



Enhancing people's lives with lighting

Indoor Luminaires Catalogue 2008 - 2010

PHILIPS

sense and simplicity



Enhancing people's lives with lighting

Light is a fundamental part of life. It gives us the natural rhythm of day and night, determines how we see things and brings the world to life. Accordingly, light has a major impact on our well-being, moods and emotions. It inspires, attracts, communicates, sets the scene and enhances our experience of architectural spaces.

Each year, we at Philips invest heavily in research to gather end-user insights, further deepening our understanding of people's needs, desires and aspirations. Combining these insights with our technological leadership, we are able to deliver meaningful innovations – advanced, energy-efficient products and systems that are designed around people and are easy to experience. Solutions, therefore, that will help us create a sustainable future.

www.philips.com/lighting

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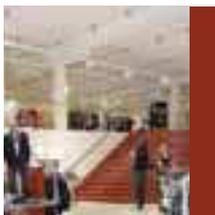
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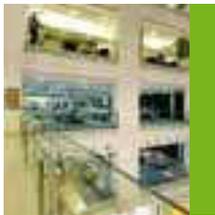
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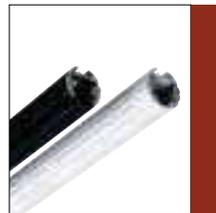
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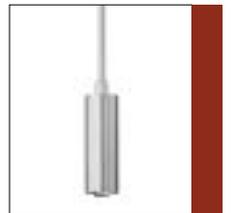
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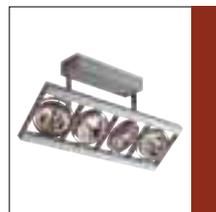
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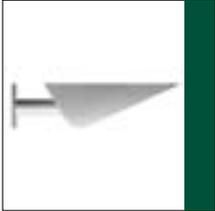
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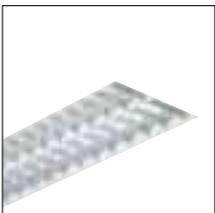
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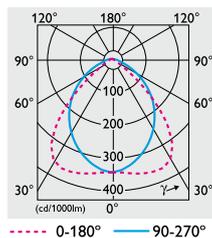
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For the photometrical diagrams of shown products, we refer to chapter 12.

All dimensions mentioned in the drawings of this catalog are in millimeters.



Project Name: Georgia Aquarium

Location: Atlanta, Georgia, USA

Design Credits: Quentin Thomas and Associates, City Design Group

Photo Credit: Kieran Reynolds Photography

Besides the Georgia Aquarium, other notable recent installations include London Eye and Harrods in London, Globen Arena in Stockholm, Dublin International Airport, La Rinascente in Milan and Palacio de las Artes Reina Sofia in Valencia.

Philips LED solutions

With the August 2007 acquisition of Color Kinetics, a leading US company in LED lighting, Philips became the world leader in solid-state lighting. Philips Solid-State Lighting Solutions, the new entity formed by the acquisition, transforms environments through dynamic and more efficient uses of light. Its award-winning lighting systems and technologies apply the benefits of LEDs as highly efficient, long-lasting and environmentally friendly – reinventing light itself as a highly controllable medium.

Philips Solid-State Lighting Solutions offers a broad selection of RGB and white LED lighting systems for indoor and outdoor applications, complete with controllers, authoring software, power supplies and accessories that bring wide-ranging designs to life. It offers both advanced systems with digital intelligence for dynamic applications, and standard luminaires for more common everyday applications. All provide an energy- and maintenance-saving alternative to most conventional light sources today.

From theater sets and television studios to renowned architectural structures, interiors and artworks, Philips' customers break boundaries in their forward-looking use of light to enhance spaces, build brands and incite imagination.

Wall washing and flood lighting luminaires:



ColorBlast® 12 Powercore

A high-performance lighting system that combines proprietary Chromacore® technology with red, green and blue LEDs to generate millions of colors and color-changing effects without the maintenance-intensive use of colored gels and filters. It utilizes Powercore® technology to directly accept line voltage, eliminating the need for an external power supply and thereby simplifying installation..



iW™ Blast 12 Powercore

A high-performance lighting system that incorporates digital intelligence and advanced white LEDs to enable both traditional and completely new uses of high-quality white light. It can produce variable color temperature within the range of 3000 to 6500 K.

Linear lighting luminaires:



iColor Cove® MX Powercore

A compact luminaire designed to generate saturated color and dynamic effects for use in alcoves, accent areas and other tight spaces in interior environments. Each 30.5 cm luminaire may be individually controlled, allowing for seamless runs of uniform color.



eW™ Cove Powercore

A compact, low-profile luminaire designed to seamlessly fit traditional lighting infrastructure, bringing the inherent benefits of LED sources to interior cove and accent lighting applications. It is available in 30.5 cm and 15.2 cm lengths, and utilizes proprietary power management and dimming technologies that translate to greater operational efficiency and ease of use.

Direct-view luminaires:



iColor® Flex SL

A multi-purpose, LED-based strand of light that generates extraordinary effects without the constraints of luminaire size, shape or space. It enables intricate, color-changing patterns and low-resolution video effects on almost any interior or exterior surface – ceilings, floors, three-dimensional objects, sculptures and more.



iColor Accent Powercore

A direct-view linear luminaire that generates seamless color-changing effects and enables low-resolution video displays for interior and exterior applications. The luminaire utilizes Chromasic® technology to offer precise control in 3 cm increments, which allows it to reproduce video, graphics and intricately designed effects in a host of architectural and entertainment settings.

For additional information, product specifications and user guides please visit www.colorkinetics.com.



“I see the effect of climate change around me and I worry about the future. I want to improve the quality of my life, but also do the right thing to protect the environment. Wouldn't it be great if we could use less energy with lighting, only using the lighting at my desk when I need it?”

Lighting a greener future

Global climate change, rising energy costs and pressure to meet targets on reduction of CO₂ emissions are major issues facing the world today.

Addressing these imperatives and the opportunities they present will have a major impact on business throughout the world.

Philips has a long-standing commitment to providing lighting solutions that improve people's lives and are environmentally sound.

Environmentally friendly innovations

Eco-Design has formed the cornerstone of Philips Lighting product design for over 25 years, since the launch of the first energy-saving compact fluorescent lamp in 1980. Now we are the industry leader in energy-efficient lighting with, for example, our state-of-the-art TL5 lamps and LED light sources, electronic gear, high-efficiency optics and energy-saving lighting controls.

Recognized leader

Philips is a recognized leader in environmental performance and sustainability, as evidenced by its consistently high rankings in the Dow Jones Sustainability Indexes, the Global 100 Most Sustainable Corporations in the World and the FTSE4Good Index.



Driving sustainability

Green Flagships

Philips has developed the concept of 'Green Flagships' to identify products that offer the best environmental performance. This goes beyond energy efficiency alone and takes other environmental aspects into account as well. The Green Flagship process is validated by a certified third party.



asimpleswitch.com

Green Flagship

Philips uses the Life Circle approach to determine a product's overall environmental improvement.

One or more of our Green Focal Areas must be significantly better, resulting in a lower total environmental impact than its competitors, its predecessor or a different product in the same application.

-  Energy efficiency
-  Hazardous substances
-  Packaging
-  Lifetime reliability
-  Recyclability
-  Weight

Green Flagships carry the green logo and offer the best environmental performance.

A good example of a Green Flagship is our new SmartForm TBS460 recessed luminaire. As well as incorporating energy-efficient TL5 lamps, an electronic ballast and high-efficiency optics, this luminaire can be equipped with innovative ActiLume lighting controls for presence detection and daylight regulation, further reducing overall cost of ownership. In this way, the range reduces energy consumption – W/m^2 is very low – and CO_2 production.



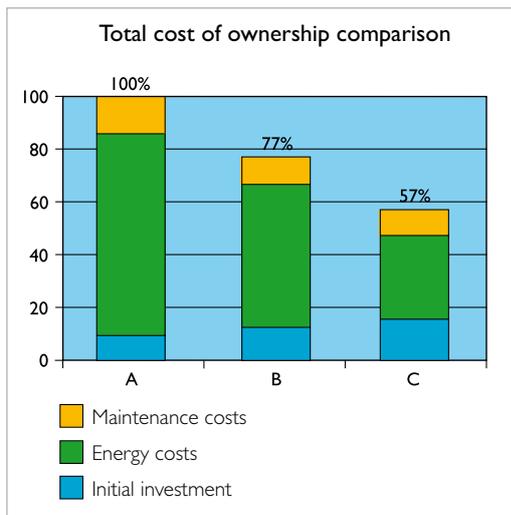
Increasing lifetime reliability and minimizing the use of hazardous substances in our products are other key environmental objectives. Indeed, we have reduced the mercury content of a broad range of lamps to record lows and are really pushing the limits in this area.



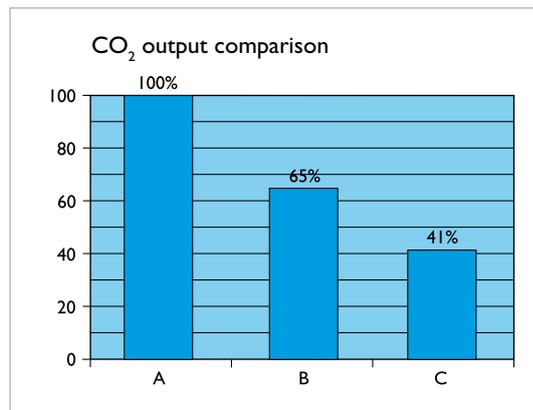
Total cost of ownership

Eco-friendly solutions help you save money and – equally important – reduce environmental pollution. While the initial purchase price of an energy-saving lighting installation is slightly higher, its efficient use of energy and long lifespan mean you end up paying less and at the same time help to protect the environment.

The example given is based on an installation still widely used in many offices, compared to an energy-saving solution already available today. The payback time for solution C is less than three years.



- A: Conventional TL-D lamp, EM ballast
- B: TL5 lamp, HFP ballast
- C: TL5 lamp, HFR ballast, Lighting Controls



Calculations are based on a lighting installation operating over a period of 15 years (average lifetime of an installation), 10 hours per day and 250 days per year.

Towards a brighter future

Environmental legislation is increasing and should be taken into account when choosing lighting solutions. Suffice to say that all Philips products not only meet the most recent European legislation, but is ahead of it. Looking ahead, we are committed to driving the sustainability process forward, in order to help secure a greener future.

www.asimpleswitch.com
www.philips.com/sustainability



Opening up a new world

As the industry leader in lighting, we must continue to deliver innovations that meet the present and future needs of the people who use and experience our products. In other words, innovations that are meaningful to our customers.

Today we are witnessing a clear shift from 'quantitative' functional lighting towards 'qualitative' intelligent and emotional lighting, stimulating designers to re-think lighting in a way that offers people new experiences. With our mission to improve people's lives with lighting, we at Philips continue to drive this trend by supporting our creative and industry partners with innovations based on sustainable, energy-efficient technologies such as LEDs.

LED lighting

Solid-state or LED lighting represents the most significant development in lighting since the discovery of electric light well over a century ago. It offers unprecedented design freedom in terms of color, dynamics, miniaturization and architectural integration, as well as significant advances in energy efficiency and lifetime. In particular, the creation of high-power white-light LEDs will revolutionize the way we light our homes, shops, offices and cities.



“I feel better when I’m exposed to natural daylight. Up until now, the light in our office was artificial and static. But now there’s a light that brings the qualities of natural daylight into our office. Light that inspires and energizes me.”

Light and well-being

Today, working conditions and staff well-being and motivation are becoming more and more important. Longer working hours and the increasing pace and variety of work require flexibility in the workplace.

The value of light

Flexible and dynamic, lighting can play a key role in the office environment, helping people to function to the best of their ability – regardless of whether they are working on a computer, reading, meeting or brainstorming.

Dynamic Lighting and ActiViva

Philips has been working with leading universities to understand how light and our surroundings affect us, physically and psychologically. This research has led us to develop two lighting solutions that have a positive effect on our performance.

With Dynamic Lighting we can bring the dynamic character of daylight – with its seamless changes in brightness and warmth – indoors, creating a natural lighting rhythm that enhances the well-being of office users. We can also tailor it to our personal preferences, needs and moods.

ActiViva lamps create the effect of natural, blue-sky daylight. This cool-white light makes people feel alert and energized throughout the day and enhances their performance.

www.philips.com/dynamiclighting

www.philips.com/activiva

Improving working life

Our portfolio of energy-efficient office lighting solutions is continually evolving through innovation. In this way we continue to make people’s working lives more enjoyable and productive.



Dynamic Lighting

Daylight – the form of light with which we are most comfortable – is never constant. It changes in brightness and warmth throughout the day and over the seasons, affecting our emotions, moods, perception and performance.

The dynamics of daylight have been shown to have a stimulating and inspiring effect. Utilizing this potential, Philips has developed two Dynamic Lighting scenarios – ‘personal light’ and ‘dynamic ambience’ – which both have a positive effect on the well-being and motivation of employees working indoors.

Philips luminaires with Dynamic Lighting are equipped with the innovative ActiViva lamp to enhance the cool-white light effect, making people feel alert and energized and so helping them improve their performance.

Personal light

Personal light enables individuals to control the lighting according to their personal preference. Using a remote control, they can easily set the lighting level and color temperature to suit their task and mood. Personal light is very useful in cell offices, combi-offices and conference rooms.

Dynamic ambience

Dynamic ambience controls the lighting in an entire workspace, changing the level and color temperature of the light according to a programmed cycle that supports the natural rhythm of activity. Dynamic ambience is designed for use in open-plan offices, conference rooms and rooms without incident daylight.

www.philips.com/dynamiclighting

www.philips.com/activiva



“For me, shopping is much more than just buying goods. I’d like to shop in a place that surprises me, inspires me, reflects me and my friends, and lets me discover new things – time and time again.”

Light and experiences

Shopping is no longer just about buying the necessities: it has evolved into a multi-faceted mass leisure activity. It’s about browsing, socializing, having fun, seeing and being seen. And in the fast-changing retail marketplace, adaptability is key.

The value of light

Deployed imaginatively, lighting can create a fresh, appealing in-store ambience. One that draws consumers in, inspires them and – with inviting displays of merchandise – puts them in the mood to buy.

Meaningful innovations

Based on our extensive research into shoppers’ needs, we have developed several innovative new concepts and solutions that enable shops to address the challenges of today’s retail environment. A primary example is AmbiScene, a flexible lighting concept that helps retailers fulfill the dynamic aspirations of contemporary consumers.

Other value-adding, sustainable innovations include our cutting-edge lamp technology, which makes fresh food produce, for example, look simply irresistible, and our LED lighting solutions, which offer a vast palette of colors and dynamic effects combined with significant savings on maintenance and energy costs.



AmbiScene

People's motivation or mood for shopping can be different at different times. One day, for example, they may simply be buying the daily necessities. Another day they may be going shopping with friends as a social activity, as a form of entertainment. And on another they may be seeking out new experiences – shopping as a journey of discovery.

AmbiScene is a flexible lighting concept designed to help retailers create inspiring and meaningful shopping experiences. It can change the lighting in every conceivable way (e.g. color, tones of white, intensity), addressing different shopping moods and supporting product presentations, retail promotions and the retailer's brand identity.

Lighting as a marketing tool

AmbiScene is not a product, nor merely colored light. It is a new way of using light in a flexible, dynamic and interactive manner – to create a strong emotional connection with shoppers and to support retail communication strategies.

AmbiScene can help retailers to adapt and enhance different aspects of the store and/or brand. It can strengthen brand identity and brand differentiation, e.g. in multi-brand retail outlets. It can optimize product presentation, adapting the lighting to support the latest collection, specific themes, the seasons, materials, colors, etc. And it can create a stage for temporary promotional events.

www.philips.com/ambiscene



“In my job I really have to concentrate on the task in hand, because my output is the input for the next stage in the process. Anything that helps me maintain focus and deliver even better quality is welcome.”

Light and productivity

Over the last two decades scientific research has consistently shown the positive influence of light on the performance and well-being of those working in industry.

The value of light

On a functional level, light has an effect on workers' visual task performance. And on a personal level, it affects their general sense of well-being. In both cases it affects productivity. Choosing the right lighting can make a world of difference. The result – better task performance, lower error rates, increased safety and reduced absenteeism.

High efficiency

Combining our focus on the needs of those on the shop floor with an in-depth understanding of our customers' processes and systems, we have developed an extensive portfolio of industrial lighting solutions. These boost operating efficiency by offering higher lighting levels – which help workers to maintain concentration and to perform better – while reducing energy consumption and maintenance.



“I wish there was a way to make my patients feel calm and less insecure during examinations. It would really help me, making treatment more efficient.”

Light and comfort

Healthcare institutions are facing a dual challenge – to provide better, patient-centric care while at the same time improving operational efficiency, e.g. by optimizing workflows and reducing energy consumption.

The value of light

Lighting is an extremely effective means of making hospitals a healing environment by improving patient comfort and enhancing staff well-being and motivation.

Simply adjusting the light enables us to personalize a space, creating our own ambience, which makes for a more comfortable experience for patients. And in a high-intensity 24/7 working environment like a hospital, being able to adapt the lighting to personal preferences enhances the motivation and well-being – and hence performance – of medical staff.

AmbiScene-Healthcare

Philips AmbiScene-Healthcare is a flexible lighting concept designed to help hospitals provide better, more patient-centric care, while increasing efficiency. Variation in light color and intensity helps patients to relax by creating a comforting ambience during diagnostic imaging, for example. This can speed up procedures, improving throughput time.

Total solutions

We are committed to working together with hospital management to create welcoming and efficient healthcare facilities. We can provide total solutions for all areas within the hospital – from luminaires and lamps through to lighting controls and lighting management systems – that help transform the hospital experience.



“When I’m on a business trip I do different things in my hotel room. When I work I need a brighter light than when I’m relaxing. But I can’t adjust the light setting in my room. I wish I could adapt it to suit my needs.”

Light and hospitality

We take people’s needs as the starting point for our innovative lighting solutions. In the area of hospitality, this means focusing on the hotel guests’ physical and emotional comfort, on the well-being and motivation of staff, and on the business challenges facing hotel management.

The value of light

Well-conceived lighting can work wonders for a hotel. Outdoors, architectural lighting can turn the hotel into a prominent landmark, reinforcing brand identity. Inside, dynamic and architectural lighting solutions ensure the visitor’s first impression is a positive one.

A spacious entry hall with bright light and colorful light accents communicates an important message to visitors: You are welcome. Lighting can also help people to find their way around, e.g. by creating subtle color accents or color codes.

In the guest rooms, restaurants and other facilities, lighting can create appealing atmospheres while simultaneously reducing energy consumption. And in the bed/bathroom, flexible lighting supports a variety of activities – reading, working, relaxation, watching TV, waking up, etc.

Enhancing the hospitality experience

Our innovative lighting solutions can make a hotel stay even more special by offering a relaxing or energizing experience. They can be standard or custom-made for a particular project, e.g. lighting management systems that optimize specific processes in the hotel.



Turning creative ideas into reality

The ideal solution for any lighting application has to be based upon balanced consideration of numerous factors – the materials being illuminated, the most appropriate lamp technology, the aesthetics of the setting, environmental constraints, etc.

Even with an extensive, state-of-the-art product range, it is not always possible to satisfy each and every requirement of any given application.

Therefore, at Philips we have a team of application and product development specialists who – working together with our customers – can co-create tailor-made lighting solutions, ranging from the functional to the more aesthetically oriented.

In this way, we enable architects and lighting designers to turn their creative ideas into reality.



Experiencing light

We have several inspiration and training centers that our professional customers and partners can visit to experience first hand the value of light and our innovative lighting solutions.

Philips' Lighting Application Centers are state-of-the-art experience, demonstration and workshop facilities, where customers can acquaint themselves with the latest lighting applications and products. The indoor and outdoor centers show best-practice examples of how light interacts with architecture and materials and let visitors see for themselves the effect light has on people.

In addition, Philips Research has set up the ShopLab and Hospitality Lab to test and demonstrate new concepts such as flexible, adaptive and interactive lighting. Selected customers are invited to these 'experience labs', and we use their feedback to further develop and refine our pioneering lighting concepts.

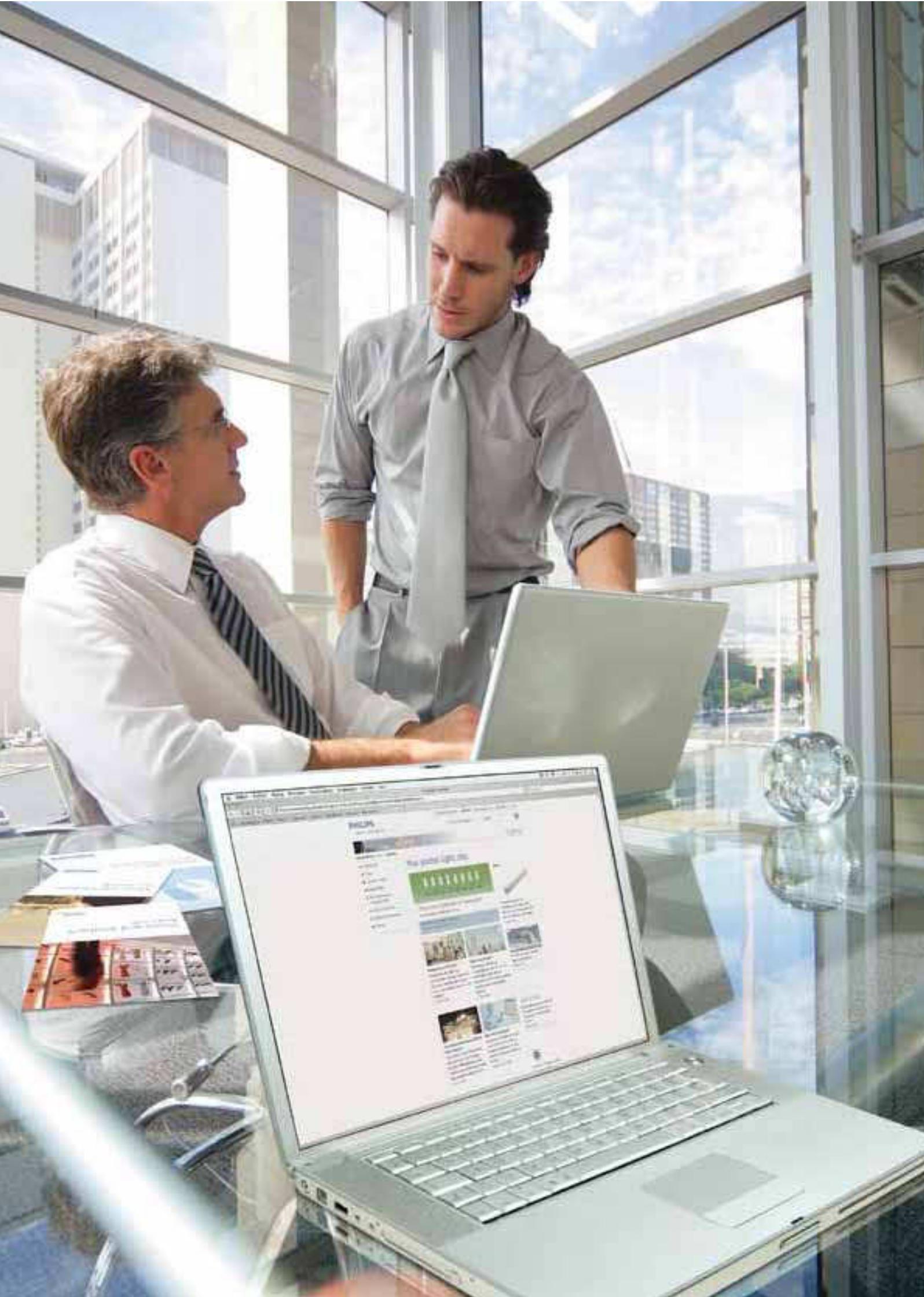
Exploring new possibilities

Our International Lighting Design and Application Center (LiDAC) comprises a network of some 200 application specialists and researchers, who propagate innovative lighting concepts and ideas in the fields of urban and street lighting, architectural lighting, retail, light & well-being and sports.

The LiDAC team supports innovation by exploring new technologies, testing the effects of new light sources on materials, structures, etc. and conducting fundamental research into the effect light has on people. Together with lighting designers and architects, new ideas are developed for meaningful, pioneering solutions in innovative lighting projects.

Around the world, local LiDAC teams are available to assist customers in the implementation of new lighting solutions in projects.

The results of this work are published in the International Lighting Review Yearbook, in order to communicate the value of light and efficient lighting, so that our customers are fully aware of the benefits our solutions have to offer, both to themselves and to *their customers*.



Views and solutions

By its very nature, a printed catalog like this represents the situation at a given moment in time. For the very latest details on our extensive range of innovative lighting solutions and products, please check our e-catalog on www.philips.com/lighting.

In addition, look out for **Views and solutions**, a bi-annual publication which combines details of our latest product innovations in luminaires, including lamps and lighting controls, with interesting articles on topical lighting themes and concepts in the fields of indoor and outdoor lighting.





Spot LED, sparkling and sustainable

Spot LED is an innovative and stable family of projectors and downlights featuring the latest LED technology. It incorporates the LUXECON™ X2 high-power LED which delivers more light than ever before and does not produce any UVA or UVB radiation.

Spot LED Downlight	Spot LED Projector
Type: Spot LED Downlight	Type: Spot LED Projector
Model: Spot LED Downlight	Model: Spot LED Projector
Material: Aluminum	Material: Aluminum
Power: 10W	Power: 10W
Beam angle: 30°	Beam angle: 30°
Color temperature: 4000K	Color temperature: 4000K
Life span: 50,000 hours	Life span: 50,000 hours
Dimensions: 100x100x100mm	Dimensions: 100x100x100mm
Weight: 0.1kg	Weight: 0.1kg
Installation: Surface mount	Installation: Surface mount
Notes: Spot LED is a family of projectors and downlights featuring the latest LED technology. It incorporates the LUXECON™ X2 high-power LED which delivers more light than ever before and does not produce any UVA or UVB radiation.	Notes: Spot LED is a family of projectors and downlights featuring the latest LED technology. It incorporates the LUXECON™ X2 high-power LED which delivers more light than ever before and does not produce any UVA or UVB radiation.



Product icon: Spot LED Downlight



Product icon: Spot LED Projector



Philips Vidiwall – realizing your vision

Philips Vidiwall provides a full service concept from consulting to servicing large LED display solutions. We work together with our customers to ensure that these solutions capture people's attention at events, in sports stadiums and in shopping malls around the world.

A wide range of customized LED video screens and application software ensure an eye-catching dynamic scene – in both outdoor and indoor applications. These solutions are designed to provide optimum image quality over an exceptionally long lifetime, are easy to maintain and have a particularly low cost of ownership.

The Philips Candeo range of 120 inch (4 sqm) displays is the ideal plug-and-play and out-of-the-box solution for indoor environments. The Candeo is sufficiently bright to provide clear viewing in even the brightest ambient conditions. Philips Anti-Solarisation Processing™ (ASP™) is a unique feature of Philips LED video screens, removing the sparkling and color banding commonly seen in darker picture areas of LED displays. The Candeos are ideal for viewing distances from 5 to 50 meters, making them perfect for the retail, transport, entertainment and leisure markets.

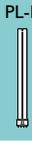
www.philips.com/vidiwall



Recessed luminaires

Selection guide – Recessed luminaires

Luminaire family	Product range	Page	Light distribution			Module dimension (mm)		Air handling	Number of lamps	Lamps			
			Symmetric	Asymmetric	Double asymmetric	In length	In width			Fluorescent			Compact fluorescent
										TL5 	TL5-C 	TL-D 	PL-L 
Savio 	TBS760/770	2.10	•			300	300		2,3,4,6	•			
Rotaris 	TBS740	2.20	•			n.a.	n.a.	•	1		•		
	TBS741	2.22	•			600	600	•	1		•		
Celino 	TBS690	2.26	•			300	none	•	1	•			
	TBS692	2.28	•			none	none	•	1	•			
SmartForm 	TBS460	2.34	•			300	300	•	1,2,3,4	•			
	TBS461/471	2.40	•			300	300		2,3,4,6	•			
TBS490 	TBS490	2.52	•			300	none		1,2	•			
TBS600 	TBS600	2.56	•	•	•	300	none	•	1,2	•			
Indolight 	TBS315	2.64	•	•	•	300	150	•	1,2	•		•	
	TBS318	2.68	•	•	•	300	185	•	1,2	•		•	
	TBS330	2.76	•	•	•	300	300	•	1,2,3,4			•	
	TBS340	2.72	•	•	•	300	150	•	1,2	•		•	
FBS330 	FBS330	2.80	•			300	300	•	2,3				•
EFix 	TBS260	2.86	•			300	300	•	2,3,4	•			
Impala 	TBS160	2.94	•			300	300	•	2,3,4			•	
	FBS160	2.98	•			300	300		2,3				•

Luminaire family	Product range	Page	Light distribution			Module dimension (mm)		Air handling	Number of lamps	Lamps			
			Symmetric	Asymmetric	Double asymmetric	In length	In width			Fluorescent			Compact fluorescent
										TL5 	TL5-C 	TL-D 	PL-L 

FBS163



FBS163	2.102	indirect			300	300		2				•
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TBS105 Series



TBS105	2.104		•		300	none	•	1			•	
FBS105	2.106		•		300	none	•	1				•





Philips MASTER TL5 – the perfect fit every time

Philips invented the T5 fluorescent concept in the 1990s, making Philips MASTER TL5 lamps the original 16 mm lamps. Philips has MASTER TL5 lamps to suit every application, as well as an extensive portfolio of MASTER TL5 luminaires, gear and controls.

MASTER TL5 lamps are operated on HF gear and offer the following benefits:

- up to 28% less energy consumption than T8 lamps on electromagnetic gear
- maximum energy efficiency: up to 104 lm/W
- very good color rendering
- long life of 19,000 hours (10% failure rate).



Best environmental choice

Environmentally, Philips MASTER TL5 lamps and gear offer the highest energy efficiency for fluorescent lighting, resulting in the lowest CO₂ emissions. All products are RoHS-compliant. MASTER TL5 lamps use less glass, metal and packaging, and their lower weight offers transport and recycling benefits.

www.philips.com/mastertl5



Innovative luminaires

Philips has a history of innovative advances in optic design, including the renowned OLC (Omni-directional Luminance Control) optics introduced at the time of the launch of the MASTER TL5 lamp. Continuing this tradition, our latest luminaires feature OLC micro optics. These allow luminaires to be miniaturist in design, with optimum performance in terms of light distribution, visual comfort and efficiency.



Lighting controls for MASTER TL5 lamps

Philips offers control systems that switch the lights off when an area is vacated and/or react to the level of daylight by adjusting the artificial light.



MASTER TL5 lamps with Philips electronic (HF) gear

By using Philips TL5 electronic (HF) gear you can be sure that the lamp and gear work perfectly together, because they have been designed, developed, tested and optimized for each other. (HF) gear maximizes energy savings, improves user comfort by eliminating start-up flicker and strobe effects, improves safety with over-voltage detection and extends lamp life.



Philips MASTER TL5 High Efficiency – optimal energy savings

MASTER TL5 HE lamps combine maximum energy efficiency with good light output.

- Luminous efficacy of up to 104 lm/W
- HE lamps are up to 10% more efficient than HO lamps

Philips MASTER TL5 High Output – optimum light output

MASTER TL5 High Output lamps are ideal for applications where you need more light, e.g.:

- Luminaires bounce light off the ceiling
- Indirect lighting effects such as wall-washing
- High-ceiling applications

**Philips MASTER TL5 HO 90 De Luxe – best for showing true colors**

These lamps have a color rendering index of more than 90. This means that colors appear rich and deep as they do in natural daylight. Moreover, objects are shown in their true, natural colors. Therefore these lamps are the best choice for color-critical applications.

Philips MASTER TL5 ActiViva – best for energizing people

Philips MASTER TL5 ActiViva lamps contain an optimized amount of blue light and in this way not only provide high-quality lighting, but also directly affect the way people feel. People indicate that they feel more active, vital and alert when working under Philips ActiViva lamps.

Philips MASTER TL5 HO Optiview – best for medical diagnosis

- Optimally tuned to support medical staff in visual clinical patient observation
- Improves early diagnosis of pathophysiological conditions that can be detected by changes in skin color
- Simplifies medical tasks that require good color discrimination, such as visibility of veins when taking blood samples

**Philips MASTER TL5 Secura – best protection against breakage**

- A unique protective coating makes the lamp shatterproof
- The Philips Secura coating does not degrade under the influence of temperature or UV light
- Cost-effective way to meet the relevant safety standards in the food industry (ISO22000 and HACCP)

Philips MASTER TL5 Circular lamps – best for circular forms

These lamps enable stylish luminaires for corridors, lobbies and reception areas. Unlike other T5 circular lamps, Philips MASTER TL5 Circular lamps use Amalgam technology, which helps ensure:

- More light, thanks to the wider operating temperature range
- Optimal light performance for long operation per switch-on
- Best performance in hot or cold-temperature applications

**Philips MASTER TL5 HE and HO Colored lamps – best for colored applications**

For areas where special color effects and/or color ambiances must be created, there is a range of red, green and blue MASTER TL5 lamps.

Philips MASTER TL5 Xtra lamps and HF-P Xtreme gear for TL5 – longest and most reliable life

- Extra-long, reliable life
- Lamp and ballast are designed for each other for maximum performance



Philips ActiViva – get activated

Good lighting doesn't only enable us to see, it also affects how we feel. On dull, dark days, the absence of bright light can dampen our mood and make us feel as miserable as the weather. But a ray of sunshine is sometimes all it takes to lift our spirits and make us feel invigorated. For several years now we've been working with leading universities to understand the highly complex relationship between light and well-being.

This has led to the development of Philips ActiViva lamps. These revolutionary new lamps contain an optimized amount of blue light and in this way make people feel more energized. So instead of feeling tired, people are able to stay alert and focused to concentrate on the task at hand..



ActiViva Natural lamps

provide natural, cool light that contains 25% more blue light than existing cool-daylight lamps, and combine well with other light sources in existing installations. They are available in TL5 and TL-D versions.

ActiViva Active lamps

are available in TL5 and provide extremely cool light with 85% more blue light than current cool-daylight lamps. Due to the high blue light content, these lamps can create a real sky effect.

All types are retro-fittable into existing fittings, making them quick and easy to install.

www.philips.com/activiva



With Philips ActiViva lamps



With traditional lamps



MASTER TL5 ActiViva Active and Natural

- 24 W, 49 W and 54 W
- Color Rendering Index >80
- Lumen output:
 - 24 W: 1650
 - 49 W: 4100
 - 54 W: 4250



MASTER TL-D ActiViva Natural

- 18 W, 36 W and 58 W
- Color Rendering Index >80
- Lumen output:
 - 18 W: 1300
 - 36 W: 3250
 - 58 W: 5000

Savio TBS760/770



Savio – pure light

Featuring Philips' patented micro-lens optic technology, Savio is a complete luminaire range that offers the ideal combination of stylish design and optimum performance for both task and general lighting.

Savio has an edge-to-edge lighting appearance with a uniform and comfortable brightness impression – a real 'surface of light'. The micro-lens optic consists of a single plate and is embedded in a housing made of high-quality natural anodized aluminum. Savio ensures optimum light distribution and full glare control in compliance with the latest office-lighting norm (EN 12464-1).

Savio luminaires with Dynamic Lighting keep us feeling active by creating dynamic artificial light that varies over the course of the day or is set according to personal preference.

Savio is available as a full range: suspended, surface-mounted, recessed, free-standing and wall-mounted.

www.philips.com/lighting



Savio recessed



Savio free floor-standing



Savio wall-mounted



Savio surface-mounted



Savio suspended





Savio – surface of light

Besides outstanding lighting performance, aesthetic appeal and architectural integration were key drivers in the development of Savio. The patented micro-lens optic provides a uniform light distribution, ensuring an even and comfortable brightness impression. Completing the effect of an edge-to-edge 'surface of light', the micro-lens optic is secured by a translucent rim around the luminaire.

Savio's design also allows multiple luminaires to be connected in a line or block arrangement, ensuring maximum freedom in application and configuration.

Micro-lens optic

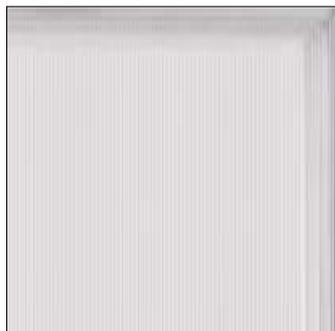
With the new patented micro-lens optic (MLO), the lamps are not directly visible and full glare control from all viewing angles is a reality (Omnidirectional Luminance Control, OLC). The micro-lens optic is highly efficient and meets the latest office standards: $L_m < 1000 \text{ cd/m}^2$ in all viewing directions at $\gamma \geq 65^\circ$ and $UGR_R < 19$ (EN 12464-1).

This means no disturbing glare on PC or laptop screens, regardless of where they are positioned in the room.

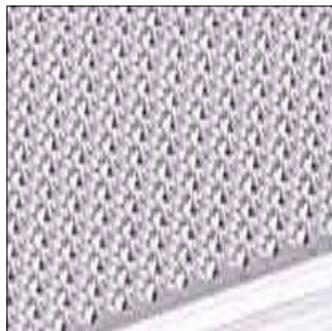
The micro-lens optic provides a uniform light distribution, ensuring an even and comfortable brightness impression – a real ‘surface of light’. The micro-lens optic is secured by a translucent rim around the luminaire.

The patented micro-lens optic design uses conical lenses with inverted tops that are positioned in a square array for the best possible glare control. The optic fully justifies the designation ‘micro’ since there are over 35 high-precision lenses per square centimeter.

Edge-to-edge lighting



The principle

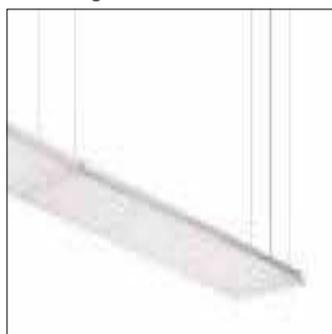


The cone



The trend towards multi-skilled knowledge workers and flattening hierarchies will transform tomorrow's office. Office spaces will take on a more social role of bringing knowledge workers together in physical proximity. They will be places where people come together to think, communicate and create. This vision has driven the design and development of Savio, with freedom in application and configuration being a key objective. Its design allows multiple luminaires to be connected in a line or block arrangement.

Line arrangement



Block arrangement

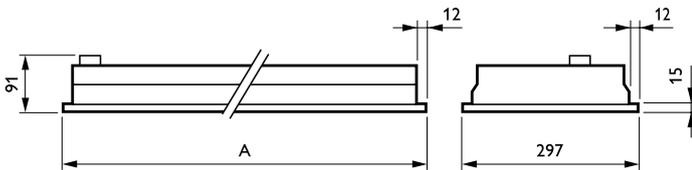


Savio	
Type	TBS760 (standard version)
Ceiling grid	Module size: 300 / 600 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Fluorescent: 2 x or 4 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator, touch and DALI (HFD-T)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Wieland connector (W4)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Cable with CEE 7 plug (CCE) Euro fuse (FU) included Safety cable (SC)

Material	Housing: anodized aluminum Micro-lens optic: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent) Mounted in a white zinc-coated sheet-steel housing
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids and plasterboard ceilings
Accessory	Suspension bracket set
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, $UGR_r, 19, L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) Luminaires delivered without diffuser (ND) Dedicated ready to install versions available (KIT)
Main applications	Office, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS760/770 2, 3 x TL5



TBS760/770 4, 6 x TL5

	A
28W, 54W	1197
35W, 49W, 80W	1497



Savio TBS760/770 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO); Savio TBS770 with Dynamic Lighting facility



Savio TBS760/770 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO); Savio TBS770 with Dynamic Lighting facility

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS760 2x28W/840 HFP PC-MLO SC	8.80	746821 00
TBS760 2x35W/840 HFP PC-MLO SC	10.70	746838 00
TBS760 2x28W/830 HFP AC-MLO	8.80	747668 00
TBS760 2x54W/840 HFP AC-MLO	8.80	749969 00
TBS760 2x35W/840 HFP AC-MLO FU	10.70	751498 00
TBS770 3x49W/827/865 HFD AC-MLO	9.90	751733 00
TBS770 3x28W/827/865 HFD AC-MLO	7.60	759258 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS760 4x14W/840 HFP PC-MLO SC	7.60	746869 00
TBS760 4x14W/830 HFR AC-MLO	8.20	747712 00
TBS760 4x14W/840 HFP AC-MLO FU	8.20	751542 00
TBS770 6x14W/827/865 HFD AC-MLO	8.90	751719 00
TBS760 4x24W/840 HFP ND PC-MLO SC	7.20	757193 00
TBS760 4x14W/830 HFD ND AC-MLO ACL	7.20	569858 00

Please contact your local Philips representative for additional configurations

The micro-lens optic provides a uniform and comfortable light distribution

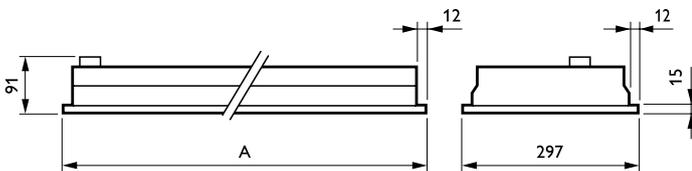


Savio	
Type	TBS770 (Dynamic Lighting version)
Ceiling grid	Module size: 300 / 600 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Fluorescent: 3 x or 6 x MASTER TL5 / G5 / 14, 28, 35, 49, 54 W
Lamp included	Yes (lamp color 827/865, 827/451, 827/452)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator; DALI (HFD)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Wieland connector; 4 poles (W4)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: Color Variation Controller (CVC) Euro fuse (FU) included Safety cable (SC)

Material	Housing: anodized aluminum Micro-lens optic: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent) Mounted in a white zinc-coated sheet-steel housing
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids and plasterboard ceilings
Accessory	Suspension bracket set, remote control, control KIT
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, $UGR_r, 19, L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) Dedicated ready to install versions available (KIT)
Main applications	Office, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS760/770 2, 3 x TL5



TBS760/770 4, 6 x TL5

	A
28W, 54W	1197
35W, 49W, 80W	1497



Savio TBS760/770 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO) and CVC; Savio TBS770 with Dynamic Lighting facility

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS770 3x49W/827/865 HFD AC-MLO CVC FU	9.90	751764 00
TBS770 3x28W/827/865 HFD AC-MLO CVC FU	7.60	759289 00
TBS770 3x35W/827/865 HFD AC-MLO CVC FU	9.90	759326 00
TBS770 3x35W/827/865 HFD PC-MLO CVC SC	9.90	759364 00

Please contact your local Philips representative for additional configurations



Savio TBS760/770 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO) and CVC; Savio TBS770 with Dynamic Lighting facility

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS770 6x14W/827/865 HFD AC-MLO CVC	8.90	751726 00
TBS770 6x14W/827/865 HFD PC-MLO CVC SC	8.90	751801 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99

Savio TBS760/770 recessed luminaire with ActiLume lighting control



Rotaris TBS740/741



Rotaris – the perfect form

The defining visual characteristic of the Rotaris product range, which is based on the innovative TL5 Circular lamp, is its concentric circles. The semi-high-gloss aluminum centerpiece is surrounded by an opal or clear lamp cover, the inside of which has a prismatic structure, again in concentric circles. Continuing outwards, the high-reflectance optic is made of the same semi-high-gloss aluminum.

With the TBS740, the outer rim of the luminaire, which forms one piece with the optic, interfaces with the ceiling, ensuring the smooth visual integration of Rotaris in the space. Glare is controlled in all viewing directions by Omnidirectional Luminance Control technology. Within the Rotaris family, a complete range of surface-mounted, recessed and suspended luminaires is available.

www.philips.com/lighting

Rotaris recessed, 600 x 600 TBS741



Rotaris recessed TBS740



Rotaris surface-mounted



Rotaris suspended

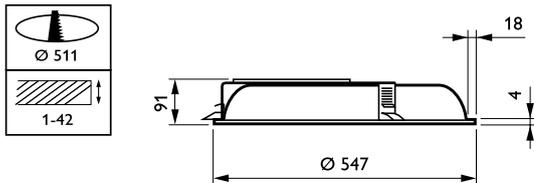


Rotaris	
Type	TBS740
Ceiling grid	Plasterboard ceilings
Light source	Compact fluorescent: 1 x MASTER TL5 Circular / 2GX13 / 60 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optical cover	Opal cover (O) Prismatic cover (P)
Infill plate / center piece	Standard (IP) Enlarged (IPL) Perforated (IPP)
Connection	Wieland connector (W)
Color	White (WH) Aluminum (ALU)

Options	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC) Dedicated center pieces: prepared for Fugato Micro, Fugato Mini, Fugato Compact or smoke detector
Material	Frame: steel Components: polycarbonate Reflector: anodized aluminum, semi-high-gloss
Installation	Individual
Accessory	Blue inlay sheet
Main applications	Office, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS740



Rotaris TBS740 recessed luminaire with opal prismatic lamp cover

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS740 1xTL5C60W/830 HFP O WH CSD	3.00	495323 00
TBS740 TL5C60W/830 HFP O IP WH	3.00	634845 00
TBS740 TL5C60W/830 HFP O IP WH SC	3.00	634869 00
TBS740 TL5C60W/840 HFP O FU IP WH	3.00	634883 00

Please contact your local Philips representative for additional configurations



Rotaris TBS740 recessed luminaire with clear prismatic lamp cover

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS740 TL5C60W/830 HFP P IP WH	3.00	634838 00
TBS740 TL5C60W/840 HFP P IP WH	3.00	635569 00
TBS740 1xTL5C60W/840 HFP P EL3 W4 IP WH	4.00	791425 00

Please contact your local Philips representative for additional configurations

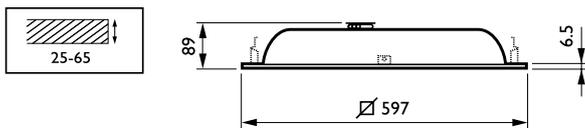


Rotaris	
Type	TBS74I
Ceiling grid	Module size: 600 mm Exposed tee ceilings
Light source	Compact fluorescent: 1 x MASTER TL5 Circular / 2GX13 / 60 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optical cover	Opal cover (O) Prismatic cover (P)
Infill plate / center piece	Standard (IP) Enlarged (IPL) Perforated (IPP)
Connection	Wieland connector (W)
Color	White (WH) Aluminum (ALU)

Options	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC) Dedicated centre pieces: prepared for Fugato Micro, Fugato Mini, Fugato Compact or smoke detector
Material	Frame: steel Components: polycarbonate Reflector: anodized aluminum, semi-high-gloss
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets (option BR) in concealed ceiling grids
Accessory	Blue inlay sheet
Main applications	Office, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS74I



Rotaris TBS74I recessed luminaire with opal prismatic lamp cover



Rotaris TBS74I recessed luminaire with clear prismatic lamp cover

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS74I TL5C60W/830 HFP O IP WH	3.00	634906 00
TBS74I TL5C60W/830 HFP O BR IP WH	3.00	634944 00
TBS74I TL5C60W/840 HFP O FU IP WH	3.00	635026 00
TBS74I TL5C60W/840 HFP O FU BR IP WH	3.00	635064 00
TBS74I TL5C60W/840 HFP O IP WH	3.00	639161 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS74I TL5C60W/830 HFP P IP WH	3.00	634890 00
TBS74I TL5C60W/830 HFP P IPL WH	3.00	634913 00
TBS74I TL5C60W/830 HFP P BR IP WH	3.00	634937 00
TBS74I TL5C60W/830 HFP P BR IPL WH	3.00	634951 00
TBS74I TL5C60W/840 HFP P FU IPL WH	3.00	635033 00

Please contact your local Philips representative for additional configurations



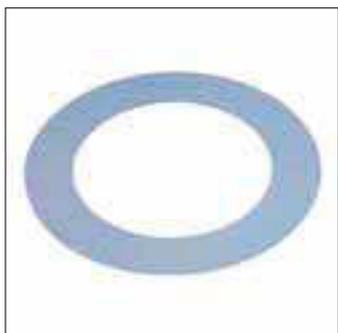
Rotaris TBS74I recessed luminaire with opal prismatic lamp cover with enlarged centerpiece (option IPL)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS74I TL5C60W/830 HFP O IPL WH	3.00	634920 00

Please contact your local Philips representative for additional configurations

Accessories



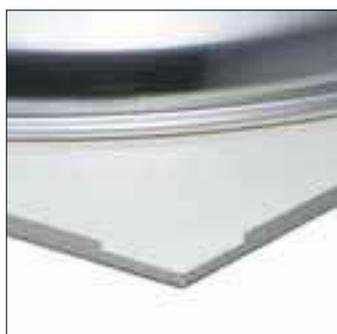
Blue inlay sheet

Product ID	EOC
ZBS740 F-BL	633145 00

Central smoke detector unit



Rotaris integrated in a square metal tile for lay-in installation



Ceiling bracket for mounting in concealed ceiling grids (option BR)



Opal prismatic lamp cover with enlarged centerpiece (option IPL)



Celino TBS690/692



Celino – for slender light beams

Celino recessed luminaires are extremely slender, with high-quality aluminum rim detailing and highly efficient micro-optics for different ceiling systems.

The luminaire-based controls (ActiLume) and high-efficiency optics deliver significant energy savings. A range of optics is available, including an optic for more aesthetic lighting of non-task areas. A floating optic provides the airhandling option, while the micro-lens optic provides a soft-light solution. With dedicated versions for exposed ceiling systems, Celino recessed is very easy to install, and the stylish aluminum rim provides the perfect finish.

www.philips.com/lighting

Celino recessed TBS690



Celino recessed TBS692



Celino free floor-standing



Celino wall-mounted



Celino surface-mounted



Celino suspended



Celino	
Type	TBS690
Ceiling grid	Module size: 300 mm Exposed tee ceiling
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch and DALI (HFD-T)
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) High-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Wieland connector (W) Push-in connector (PI)

Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC)
Material	Housing: zinc-coated steel, white Housing frame: natural anodized aluminum, white Optic: aluminum Cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Installation	Individual; lay-in in exposed ceiling grids
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, $UGR_r, 19, L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) Dedicated luminaires available with air-handling functionality (AIR), 50 m ³ / hour / luminaire
Main applications	Offices, education, healthcare, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS690



Celino TBS690 recessed luminaire with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

	A	B
28W PI, 54W PI	87	1190
28W W	98	1190
35W PI, 49W PI	87	1490
35W W, 49W W	98	1490

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS690 1x28W/840 HFP C8-VH EL3 PI ALU	4.60	495026 00
TBS690 1x28W/840 HFP C8 PI ALU	3.60	795232 00
TBS690 1x35W/840 HFP C8 PI ALU	4.50	795270 00
TBS690 1x49W/840 HFP C8 PI ALU	4.50	795317 00
TBS690 1x28W/840 HFP C8 PI ALU SC	3.60	795348 00
TBS690 1x35W/840 HFP C8 PI ALU SC	4.50	795355 00

Please contact your local Philips representative for additional configurations



Celino TBS690 recessed luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS690 1x28W/830 HFP D8-VH W ALU	3.60	795119 00
TBS690 1x35W/830 HFP D8 W ALU	4.50	795140 00
TBS690 1x49W/830 HFP D8 W ALU	4.50	795171 00
TBS690 1x49W/830 HFP D8-VH W ALU	4.50	795188 00

Please contact your local Philips representative for additional configurations



Celino TBS690 recessed luminaire with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS690 1x49W/830 HFP M2 W ALU	4.50	795218 00
TBS690 1x35W/840 HFP M2 PI ALU	4.50	795287 00
TBS690 1x49W/840 HFP M2 PI ALU	4.50	795324 00
TBS690 1x54W/830 HFP M2 FU PI ALU	3.60	569636 00

Please contact your local Philips representative for additional configurations



Celino TBS690 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS690 1x54W/830 HFP AC-MLO PI ALU	3.60	493367 00
TBS690 1x35W/830 HFP AC-MLO W ALU	4.50	795164 00
TBS690 1x49W/830 HFP AC-MLO W ALU	4.50	795195 00
TBS690 1x35W/840 HFP PC-MLO PI ALU SC	4.50	795416 00
TBS690 1x54W/830 HFP AC-MLO FU PI ALU	3.60	569643 00

Please contact your local Philips representative for additional configurations

The aluminum rim integrates seamlessly and securely into different ceiling systems, e.g. exposed ceilings



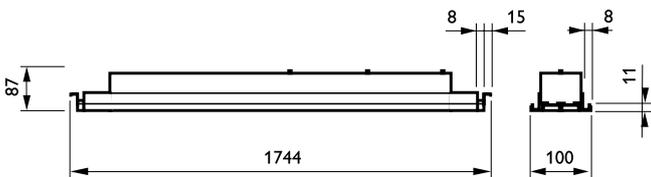
Emergency lighting option with LEDs for efficient maintenance and energy saving



Celino	
Type	TBS692 SB1: standaard bandraaster SB2: GPS100 SB3: C/U-profile metal ceiling
Ceiling grid	Bandraaster ceiling (with flexible length up to 2100 mm)
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Naturel), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch and DALI (HFD-T)
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) High-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Wieland connector (W) Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC)
Material	Housing: zinc-coated steel, white Housing frame: natural anodized aluminum, white Optic: aluminum Cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Installation	Lay-in in bandraaster ceiling grids
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN12464-1, UGR _r , 19, L _m < 1000 cd/m ² at γ > 65°) Dedicated luminaires available with air-handling functionality (AIR), 50 m ³ / hour / luminaire
Main applications	Offices, education, healthcare, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS692



Celino TBS692 recessed luminaire with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS692 1x80W/830 HFP C8 W AIR ALU SB2	4.70	495071 00
TBS692 1x49W/830 HFR C8 LX W AIR ALU SB2	4.70	495088 00
TBS692 1x35W/840 HFD C8-VH ACL W WH SB1	4.70	495095 00
TBS692 1x35W/830 HFR C8 LX W AIR ALU SB2	4.70	567076 00

Please contact your local Philips representative for additional configurations



Celino TBS692 recessed luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS692 1x35W/830 HFP D8 W ALU SB2	4.70	795539 00
TBS692 1x35W/830 HFP D8-VH W ALU SB2	4.70	795546 00
TBS692 1x49W/830 HFP D8 W ALU SB2	4.70	795553 00
TBS692 1x49W/830 HFP D8-VH W ALU SB2	4.70	795560 00

Please contact your local Philips representative for additional configurations



Celino TBS692 recessed luminaire with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS692 1x35W/830 HFP M2 EL3 PI ALU SB3	5.70	495101 00

Please contact your local Philips representative for additional configurations



Celino TBS692 recessed luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS692 1x35W/830 HFP PC-MLO W ALU SB2	4.70	495118 00
TBS692 1x35W/830 HFP AC-MLO W ALU SB2	4.70	495125 00

Please contact your local Philips representative for additional configurations

ActiLume provides daylight regulation, occupancy control and personal regulation for maximum visual comfort and automatic energy saving

The aluminum rim integrates seamlessly and securely into different ceiling systems, e.g. standard bandrastrer ceilings



SmartForm



SmartForm – the new standard for office lighting

Reflecting Philips' drive for simplicity, SmartForm recessed is a complete family of highly versatile modular luminaires. These luminaires are available with MASTER TL5 lamps in square and rectangular, standard and Dynamic Lighting versions and have been designed to fit in a wide range of modular ceiling types (600-mm-module grids) and plaster ceilings. They can fulfill the majority of project requirements in most applications.

Energy efficiency

As well as incorporating energy-efficient TL5 lamps and a range of Philips electronic ballasts, the SmartForm recessed family can be equipped with lighting controls for presence detection and daylight regulation (ActiLume) or daylight regulation only (Luxsense) in order to reduce energy consumption (W/m^2 is very low). In this way, this Green Flagship range also reduces the overall cost of ownership as well as CO_2 levels, making SmartForm an environmentally friendly choice.

SmartForm – ultra-flat 'light beam'

SmartForm recessed TBS460 is a combination of 'light beams'. The luminaire is built around superior micro optics and has a build-in height of a mere 45 mm. The very flat fittings make them ideal for applications where there is little space above false ceilings, e.g. in refurbishment projects where ceiling space may be especially limited.

SmartForm – a real 'light surface'

SmartForm recessed TBS461/471 'light surface' luminaires are equipped with a micro-lens optic (MLO) to create a homogeneous edge-to-edge lighting appearance with a comfortable brightness impression, as is often required in healthcare, education or architectural lighting projects where visual quality is very important. The housing of these luminaires has a build-in height of 95 mm. The TBS471 version has also Dynamic Lighting.

SmartForm – attractive 'light effect beam'

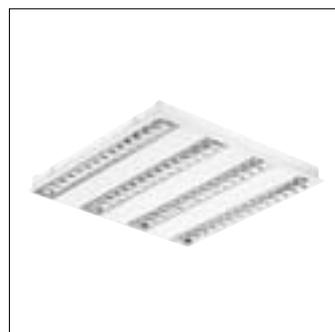
SmartForm recessed TBS464 is a combination of light beams and decorative panels. With an innovative way of guiding the light towards the infill panels, while ensuring a high quality office beam, this result in crispy and homogenous decorative light effects.

SmartForm – attractive 'light effect cover'

SmartForm recessed TBS464 with a selection of optical covers: opal-satinized and micro-lens optics, combined with top-reflectors, create linear lighting effects of different levels within a surface of light: – medium and intense – for different applications.

www.philips.com/lighting

SmartForm



Range architecture for SmartForm 'light beam' TBS460

The SmartForm recessed range TBS460 is a concept with a combination of 'light beams' for ceilings with modular grids of 600 × 600, 300 × 1200 and 300 × 1500 mm and for plaster ceilings. The luminaires are very flat, measuring only 45 mm (Push-in versions), and are easy to install.

- Square luminaires have 2, 3 or 4 lamps of 14 or 24 W.
- Rectangular luminaires have 1 or 2 lamps of 28 or 54 W and 35, 49 or 80 W.

The housings are filled symmetrically with 'light beam' micro optics, which are available in different quality levels and with closed or perforated infill plates.

The high-quality finishing and the seamless rim with a height of only 5 mm ensure the luminaire blends in with every ceiling.

The TBS460 luminaires have closed or perforated infill plates and are painted white or silver-gray. The attractive perforated pattern makes the luminaire appear richer when it is mounted in the ceiling.

Ultra-flat housing, with Push-in connection, is only 45 mm



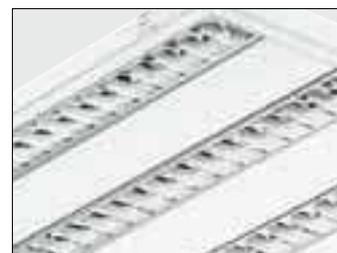
Rim detailing is seamless and with only 5 mm height



Very High efficient OLC optic (C8/D8-VH), LOR up to 94%



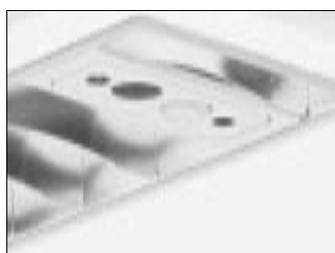
Very Comfortable OLC optic (C8/D8-C), glare control 200 cd/m²



Micro-Lens-Optic with Personal and Dynamic Lighting options



ActiLume for energy saving



Air-handling slots beside optics

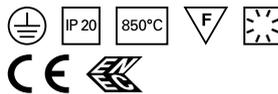


Silver-gray color (RAL9006 based) and, as option, perforated infill panels

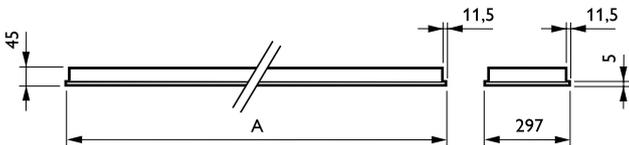


SmartForm	
Type	TBS460 (standard version)
Ceiling grid	Module size: 600 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Fluorescent: 2 x, 3 x or 4 x MASTER TL5 / G5 / 14, 24 W (square version) 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W (rectangular version)
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFR-T)
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) High-gloss optic, 3D micro-lamellae, comfort (C8-C) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) Semi-high-gloss optic, 3D micro-lamellae (D8) Semi-high-gloss optic, 3D micro-lamellae, comfort (D8-C) Matt mirror; ribbed cross louvers (M2)
Optical cover	Opal cover (O)
Connection (outside housing)	Push-in connector (PI) or with pull relief (PIP) Wieland connector GST 18, 3 or 4 poles (W,W4 respectively) Wago connector; 3 or 4 poles (WA, WA4 respectively) Cable, length 200 cm, with plug CEE7 (CCE)

Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC) Separate switching (SW)
Infill plates	Infill plate closed (IP) Infill plate perforated (IPP)
Material	Housing: zinc-coated steel, rim post lackered, white RAL9016 based Optional white RAL9010 or silver grey RAL9006 based Optic: aluminum
Installation	Exposed ceilings: in lay, no brackets needed Concealed ceilings: bracket ZBS460 SMB (4 pcs) reach is 25 - 45 or 65 mm Concealed ceiling with T-bar 38 mm: bracket ZBS460 SMB-TPM (4 pcs) Plaster ceilings: bracket ZBS460 SMB-PLC (24 pcs), reach is 10 - 20 mm
Accessory	Suspension bracket sets
Remarks	Protection foil to protect the optic during installation Dedicated luminaires available with air-handling functionality (AIR), 50 m ³ / hour / luminaire
Main applications	Office, education, healthcare, recreation, retail, industry

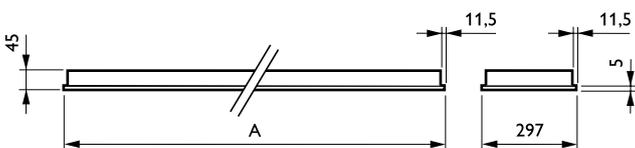


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



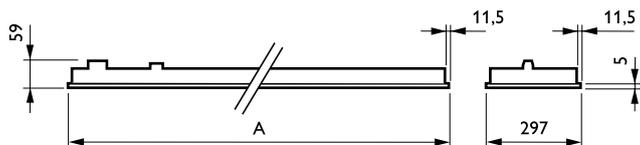
TBS460 1 x TL5 PI

	A
28W	1197
35W	1497



TBS460 2 x TL5 PI

	A
28W, 54W	1197
35W	1497



TBS460 1, 2 x TL5 W



TBS460 2, 3, 4 x TL5 W

	A
28W, 54W	1197
35W, 49W	1497



TBS460 2, 3, 4 x TL5 PI



SmartForm TBS460 recessed modular with micro optic with flat, profiled lamellae (M2) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 1x28W/840 HFP M2 PI IP	4.80	002747 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro OLC very high efficiency high-gloss optic (C8) and very-high-gloss optic (C8-VH) and infill plate perforated (IPP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 2x28W/840 HFP C8-VH EL3 FU PI IPP	5.80	007247 00
TBS460 2x28W/840 HFP C8-VH EL3 FU W IPP	5.80	007254 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro optic with flat, profiled lamellae (M2) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 2x28W/840 HFP M2 EL3 FU W IP	5.80	007353 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro optic with flat, profiled lamellae (M2), air handling via slots beside optics (AIR) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 2x24W/840 HFP M2 W AIR IP	4.60	003058 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with opal beam cover (O) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 2x24W/830 HFP O W IP	4.60	003089 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro OLC excellent comfort high-gloss optic (C8-C) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 3x14W/830 HFP C8-C PI IP	4.60	003959 00
TBS460 3x14W/840 HFP C8-C PI IP	4.60	004802 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro OLC excellent comfort semi-high-gloss optic (D8-C), air handling via slots beside optics (AIR) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 3x14W/830 HFP D8-C W AIR IP	4.60	004512 00
TBS460 3x14W/830 HFR D8-C LX W AIR IP	4.60	004659 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with micro OLC very high efficiency semi-high-gloss optic (D8) and very-high-gloss optic (D8-VH) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 4x14W/830 HFP D8-VH PI IP	4.60	004581 00
TBS460 4x14W/840 HFP D8-VH PI IP	4.60	006141 00

Please contact your local Philips representative for additional configurations



SmartForm TBS460 recessed modular with opal beam cover (O) and infill plate closed (IP)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS460 4x14W/830 HFP O PI IP	4.60	005663 00
TBS460 4x14W/840 HFP O PI IP	4.60	006295 00
TBS460 4x24W/830 HFP O W IP	4.60	006400 00
TBS460 4x24W/830 HFP O PI IP	4.60	006417 00
TBS460 4x24W/840 HFP O PI IP	4.60	006455 00

Please contact your local Philips representative for additional configurations

Accessories



Brackets for concealed ceilings with T-bar 38 mm

Product ID	EOC
ZBS460 SMB-TPM (4PCS)	493039 99



Brackets for concealed ceilings

Product ID	EOC
ZBS460 SMB (4PCS)	493077 99



Brackets for plaster ceilings

Product ID	EOC
ZBS460 SMB-PLC (24PCS)	493053 99

SmartForm



Range architecture for SmartForm 'light surface' TBS461/471

The SmartForm recessed range TBS461 is a 'light surface' concept which incorporates the superior micro-lens optics (MLO). The range is for ceilings with modular grids of 600 x 600, 300 x 1200 and 300 x 1500 mm and for plaster ceilings. The luminaires are designed for edge-to-edge homogeneous light surfaces and have a height of 95 mm (push-in version). The luminaires offer the full TL5 range:

- The square luminaires have 4 lamps of 14 or 24 W
- The rectangular luminaires have 2 lamps of 28 or 54 W and 35, 49 or 80 W.

The SmartForm TBS471 is the Dynamic Lighting version with the color variation controller (CVC). The luminaires offer the full TL5 range:

- The square luminaires have 6 lamps of 14 or 24 W and
- The rectangular luminaires have 3 lamps of 28 or 54 W and 35, 49 or 80 W.

Due to the low height of the rim (5 mm), the luminaire fits flush with the ceiling.

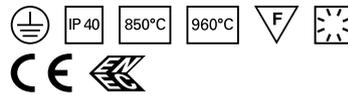
The height is 95 mm and the rim is seamless with a height of only 5 mm



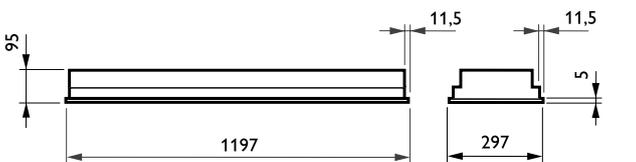
The luminaire is available with a silver-gray (RAL9006-based) painted rim



SmartForm		
Type	TBS46I (standard version) TBS47I (Dynamic Lighting version)	Wago connector; 3 or 4 poles (WA, WA4 respectively)
Ceiling grid	Module size: 600 mm Exposed tee, concealed fixed and plasterboard ceilings	Cable, length 200 cm, with plug CEE7 (CCE), for TBS46I only
Light source	Fluorescent: Square TBS46I: 4 x MASTER TL5 / G5 / 14, 24 W Square TBS47I: 6 x MASTER TL5 / G5 / 14, 24 W Rectangular TBS46I: 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W Rectangular TBS47I: 3 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W	Option Emergency lighting: 1 hour (EL1), 3 hours (EL3) Lighting controls: TBS46I: ActiLume multi controller (ACL) TBS47I: Color Variation Controller (CVC) Euro fuse (FU) included Safety cable (SC) Separate switching (SW), TBS46I only
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No	Material Housing: zinc-coated steel, rim post lackered, white RAL9016 based Optional white RAL9010 or silver grey RAL9006 based Optical cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Gear	Electronic, 220 - 240V / 50 - 60 Hz: TBS46I: High Frequency Performer (HFP) TBS46I/47I: High Frequency Regulator, DALI (HFD) TBS46I: High Frequency Regulator (HFR) TBS46I: High Frequency Regulator; touch-switch (HFR-T)	Installation Exposed ceilings: in lay, no brackets needed Concealed ceilings: bracket ZBS460 SMB (4 pcs) reach is 25 - 45 or 65 mm Plaster ceilings: bracket ZBS471 SMB-PLC (4 pcs), reach is 10 - 20 mm
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO) Diffuser; standard MLO's have diffuser (DF)	Accessory Suspension bracket sets
Connection (outside housing)	Push-in connector (PI) or with pull relief (PIP) Wieland connector GST 18, 3 or 4 poles (W, W4 respectively)	Remarks Protection foil to protect the optic during installation
		Main applications Office, education, healthcare, recreation, retail, industry



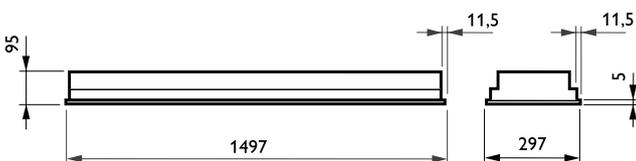
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TBS46I/47I 28, 54 W PI



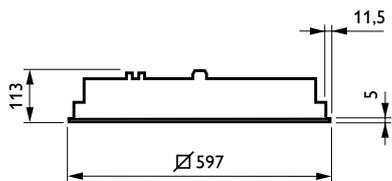
TBS46I/47I 28, 54 W W



TBS46I/47I 35, 49, 80 W PI



TBS46I/47I 35, 49, 80 W W



TBS461/471 14, 24 W W



SmartForm TBS461/471 recessed modular luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO); SmartForm TBS471 with Dynamic Lighting facility



TBS461/471 14, 24 W PI

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS461 2x54W/830 HFP AC-MLO PI	7.80	006394 00
TBS461 2x49W/840 HFP AC-MLO PI	9.00	006509 00
TBS461 2x28W/840 HFP PC-MLO EL3 FU W	8.80	007858 00
TBS461 2x35W/840 HFD ND AC-MLO ACL W	9.00	007889 00
TBS461 2x54W/840 HFD ND AC-MLO ACL W	7.80	007940 00

Please contact your local Philips representative for additional configurations



SmartForm TBS461/471 recessed modular luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO); SmartForm TBS471 with Dynamic Lighting facility

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS461 4x14W/830 HFP AC-MLO PI	7.80	006530 00
TBS461 4x24W/840 HFP ND AC-MLO W	7.80	008015 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set

Product ID	EOC
ZBS461 SMB-PLC (4PCS)	641776 99

SmartForm



The deco-infill panels have square holes of 4 mm.

The colored foils generate light effects in white, blue, green or yellow.

The customized panels are also available in standard colors



SmartForm TBS464 – attractive ‘light effect beam’

SmartForm recessed TBS464 is a combination of light beams and decorative panels. With an innovative way of guiding the light towards the infill panels, while ensuring a high quality office beam, this result in crispy and homogenous decorative light effects.

Range architecture for SmartForm ‘light effect beam’ TBS464

SmartForm recessed TBS464 range is a concept that offers comfortable ‘light effects’ thanks to the combination of ‘light beams’ and decorative perforated infill panels (IPD-xx). The attractive way of guiding light towards the infill panels, ensuring high quality light beam, results in crispy and homogenous decorative light effects. With additional foils color accents can be made.

This range is available as standard for ceilings with modular grids of 600 x 600 mm (3- and 4-lamps) and 300 x 1200 mm (2-lamps) and for plaster ceilings. The luminaires are very flat, height only 47 mm, are suitable for use with TL5 lamps, offer quick connection facilities and are easy to install. The housings are filled symmetrically with ‘light beam’ micro optics, which are available in different qualities. To facilitate maintenance, all these elements are easily to remove. The high-quality finishing and the flat seamless rim ensure the luminaires blend in with any ceiling.

The SmartForm TBS464 with customized infill panels (IPC-xx) has a frame construction which can be adapted for use with different cover materials. A few standard choices are made for color effects but there is also a lot of freedom to use other transparent materials which ensure an appealing light effect on the ceiling. The dimensions, material weight and recommended transparency are specified.

Optics

SmartForm concepts incorporate the latest optic technology: the aluminum micro optic with 3D lamellae ensures optimum visual comfort and efficiency compliant with the latest office-lighting norm (EN 12464-1).

www.philips.com/lighting

C/D8-C (IPD)

Excellent comfort micro optic made of high-quality very high reflecting aluminum in high gloss (C) or semi-high gloss (D).



C/D8-VH (IPC)

Very efficient micro optic made of high-quality very high reflecting silver aluminum in high gloss (C) or semi-high gloss (D).



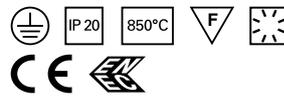
C/D8 (IPD)

Performer micro optic made of high-quality aluminum in high gloss (C) or semi-high gloss (D).

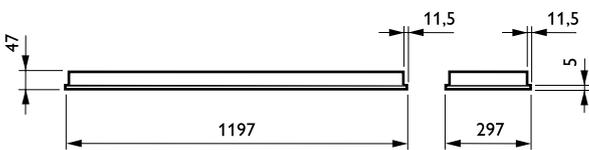


SmartForm	
Type	TBS464
Ceiling grid	Module size: 600 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Fluorescent: Square: 3 x or 4 x MASTER TL5 / G5 / 14, 24 W Rectangular: 2 x MASTER TL5 / G5 / 28, 54 W
Lamp included	Yes, (lamp color 45 I (ActiViva Natural), 452 (ActiViva Active), 827, 830,840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator; I-10V (HFR) High Frequency Regulator; touch and DALI (HFD-T)
Optic	Micro OLC Performer high-gloss optic (C8) Micro OLC Performer semi-high-gloss optic (D8) Micro OLC excellent comfort high-gloss optic (C8-C) Micro OLC excellent comfort semi-high-gloss optic (D8-C) Micro OLC very high efficient high-gloss optic (C8-VH) Micro OLC very high efficient semi-high-gloss optic (D8-VH)
Infill plates (beam version)	Infill plate deco (IPD) with colored foil, white (WH), blue (BL), green (GN), yellow (YE) Infill plate customized (IPC) empty frame, with opal and colored foil, white (WH), blue (BL), green (GN), yellow (YE), Teaser I (IPC-TI)

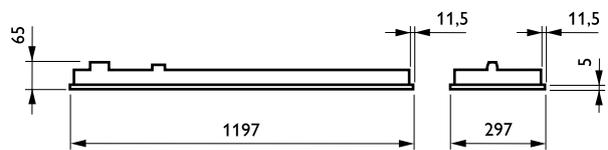
Controls (optional)	Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL)
Emergency Lighting	Emergency lighting, 1 hour (EL1), 3 hours (EL3)
Connections (outside housing)	Push in connection (PI) or with pull relief (PIP) Wieland connector 3 or 4 pole GST 18 (W,W4) Wago connector 3 or 4 pole (WA,WA4) Ensto connector 3 or 4 pole (EN, EN4) Cord white, 2 m and plug CEE7 (CCE)
Other options	Euro fuse (FU), Safety cable (SC), Separate switching (SW), Separate switching EL-versions (SW-EL)
Material and colors	Housing: zinc-coated steel, rim post lackered, white RAL9016 based Optional white RAL9010 or Silver grey RAL9006 based
Deliveries	Luminaires are packed with mounting instructions and optics are protected with foil
Accessories	Exposed ceilings (in lay): no brackets needed Concealed ceilings: bracket ZBS460 SMB (4 pcs) Concealed ceiling with T-bar 38 mm: ZBS460 SMB-TPM (4 pcs) Plaster ceilings: bracket ZBS460 SMB-PLC (24 pcs)
Main applications	Office, education, healthcare, recreation, retail, industry



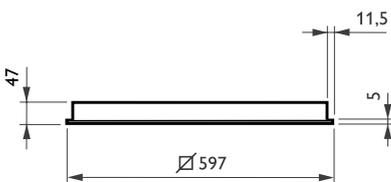
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



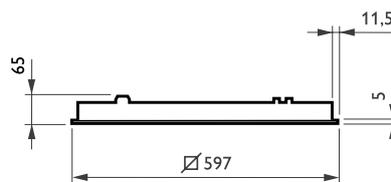
TBS464 2 x TL5



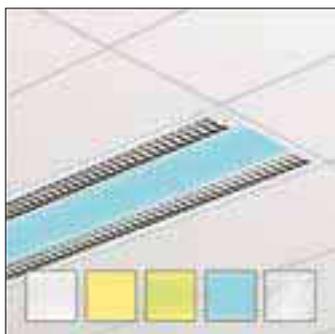
TBS464 2 x TL5 with connector



TBS464 3,4 x TL5



TBS464 3,4 x TL5 with connector

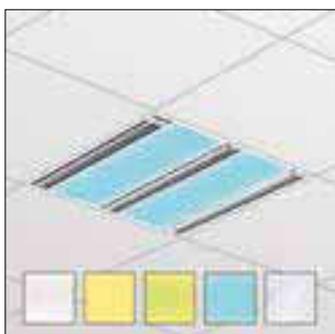


SmartForm TBS464 recessed modular luminaire with micro OLC excellent comfort semi-high-gloss optic (D8-C) customized infill plate

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 2x28W/840 HFP D8 W IPC	5.40	009883 00
TBS464 2x28W/840 HFP D8-C W IPC-WH	5.40	009890 00
TBS464 2x28W/840 HFR D8 LXM PI IPD-WH	5.40	009951 00
TBS464 2x28W/840 HFR D8 LXM W IPD-WH SI	5.40	009968 00
TBS464 2x54W/840 HFP D8-C W IPD-BL	5.40	980048 00

Please contact your local Philips representative for additional configurations

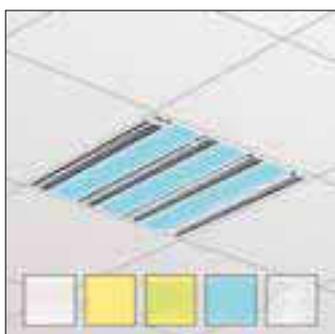


SmartForm TBS464 recessed modular luminaire with micro OLC excellent comfort semi-high-gloss optic (D8-C) customized infill plates

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 3x14W/840 HFP D8 W IPC	5.50	980147 00
TBS464 3x14W/840 HFP D8-C W IPC-WH SI	5.50	980178 00

Please contact your local Philips representative for additional configurations



Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 4x14W/840 HFP C8 W IPC-GN	5.60	980345 00
TBS464 4x14W/840 HFP D8 W IPC	5.60	980413 00
TBS464 4x14W/840 HFP D8-C W IPC-BL SI	5.60	980437 00
TBS464 4x14W/840 HFP D8-VH W IPC-WH	5.60	980451 00

Please contact your local Philips representative for additional configurations



SmartForm TBS464 recessed modular luminaire with micro OLC excellent comfort semi-high-gloss optic (D8-C) and decorative panels

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 3x14W/840 HFP C8 W IPD-WH SC	5.50	980116 00
TBS464 3x14W/840 HFP C8-C W IPD-WH SC	5.50	980123 00
TBS464 3x14W/840 HFP D8 W IPD-WH SI	5.50	980154 00
TBS464 3x14W/840 HFP D8-C W IPD-BL	5.50	980185 00

Please contact your local Philips representative for additional configurations



SmartForm TBS464 recessed modular luminaire with micro OLC excellent comfort semi-high-gloss optic (D8-C) and decorative panels

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 4x14W/840 HFP C8 PI IPD-YE	5.60	980338 00
TBS464 4x14W/840 HFP C8 W IPD-WH SC	5.60	980352 00
TBS464 4x14W/840 HFP C8-C W IPD-WH	5.60	980383 00
TBS464 4x14W/840 HFP D8-C W IPD-GN	5.60	980444 00
TBS464 4x14W/840 HFR D8 LXM W IPD-WH	5.60	980666 00
TBS464 4x24W/840 HFP C8-VH PI IPD-WH	5.60	980772 00

Please contact your local Philips representative for additional configurations

SmartForm



TBS464, 2 and 3-lamp with opal satinized cover (O-SAT)



TBS464, 2 and 3-lamp with AC-MLO and top reflector with very high-reflectance aluminum (T-VH AC-MLO)



SmartForm TBS464 – attractive 'light effect cover'

SmartForm recessed TBS464 with a selection of optical covers: opal-satinized and micro-lens optics, combined with top-reflectors, create linear lighting effects of different levels within a surface of light: – medium and intense – for different applications.

SmartForm 'light effect' luminaire with opal satinized cover or micro lens optic (MLO)

The SmartForm recessed TBS464 range is a concept that offers comfortable 'light effects'. The combination comprises a very flat luminaire and special transparent covers. Excellent results can be achieved for a variety of applications using additional top reflectors to create linear lighting effects of different levels: medium or intense. MASTER TL5 lamps with color 840 are recommended to produce clear brightness effects.

This range is available as standard for ceilings with modular grids of 600 x 600 mm (3- and 4-lamp) and 300 x 1200 mm (2-lamp), and for plaster ceilings.

The luminaires are very flat, measuring only 47 mm, can be used with TL5 lamps, offer quick connection facilities and are easy to install. The high-quality finishing and the flat seamless rim ensure clean and superior visual appearance on the ceiling.

Optics

Two cover qualities

- Opal satinized acrylate cover optic (O-SAT). This optic creates a diffuses light distribution.
- Mirco Lens Optic made of acrylate (AC-MLO) or polycarbonate (PC-MLO). Droplet shaped light distribution and all around glare control. The patented Micro Lens Optic is optimized for the best balance between efficiency and low brightness at viewing angles above 65 degrees.

Options

- White lacquered metal reflector (T-WH) behind cover for medium linear lighting effects.
- Aluminum top reflector made of high quality, very high reflective optimum silver-coated aluminum (T-VH), reflection $\geq 97\%$ for intense linear effects.

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O-Sat opal satinized acrylate cover

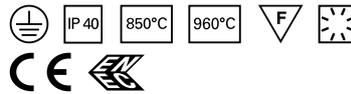


AC/PC-MLO Micro Lens Optic

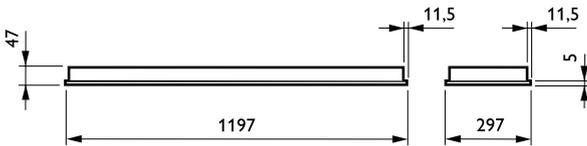


Smartform	
Type	TBS464
Light source	Fluorescent TL5: Square: 3 x or 4 x MASTER TL5 / G5 / 14, 24 W Rectangular: 2 x MASTER TL5 / G5 / 28, 54 W
Lamp included	Yes, (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830,840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator; I-10V (HFR) High Frequency Regulator; touch and DALI (HFD-T)
Optic	Micro OLC lens optic cover of acrylate material (AC-MLO) Micro OLC lens optic cover of polycarbonate material (PC-MLO) Opal satinized cover of acrylate material (O-SAT) Top-reflector of white metal (T-WH), optional Top-reflector of very high reflectance aluminum (T-VH), optional
Controls (optional)	Luxsense micro daylight controller (LXM) ActiLume multi controller (ACL)
Emergency Lighting	Emergency lighting, 1 hour (EL1) Emergency lighting, 3 hours (EL3)

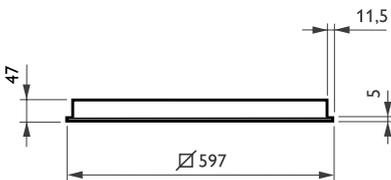
Connections (outside housing)	Push in connection (PI) or with pull relief (PIP) Wieland connector 3 or 4 pole GST 18 (W,W4) Wago connector 3 or 4 pole (WA,WA4) Ensto connector 3 or 4 pole (EN, EN4) Cord white, 2 m and plug CEE7 (CEE)
Other options	Euro fuse (FU), Safety cable (SC), Separate switching (SW), Separate switching EL-versions (SW-EL)
Material and colors	Housing: zinc-coated steel, rim post lackered, white RAL9016 based Optional white RAL9010 or Silver grey RAL9006 based
Deliveries	Luminaires are packed with mounting instructions and optics are protected with foil
Accessories	Exposed ceilings (in lay): no brackets needed Concealed ceilings: bracket ZBS460 SMB (4 pcs) Concealed ceiling with T-bar 38mm: ZBS460 SMB-TPM (4 pcs) Plaster ceilings: bracket ZBS460 SMB-PLC (24 pcs)
Main applications	Office, education, healthcare, recreation, retail, industry



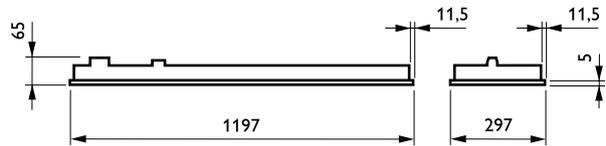
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS464 2 x TL5



TBS464 3,4 x TL5



TBS464 2 x TL5 with connector



TBS464 3,4 x TL5 with connector



Smartform TBS464 recessed modular luminaire with opal satinized cover (O-SAT)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 2x28W/840 HFP O-SAT PI	5.40	009906 00
TBS464 2x54W/840 HFP O-SAT PI	5.40	980055 00

Please contact your local Philips representative for additional configurations



Smartform TBS464 recessed modular luminaire with acrylate or polycarbonate microlens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 2x28W/840 HFD AC-MLO ACL W	5.40	009937 00
TBS464 2x28W/840 HFP PC-MLO W	5.85	980017 00
TBS464 2x54W/840 HFD T-VH AC-MLO W	5.40	980048 00

Please contact your local Philips representative for additional configurations



Smartform TBS464 recessed modular luminaire with with acrylate or polycarbonate microlens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 3x14W/840 HFD AC-MLO ACL W	5.50	980109 00
TBS464 3x14W/840 HFP PC-MLO W	5.50	980222 00
TBS464 3x14W/840 HFP T-WH AC-MLO PI	6.80	980239 00
TBS464 4x14W/840 HFD AC-MLO ACL W	5.60	980260 00
TBS464 4x14W/840 HFP T-VH PC-MLO W SI	5.60	980574 00
TBS464 4x14W/840 HFP T-WH AC-MLO W	6.90	980598 00
TBS464 4x24W/840 HFD AC-MLO W	5.60	980734 00
TBS464 4x24W/840 HFD T-VH AC-MLO W	5.60	98075 800
TBS464 4x14W/840 HFR D8 LXM W IPD-WH	5.60	980666 00

Please contact your local Philips representative for additional configurations



Smartform TBS464 recessed modular luminaire with opal satinized cover (O-SAT)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS464 3x14W/840 HFP O-SAT W	5.50	980208 00
TBS464 3x24W/840 HFP O-SAT PI	5.50	980246 00
TBS464 4x14W/840 HFD T-VH O-SAT ACL W SI	5.60	980307 00
TBS464 4x14W/840 HFP T-WH O-SAT W	6.90	980611 00
TBS464 4x24W/840 HFP O-SAT PI	5.60	980789 00
TBS464 4x14W/840 HFP D8-VH W IPC-WH		

Please contact your local Philips representative for additional configurations

TL5 'light beam' Luminaires



TL5 'light beam' concepts – slender and semi-modular

Reflecting the market trend towards miniaturization and architectural integration, Philips has developed a number of semi-modular luminaire ranges designed around the slim TL5 fluorescent lamp.

Creating the appearance of a slender beam made of light, these luminaires – most incorporating a single lamp – combine outstanding light distribution, glare control and visual comfort with high levels of efficiency, in compliance with the latest office-lighting norm (EN 12464-1).

Modular in length only, these 'light beam' luminaires are typical project solutions. Featuring state-of-the-art micro, mini or midi optics, they cover the full high- to mid-end specification spectrum and are designed to fit in a variety of ceiling types – e.g. exposed, concealed, bandraster and plaster. A number of versions can easily be extended in length, while others (can be configured to) form a light-line. Most of the types have ventilation slots and are easy to install.

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TL5 light beam concepts

Main characteristics			Indolight	Indolight	Indolight
	TBS490	TBS600	TBS315	TBS318	TBS340
Appearance:	Smallest beam concept in metal housing	Continuous lightline beam concept in metal housing			
Width 1 lamp:	90.5 mm	114.5 mm	147.5 mm	185.0 mm	147.5 mm
Width 2 lamps:	150.5 mm	200 mm	147.5 mm	185.0 mm	147.5 mm
Beam optic:	micro-beam	mini-beam	mid-beam	mid-beam	mid-beam
Ceiling type:	exposed and concealed	exposed and concealed	exposed and concealed	metal strip	exposed and concealed
Modularity:	modular in length	flexible in length	flexible in length	flexible in length	flexible in length

TBS490



TBS600



TBS315



TBS490



TBS490 – for slender light beams

TBS490 is a range of TL5 recessed luminaires for exposed ceilings. Modular in length only, they are designed for 300 mm modules.

Featuring a very slim housing and highly efficient micro-optics, TBS490 creates the impression of a slender strip of light. The miniaturized luminaire-based controls (ActiLume) and high-efficiency optics deliver significant energy savings. A range of optics is available, including an optic for more aesthetic lighting of non-task areas. TBS490 is easy to install.

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TBS490 recessed luminaire with ActiLume lighting control

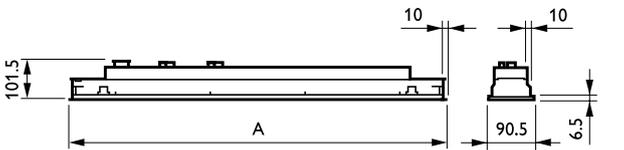


TBS490	
Type	TBS490
Ceiling systems	Module size: 300 mm Exposed tee ceilings
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator, touch and DALI (HFD-T) High Frequency Regulator (HFR)
Optic	Semi-high-gloss optic, 3D micro-lamellae (D8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) High-gloss optic, 3D micro-lamellae (C8) High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) Matt mirror, ribbed cross louvers (M2)

Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Wieland connector (W) Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL) Euro fuse (FU) included Safety cable (SC)
Material	Housing: zinc-coated steel Housing frame: natural anodized aluminum Optic: aluminum Cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Installation	Individual or in line; lay-in in exposed ceiling grids
Accessory	Suspension bracket set
Main applications	Offices, education, healthcare, retail

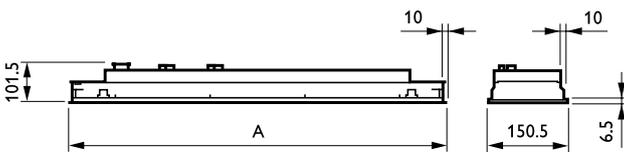


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS490 1 x TL5

	A
14W	597
28W, 54W	1197
35W, 49W, 80W	1497



TBS490 2 x TL5

	A
14W, 24W	597
28W	1197
35W, 49W	1497

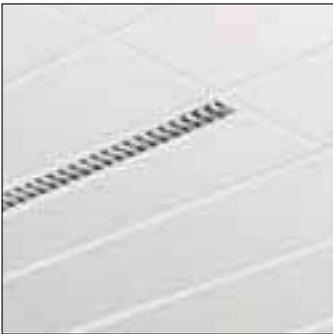


TBS490 recessed luminaire with TL5 fluorescent lamp(s) and semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS490 1x35W/830 HFP D8 PI	3.10	493954 00
TBS490 1x28W/830 HFP D8 W	2.60	795669 00
TBS490 1x28W/830 HFP D8-VH W	2.60	795683 00
TBS490 1x54W/830 HFD D8 ACL W	2.60	795737 00
TBS490 1x35W/830 HFR D8 LX W	3.10	795782 00

Please contact your local Philips representative for additional configurations



TBS490 recessed luminaire with TL5 fluorescent lamp(s) and high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS490 1x54W/840 HFD C8 W	2.60	491950 00
TBS490 1x28W/840 HFP C8 PI	2.60	795904 00
TBS490 1x54W/840 HFD C8 ACL W	2.60	795959 00
TBS490 1x28W/840 HFP C8 PI SC	2.60	796048 00
TBS490 1x35W/840 HFP C8 PI SC	3.10	796055 00

Please contact your local Philips representative for additional configurations

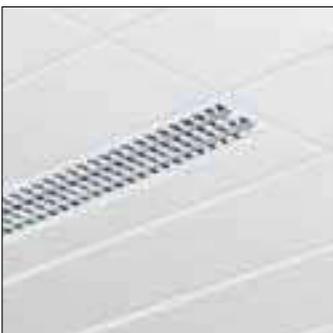


TBS490 recessed luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS490 1x28W/830 HFP M2 PI	2.60	493862 00
TBS490 1x35W/830 HFP M2 W	3.10	795775 00
TBS490 1x28W/840 HFP M2 PI	2.60	795928 00
TBS490 1x54W/840 HFP M2 PI	2.60	795966 00
TBS490 1x49W/840 HFP M2 PI	3.10	796031 00

Please contact your local Philips representative for additional configurations



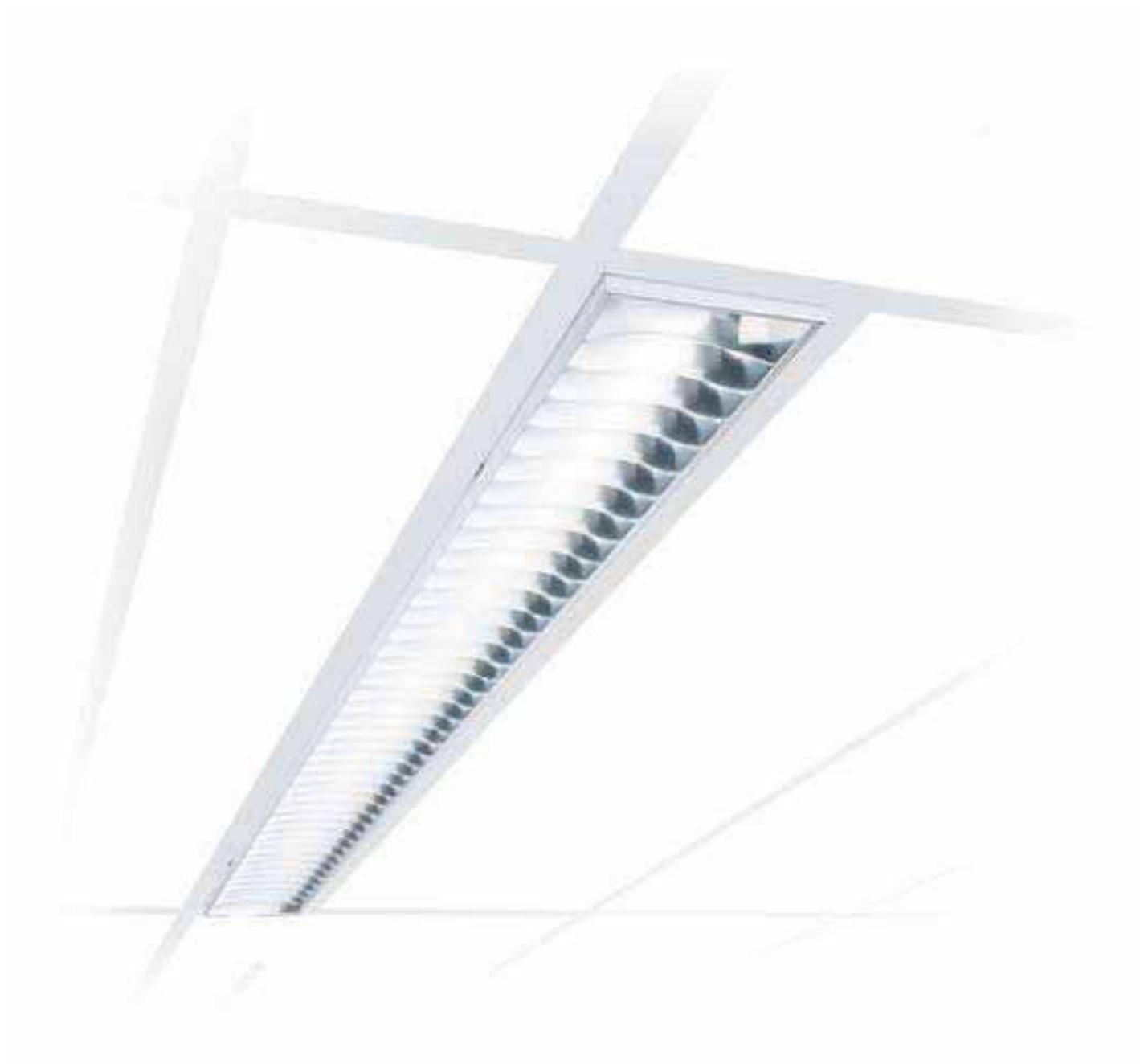
TBS490 recessed luminaire with TL5 fluorescent lamp(s) and semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS490 2x14W/830 HFP D8 PI	1.90	493381 00
TBS490 2x28W/830 HFP D8 PI	3.50	493398 00
TBS490 2x35W/830 HFP D8 PI	4.40	493404 00
TBS490 2x49W/830 HFP D8 PI	4.40	493411 00

Please contact your local Philips representative for additional configurations

TBS600



TBS600 – wide choice of light beams

TBS600 is an innovative miniature luminaire for 1 or 2 TL5 (16 mm) fluorescent lamps with a choice of different optics, including Omnidirectional Luminance Control (OLC) optics. TBS600 offers a choice of standard symmetrical light distributions or special distributions like asymmetric, bi-directional and wide beams. It has an integrated top reflector with sleeves for air exhaust, making it suitable for integration in air-handling installations. A dedicated version is available for extended air handling. TBS600 can be mounted individually or in line. Extra-long versions are available.

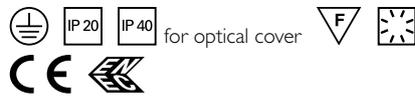
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TBS600 recessed luminaire with Luxsense lighting control

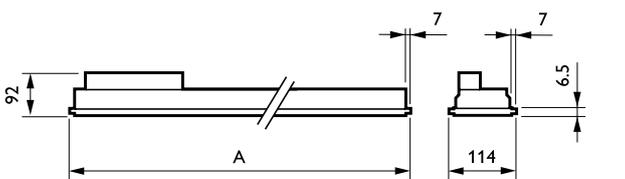


TBS600	
Type	TBS600
Ceiling grid	Module size: 300 mm Strip and plasterboard ceilings
Light source	Compact fluorescent: 1 x, 2 x MASTER TL5 / G5 / 14, 21, 24, 28, 35, 39, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 830 or 840) No
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, 3D mini-lamellae (C7) High-gloss optic, 3D mini lamellae (C6) Semi-high-gloss optic, 3D mini lamellae (D7) Semi-high-gloss optic, 3D mini lamellae (D6) Matt optic, 3D mini lamellae (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic louvers, bi-directional beam (M6-BD) Matt optic, double parabolic louvers, wide beam (M6-WB) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louver; asymmetric (M2-A) Matt mirror; ribbed louver; bi-directional beam (M2-BD)

	Matt mirror; ribbed louver; wide beam (M2-WB) Mirror with decorative green louvers (M-DGN)
Optical cover	Decorative opal cover (OD)
Connection	Wieland connector (W) Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Separate switching of lamps (SW) Euro fuse (FU) included Protection foil (FL) to protect the optic during installation
Material	Housing: zinc-coated sheet steel, white
Installation	Individual or in-line: with ceiling brackets in strip or plasterboard ceilings Through-wiring possible
Accessory	Suspension bracket set
Remarks	Extensions in length of housing possible Housing has safety suspension points for chain The luminaire offers air-handling functionality via the housing (not with OD cover) All luminaires have an integrated top reflector
Main applications	Office, recreational, healthcare, education, retail

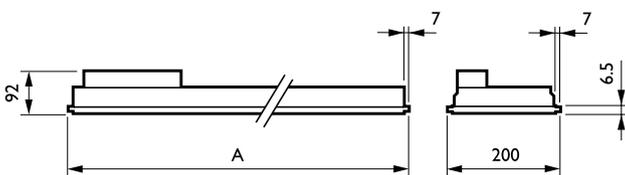


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS600 1 x TL5

	A
14W	597
28W, 54W	1197
35W, 49W	1497



TBS600 2 x TL5

	A
14W	597
28W	1197
35W	1497



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-efficiency aluminum optic with 3D lamellae (C7)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 1xTL5-28W/840 HFP C7 PI	3.50	063171 00
TBS600 1xTL5-14W/830 HFP C7 W	1.90	590554 00
TBS600 1xTL5-28W/830 HFP C7 W SC	3.50	590820 00
TBS600 1xTL5-35W/830 HFP C7 W SC	5.00	591391 00

Please contact your local Philips representative for additional configurations



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 1xTL5-28W/840 HFP C6 PI	3.50	590899 00

Please contact your local Philips representative for additional configurations



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-efficiency aluminum optic with 3D lamellae (D7)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 1xTL5-35W/830 HFP D7 W	5.00	055091 00
TBS600 1xTL5-49W/830 HFP D7 W	5.00	063683 00
TBS600 1xTL5-14W/830 HFR D7 W	1.90	590639 00
TBS600 1xTL5-28W/840 HFP D7 PI	3.50	594156 00
TBS600 1xTL5-35W/830 HFR D7 LXW	5.00	562033 00

Please contact your local Philips representative for additional configurations

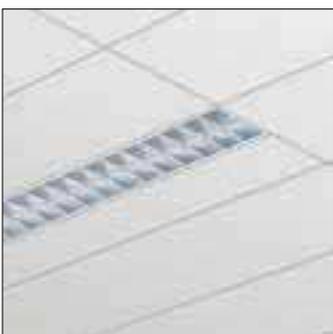


TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 1xTL5-28W/830 HFP D6 W	3.50	590783 00
TBS600 1xTL5-35W/830 HFP D6 W	5.00	591360 00
TBS600 1xTL5-35W/830 HFR D6 W	5.00	591476 00
TBS600 1xTL5-54W/830 HFP D6 W	3.50	591919 00
TBS600 1xTL5-54W/830 HFR D6 W	3.50	591971 00

Please contact your local Philips representative for additional configurations



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 1xTL5-28W/840 HFP M6 PI	3.50	590912 00
TBS600 1xTL5-28W/830 HFP M6 W	3.50	590929 00
TBS600 1xTL5-35W/830 HFP M6 W	5.00	591445 00
TBS600 1xTL5-49W/830 HFP M6 W	5.00	591773 00
TBS600 1xTL5-54W/830 HFR M6 W	3.50	591988 00

Please contact your local Philips representative for additional configurations

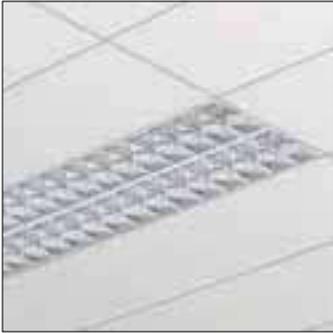


TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-efficiency aluminum optic with 3D lamellae (D7)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 2xTL5-28W/830 HFP D7 W	4.50	055374 00
TBS600 2xTL5-35W/830 HFP D7 W	5.50	060866 00
TBS600 2xTL5-28W/830 HFR D7 W	4.50	591216 00
TBS600 2xTL5-35W/830 HFR D7 W	5.50	591643 00
TBS600 2xTL5-28W/830 HFR D7 LX W	4.50	562217 00

Please contact your local Philips representative for additional configurations



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 2xTL5-14W/830 HFR D6 W	2.80	590745 00
TBS600 2xTL5-28W/830 HFP D6 W	4.50	591124 00
TBS600 2xTL5-28W/830 HFR D6 W	4.50	591131 00
TBS600 2xTL5-35W/830 HFP D6 W	5.50	591599 00
TBS600 2xTL5-35W/830 HFR D6 W	5.50	591650 00

Please contact your local Philips representative for additional configurations



TBS600 recessed luminaire with TL5 fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS600 2xTL5-28W/840 HFP OD PI	4.50	590394 00
TBS600 2xTL5-28W/830 HFP OD W	4.50	591209 00
TBS600 2xTL5-28W/830 HFR OD W	4.50	591254 00
TBS600 2xTL5-35W/830 HFP OD W	5.50	591636 00
TBS600 2xTL5-35W/830 HFR OD W	5.50	591698 00

Please contact your local Philips representative for additional configurations

Accessories

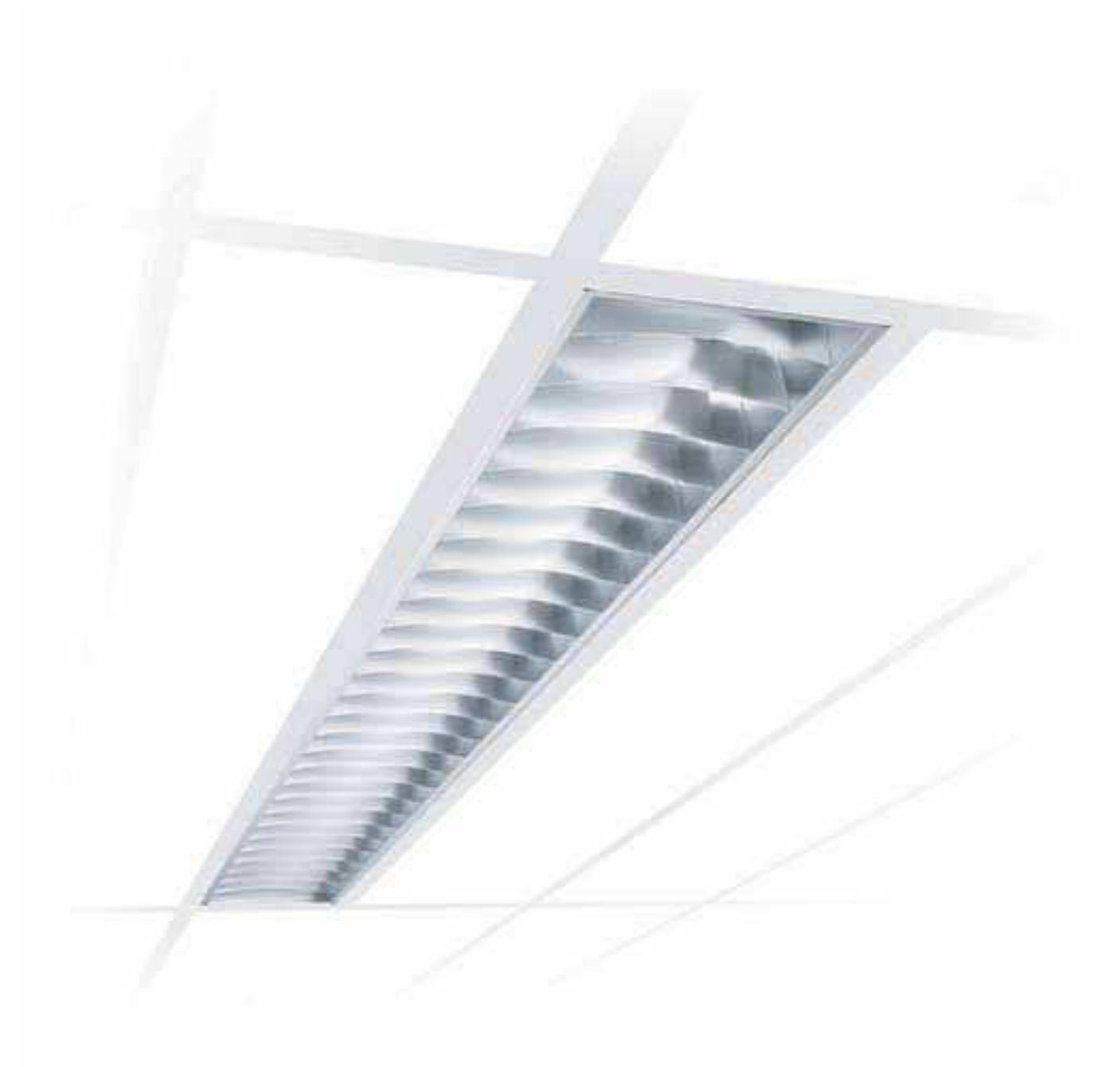


Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99



Indolight TBS3 | 5/3 | 8/340 TL5



Indolight – extensive functionality

Indolight TBS315, 318 and 340 is a recessed luminaire for 1 or 2 TL5 fluorescent lamps with a choice of different high-performance covers and optics, some of which feature Omnidirectional Luminance Control (OLC). The luminaire is suitable for concealed or exposed ceiling systems (modular 600 mm in length only). It offers air-handling functionality via the housing and is supplied ready for use, including extra features such as emergency lighting and electronic lighting controls. Extended versions can be ordered.

This luminaire range is also available with TL-D lamps.

Project solution with Dynamic Lighting: Indolight TBS375 offers the possibility to change the color temperature of the light between warm white (2700 K) and cool white (6500 K). For more information, please visit www.dynamiclighting.philips.com.

www.philips.com/lighting

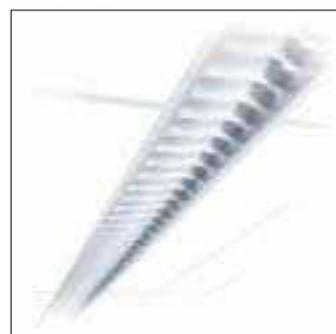
Indolight TBS315



Indolight TBS318



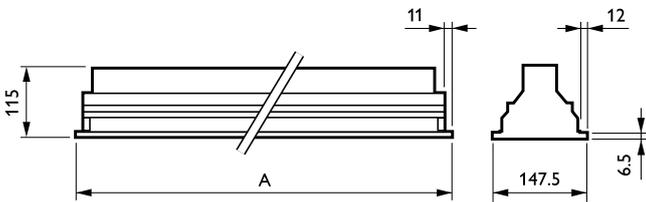
Indolight light line TBS340



Indolight			
Type	TBS315	Optical cover	Decorative opal cover (OD) Opal cover (O) Prismatic cover (P)
Ceiling grid	Module size: 300 mm Exposed tee and concealed fixed ceilings	Connection (outside housing)	Wieland connector (W) Push-in connector (PI)
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 21, 24, 28, 35, 39, 49, 54, 80 W	Option	Top reflector (T) in combination with high-reflective optics Emergency lighting: 3 hours (EL3) Lighting control: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Separate switching (SW) Euro fuse (FU) included Protection foil (FL) to protect the optic during installation Safety cable (SC)
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No	Material	Housing: zinc-coated steel, white
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)	Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids
Optic	High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic 50° (C6) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, bi-directional 30° (D6-BD30) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective (M6-H) Matt optic, double parabolic louvers, closed (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic, bi-directional 45° (M6-BD45) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louvers, wide beam (M2-WB) Matt mirror; ribbed louvers, asymmetric (M2-A) Matt mirror; ribbed louvers, bi-directional 45° (M2-BD45) Lamellae louvers, flat cross louvers (L1) Mirror with decorative green louvers (M-DGN) Asymmetrical mirror (A)	Accessory	Suspension bracket set
		Remarks	Dedicated luminaires with Dynamic Lighting functionality available (TBS375 types) The luminaire offers air-handling functionality via the housing Extra-long version of housing can be ordered Also available with TL-D lamps
		Main applications	Office, education, healthcare, recreation, retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS315

	A
14W	597
28W, 54W	1197
35W, 49W	1497



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 2xTL5-28W/830 HFP C6 W FL SC	4.80	612355 00
TBS315 1xTL5-28W/840 HFP C6-H FU W FL	4.80	614793 00
TBS315 2xTL5-28W/840 HFP C6 PI FL	3.10	627939 00
TBS315 1xTL5-35W/840 HFP C6 PI FL	5.70	627984 00
TBS315 2xTL5-35W/840 HFP C6 PI FL	5.70	628035 00

Please contact your local Philips representative for additional configurations

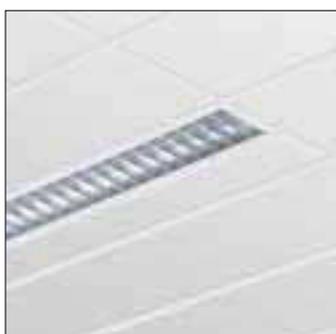


Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6) or high-reflectance 3D lamellae (D6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 1xTL5-49W/830 HFP D6 W FL	5.70	605234 00
TBS315 2xTL5-49W/830 HFP D6 W FL	5.70	605265 00
TBS315 1xTL5-28W/830 HFP D6-H PI FL	4.80	616179 00
TBS315 1xTL5-49W/830 HFP D6-H W FL	5.70	624167 00
TBS315 1xTL5-35W/830 HFR T D6-H LX W FL	5.70	705453 00

Please contact your local Philips representative for additional configurations



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 1xTL5-28W/830 HFP M6 W FL	4.80	624044 00
TBS315 1xTL5-35W/830 HFR M6 W FL	5.70	624082 00
TBS315 2xTL5-35W/830 HFP M6 W FL	5.70	624211 00
TBS315 2xTL5-49W/830 HFR M6 W FL	5.70	624266 00
TBS315 1xTL5-28W/840 HFD M6 ACL W FL	4.80	561081 00

Please contact your local Philips representative for additional configurations



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 1xTL5-28W/830 HFP M2 W FL	4.80	605395 00
TBS315 1xTL5-35W/830 HFP M2 W FL	5.70	605401 00
TBS315 2xTL5-49W/830 HFP M2 W FL	5.70	605425 00
TBS315 1xTL5-28W/830 HFR M2 PI FL	4.80	619040 00
TBS315 1xTL5-35W/830 HFR M2 PI FL	5.70	619057 00

Please contact your local Philips representative for additional configurations



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and white painted aluminum optic with flat lamellae (L1)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 2xTL5-49W/830 HFP L1 W FL	5.70	624242 00

Please contact your local Philips representative for additional configurations



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and asymmetric beam

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 1xTL5-14W/830 HFP A W	3.40	613048 00
TBS315 2xTL5-14W/840 HFP A W	2.10	635446 00
TBS315 1xTL5-54W/830 HFP A W FL	4.80	743042 00
TBS315 1xTL5-54W/827 HFP A W FL	4.80	743073 00

Please contact your local Philips representative for additional configurations



Indolight TBS315 recessed luminaire with TL5 fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS315 1xTL5-54W/830 HFP OD W	4.80	705477 00
TBS315 2xTL5-54W/830 HFP OD W	4.80	705514 00
TBS315 1xTL5-28W/830 HFP OD W	4.80	743059 00
TBS315 2xTL5-14W/830 HFP OD EL3 W4	4.40	790626 00
TBS315 2xTL5-14W/830 HFP OD W4	3.40	792194 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99
ZBS300 SMB	598161 99

Indolight TBS315 recessed luminaire with Luxsense lighting control



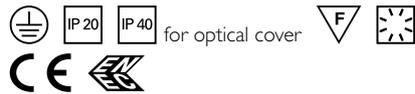
Indolight TBS315 recessed luminaire with ActiLume lighting control



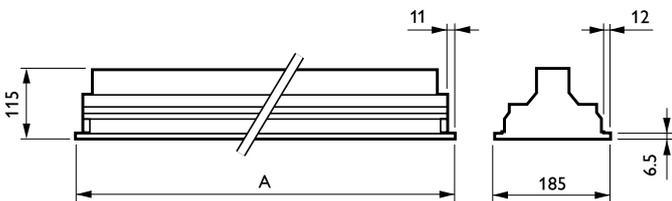


Indolight TBS318 TL5

Indolight	
Type	TBS318
Ceiling grid/system	Module size: 300 mm Exposed tee and concealed fixed ceilings
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 21, 24, 28, 35, 39, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic 50° (C6) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective (M6-H) Matt optic, double parabolic louvers, closed (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic, bi-directional 30° (M6-BD30) Matt optic, double parabolic, bi-directional 45° (M6-BD45) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louvers, wide beam (M2-WB) Matt mirror; ribbed louvers, asymmetric (M2-A) Matt mirror; ribbed louvers, bi-directional 30° (M2-BD30) Matt mirror; ribbed louvers, bi-directional 45° (M2-BD45)
Optical cover	Lamellae louvers, flat cross louvers (LI) Mirror with decorative green louvers (M-DGN) Opal cover (O) Prismatic cover (P) Decorative opal cover (OD)
Connection (outside housing)	Wieland connector (W) Push-in connector (PI)
Option	Top reflector (T) in combination with high-reflective optics Emergency lighting: 3 hours (EL3) Lighting control: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Separate switching (SW) Euro fuse (FU) included Protection foil (FL) to protect the optic during installation Safety cable (SC)
Material	Housing: zinc-coated steel, white
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids
Accessory	Suspension bracket set, longitudinal suspension strip
Remarks	Dedicated luminaires available with air-handling functionality (TBN types) Extra-long version of housing can be ordered Also available with TL-D lamps
Main applications	Office, education, healthcare, recreation, retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS318

	A
14W	597
28W, 54W	1197
35W, 49W	1497



Indolight TBS318 recessed luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS318 1xTL5-28W/840 HFP C6-H FU W FL	5.00	614601 00
TBS318 1xTL5-28W/840 HFP C6 FU W FL	5.00	614618 00
TBS318 1xTL5-28W/830 HFD C6 ACL W FL	5.00	561111 00

Please contact your local Philips representative for additional configurations



Indolight TBS318 recessed luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6) or high-reflectance 3D lamellae (D6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS318 2xTL5-28W/830 HFP D6-H PI FL	5.00	616308 00
TBS318 2xTL5-35W/830 HFP D6-H PI FL	5.90	616322 00
TBS318 2xTL5-35W/830 HFR D6-H PI FL	5.90	618609 00
TBS318 1xTL5-28W/830 HFR D6 PI FL	5.00	618616 00
TBS318 1xTL5-28W/830 HFR D6 LX W FL	5.00	561104 00

Please contact your local Philips representative for additional configurations



Indolight TBS318 recessed luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS318 1xTL5-28W/830 HFP M2 W FL	5.00	605616 00
TBS318 1xTL5-49W/830 HFP M2 W FL	5.90	605630 00
TBS318 2xTL5-35W/830 HFP M2 W FL	5.90	605647 00
TBS318 1xTL5-35W/830 HFP M2 PI FL	5.90	618630 00
TBS318 2xTL5-35W/830 HFP M2 PI FL	5.90	618647 00

Please contact your local Philips representative for additional configurations



Indolight TBS318 recessed luminaire with TL5 fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS318 2xTL5-35W/830 HFR M6 PI FL	5.90	620886 00
TBS318 1xTL5-28W/830 HFP M6 W FL	5.00	624273 00
TBS318 2xTL5-35W/830 HFP M6 W FL	5.90	624372 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99



Adaptor bracket for strip ceilings for TL-D 18W/TL5 14/24W (LP18), TL-D 36W/TL5 28/54W (LP36) and TL-D 58W/TL5 35/49/80W (LP58).
Adjustment (all sites): 9-94 mm

Product ID	EOC
ZBS318 LP18	706092 99
ZBS318 LP36	706559 99
ZBS318 LP58	706719 99

Indolight TBS318 recessed luminaire with suspension strip, longitudinal



Indolight TBS318 recessed luminaire with Luxsense lighting control



Indolight TBS318 recessed luminaire with ActiLume lighting control





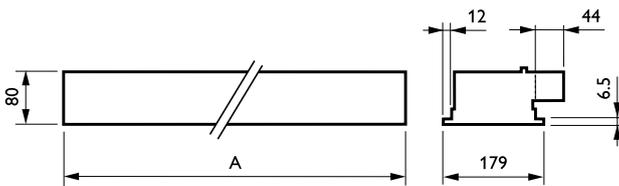
Indolight TBS340 TL5

Indolight	
Type	TBS340 (for line arrangements)
Ceiling system	Module size: 300 mm Concealed fixed ceilings
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, double parabolic 50° (C6) Semi-high-gloss optic, double parabolic (D6) Matt mirror, ribbed cross louvers (M2) Lamellae louvers, flat cross louvers (L1)
Optical cover	Decorative opal cover (OD)

Connection (outside housing)	Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Through-wiring: 1-phase (TW1), 3-phase (TW3) Protection foil (FL) to protect the optic during installation Safety cable (SC)
Material	Zinc-coated steel, white Installation in line; with ceiling brackets in concealed ceiling grids
Accessory	Suspension bracket set, end caps
Remarks	Housing has safety suspension points for chain, cable or threaded rod Also available with TL-D lamps
Main applications	Office, education, healthcare, recreational



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS340

	A
28W, 54W	1178
35W, 49W	1478



Indolight TBS340 recessed continuous-line luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS340 1xTL5-35W/840 HFP C6 PI	3.30	639604 00
TBS340 2xTL5-35W/840 HFP C6 PI	3.30	639697 00
TBS340 1xTL5-49W/840 HFP C6 TWI PI SC	3.30	704586 00
TBS340 2xTL5-49W/840 HFP C6 TWI PI SC	3.30	704593 00

Please contact your local Philips representative for additional configurations

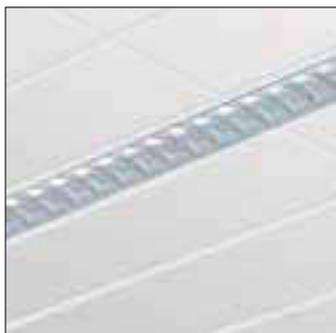


Indolight TBS340 recessed continuous-line luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6) or high-reflectance 3D lamellae (D6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS340 1xTL5-35W/840 HFP D6 PI	3.30	639611 00
TBS340 2xTL5-35W/840 HFP D6 PI	3.30	639703 00
TBS340 2xTL5-54W/840 HFP D6 TWI PI SC	2.15	704616 00
TBS340 1xTL5-49W/840 HFP D6 TWI PI SC	3.30	704623 00
TBS340 2xTL5-49W/840 HFP D6 TWI PI SC	3.30	704630 00

Please contact your local Philips representative for additional configurations



Indolight TBS340 recessed continuous-line luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profilled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS340 1xTL5-35W/840 HFP M2 PI	3.30	639598 00
TBS340 2xTL5-35W/840 HFP M2 PI	3.30	639680 00
TBS340 2xTL5-54W/840 HFP M2 TWI PI SC	2.15	704654 00
TBS340 1xTL5-49W/840 HFP M2 TWI PI SC	3.30	704661 00
TBS340 2xTL5-49W/840 HFP M2 TWI PI SC	3.30	704678 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99



A set of two end-caps

Product ID	EOC
ZBS340 EP	704326 99

Indolight TBS330



Indolight TBS330 – extensive functionality

Indolight TBS330 recessed is a versatile, easy-to-install luminaire range that offers outstanding lighting performance and user comfort. Available with up to four TL-D lamps and in a variety of dimensions, the low-height Indolight TBS330 family provides the ideal recessed solution, whether for standard renovations or new buildings.

Indolight TBS330 luminaires fit in all standard ceiling systems such as exposed and concealed mineral ceilings, metal ceilings, etc. Installation is always fast and straightforward, thanks to the use of smart universal mounting brackets and simple plug-and-play connectors.

Wide application coverage

In general applications – e.g. in hospitals, schools, laboratories, industrial areas and other public buildings – Indolight TBS330's extensive range of optics and covers provides stylish, comfortable and effective lighting. In offices, Indolight TBS330's excellent glare control ensures visual comfort and helps people remain productive. And in shops, Indolight TBS330 creates a welcoming ambience, with its precision light distribution making the merchandise virtually leap out from the display racks.

www.philips.com/lighting

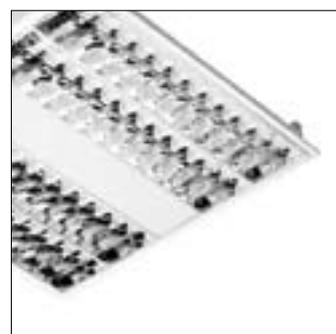
TBS330 2-lamp



TBS330 3-lamp



TBS330 4-lamp

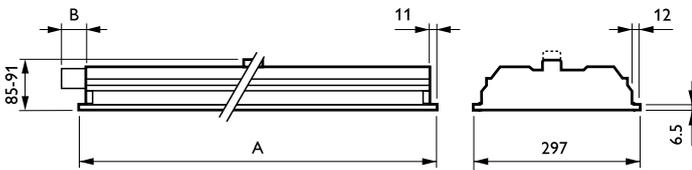


Indolight	
Type	TBS330
Ceiling system	Module size: 600 x 600, 300 x 600, 300 x 1200, 300 x 1500 mm Exposed tee and concealed fixed ceilings
Light source	Fluorescent: 1 x, 2 x, 3 x or 4 x MASTERTL-D / G13 / 18, 36, 58 W
Lamp included	Yes (lamp color 827, 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic (C6) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective (M6-H) Matt optic, double parabolic louvers (M6) Matt optic, double parabolic, bi-directional 30° (M6-BD30) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louvers, bi-directional 30° (M2-BD30) Lamellae louvers, flat cross louvers (L1) Mirror with decorative green louvers (M-DGN)

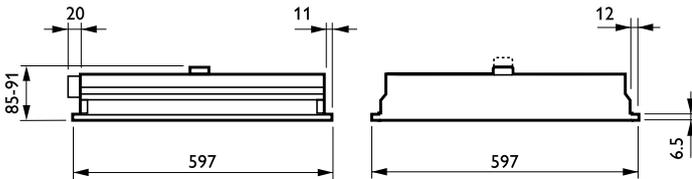
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO) Decorative opal cover (OD) Opal cover (O) Prismatic cover (P)
Connection (outside housing)	Wieland connector (W) Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Lighting control: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Separate switching (SW) Euro fuse (FU) included Infill plate: standard (IP), decorative (IPD) Protection foil (FL) to protect the optic during installation Safety cable (SC)
Material	Housing: zinc-coated steel, white
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids
Accessory	Suspension bracket set
Remarks	The luminaire offers air-handling functionality via the housing Housing has safety suspension points for chain, cable or threaded rod
Main applications	Office, education, healthcare, recreation, retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

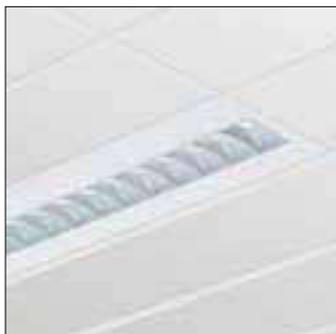


TBS330 1, 2 x TL-D



TBS330 3, 4 x TL-D

	A	B
18W	597	44
36W	1197	54
58W	1497	54

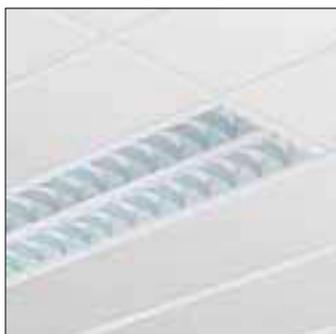


Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 1xTL-D58W/830 IC M2 CE FL	8.10	615295 00
TBS330 1xTL-D18W/830 HFP M2 W FL	3.90	622583 00
TBS330 1xTL-D36W/830 HFP M2 W FL	5.50	622910 00
TBS330 1xTL-D58W/830 HFP M2 W FL	8.10	625249 00
TBS330 1xTL-D36W/840 HFP M2 W FL	5.50	705668 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and white painted aluminum optic with flat lamellae (L1)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 2xTL-D36W/840 HFP L1 W IP FL	5.50	705804 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 2xTL-D36W/830 HFP OD PI IP	5.50	626758 00
TBS330 2xTL-D36W/840 HFP OD PI IP	5.50	626772 00
TBS330 2xTL-D58W/840 HFP OD PI IP	5.60	626918 00
TBS330 2xTL-D36W/830 HFP OD W IP	5.50	705736 00
TBS330 2xTL-D36W/830 HFR OD W IP	5.50	705781 00
TBS330 2xTL-D36W/840 HFP OD W IP	5.50	705828 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 3xTL-D18W/830 HFR C6 PI IP FL	5.20	627014 00
TBS330 3xTL-D18W/830 HFR C6 LX W IPD FL	5.20	633602 00
TBS330 3xTL-D18W IC C6 PI IP	5.20	636153 00
TBS330 3xTL-D18W/840 HFP C6 EL3 W IP FL	6.20	792286 00
TBS330 3xTL-D18W/840 HFP C6 W IP FL SC	5.20	560688 00

Please contact your local Philips representative for additional configurations

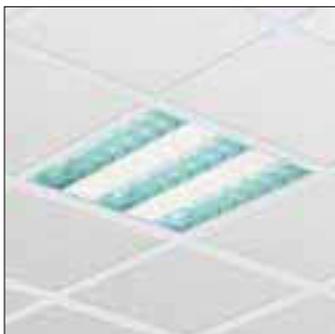


Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6) or high-reflectance 3D lamellae (M6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 3xTL-D18W/830 IC M6 CE IP FL	5.20	615332 00
TBS330 3xTL-D18W/830 HFP M6 W IP FL	5.20	622767 00
TBS330 3xTL-D18W/840 HFR M6 PI IP FL	5.20	626949 00
TBS330 3xTL-D18W/840 HFP M6 PI IP FL SC	5.20	560763 00
TBS330 3xTL-D18W/840 HFR M6 W IP FL SC	4.40	560787 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with matt high quality aluminum optic with greenish translucent concave cross louvers (M-DGN)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 3xTL-D18W/840 IC M-DGN PI IP FL	5.20	628288 00
TBS330 3xTL-D18W/840 HFP M-DGN PI IP FL	5.20	630519 00
TBS330 3xTL-D18W IC M-DGN PI IP	5.20	636207 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6) or high-reflectance 3D lamellae (D6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 4xTL-D18W/830 IC D6 PI IP FL	5.20	618944 00
TBS330 4xTL-D18W/840 HFR D6 PI IP FL	5.20	627182 00
TBS330 4xTL-D18W/830 HFP D6 PI IP FL	5.20	629483 00
TBS330 4xTL-D18W/840 HFP D6 EL3 PI IP FL	6.20	630953 00
TBS330 4xTL-D18W/830 HFR D6 LX W IPD FL	5.20	633572 00

Please contact your local Philips representative for additional configurations



Indolight TBS330 recessed luminaire with TL-D fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS330 4xTL-D18W HFP OD PI IP	5.20	629421 00
TBS330 4xTL-D18W/830 HFP OD PI IP	5.20	629445 00
TBS330 4xTL-D18W/840 HFP OD PI IP SC	5.20	560824 00
TBS330 4xTL-D18W/840 HFP OD W IP SC	5.20	560848 00
TBS330 4xTL-D18W/840 HFR OD W IP SC	5.20	560862 00

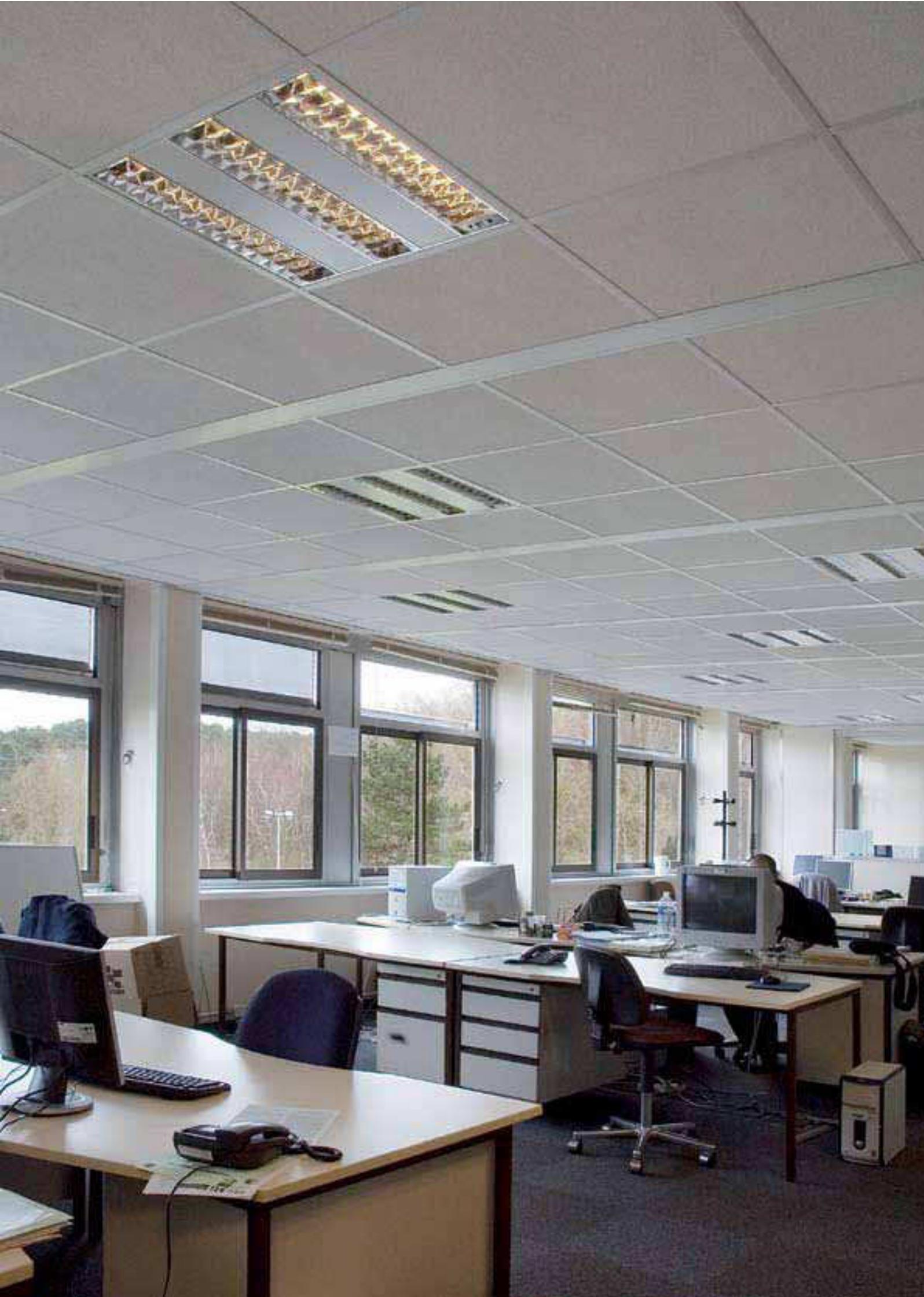
Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99



Indolight FBS330



Indolight – square of light

FBS330 is a square recessed luminaire, available in two different sizes (300, 500 and 600 mm), for PL-L and PL-S fluorescent lamps. It provides a choice of different high-performance optics and covers, including Omnidirectional Luminance Control (OLC) optics. The luminaire offers air-handling functionality via the housing. Accessories include suspension brackets for concealed ceilings.

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300 x 300



500 x 500

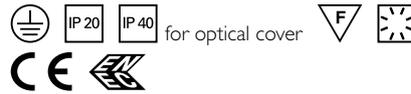


600 x 600

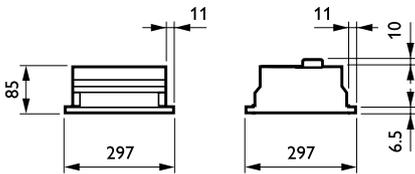


Indolight FBS330

Indolight	
Type	FBS330
Ceiling grid	Module size: 300 / 500 / 600 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Compact fluorescent: 2 x or 3 x MASTER PL-L 4 pins / G24 q-1 / 18, 36, 40, 55 W 2 x MASTER PL-S 4 Pin / 2G7 / 11 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP), not for PL-S 11 W and PL-L 18 W versions High Frequency Regulator; DALI (HFD), not for PL-S 11 W and PL-L 18 W versions High Frequency Regulator (HFR), not for PL-S 11 W and PL-L 18 W versions High Frequency Matchbox (HFM), only for PL-S 11 W and PL-L 18 W versions
Optic	High-gloss optic, double parabolic (C6) Semi-high-gloss optic, double parabolic (D6) Matt optic, double parabolic louvers (M6)
Optical cover	Matt mirror; ribbed cross louvers (M2) Lamellae louvers, flat cross louvers (L1) Decorative opal cover (OD)
Connection	Wieland connector (W) Push-in connector (PI)
Option	Euro fuse (FU) included Protection foil (FL) to protect the optic during installation
Material	Zinc coated steel, white
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids or plasterboard ceilings
Accessory	Suspension bracket set
Remarks	Housing has safety suspension points for chain, cable or threaded rod Air-handling functionality via housing (not for 11 and 18 W versions)
Main applications	Office, education, healthcare, recreation, retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS330



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L18W/840 C6 PI IP	1.25	700380 00
FBS330 2xPL-L18W/840 HFM C6 PI IP SC	1.25	704029 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L18W/840 D6 PI IP	1.25	700397 00
FBS330 2xPL-L18W/840 HFM D6 PI IP SC	1.25	704036 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L18W/840 M6 PI IP	1.15	700403 00
FBS330 2xPL-L18W/830 HFM M6 PI IP	1.25	701523 00
FBS330 2xPL-L18W/840 HFM M6 PI IP SC	1.25	704043 00
FBS330 2xPL-S/4P1 IW/840 HFM M6 PI IP	1.25	700373 00
FBS330 2xPL-S/4P1 IW/840 HFM M6 PI IP SC	1.25	704012 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L40W/840 HFP C6 PI IP FL	5.00	700472 00
FBS330 2xPL-L55W/840 HFP C6 PI IP FL	5.70	700502 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L40W/840 HFP D6 PI IP FL	5.70	700489 00
FBS330 2xPL-L55W/840 HFP D6 PI IP FL	4.50	700519 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 2xPL-L40W/840 HFP M6 PI IP FL	5.70	700496 00
FBS330 2xPL-L55W/840 HFP M6 PI IP FL	5.70	700526 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 3xPL-L40W/840 HFP C6 PI IP	5.70	700410 00
FBS330 3xPL-L55W/840 HFP C6 PI IP FL	5.70	700441 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 3xPL-L40W/840 HFP D6 PI IP	5.70	700427 00
FBS330 3xPL-L55W/840 HFP D6 PI IP	5.70	700458 00

Please contact your local Philips representative for additional configurations



Indolight FBS330 recessed luminaire with PL-L or PL-S compact fluorescent lamps and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS330 3xPL-L40W/840 HFP M6 PI IP	5.70	700434 00
FBS330 3xPL-L55W/840 HFP M6 PI IP FL	5.70	700465 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension bracket set for recessed mounting in false ceilings with concealed profiles

Product ID	EOC
ZBS300 SMB (4PCS)	598147 99
ZBS300 SMB	598161 99



EFix TBS260



EFix – simple mounting

EFix recessed TBS260 is a modular recessed luminaire for TL5 fluorescent lamps. Measuring only 55 mm in overall height and featuring a very flat rim, it fits in 600 mm grids in exposed, concealed and plaster ceilings.

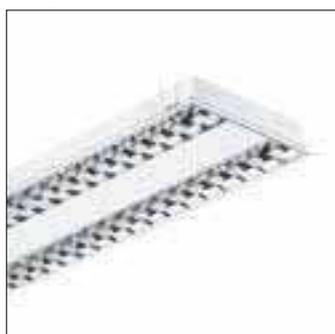
EFix recessed TBS260 offers a choice of mini-optics and has been optimized for general lighting applications and offers standard slots for ventilation.

The optional Luxsense control delivers automatic energy savings. By reacting to the level of daylight the artificial light will be adjusted, enabling significant savings on energy costs. The luminaire comes with an external connection system enables the mains connection to be made without opening the luminaire and lamps included, making it extremely easy to mount in position. The EFix recessed TBS260 range comprises square 3- and 4-lamp and rectangular 2-lamp versions.

EFix surface-mounted TCS260 and EFix suspended TPS260 complete Philips' range of luminaires for general lighting applications in offices and shops.

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2-lamp



3-lamp



4-lamp



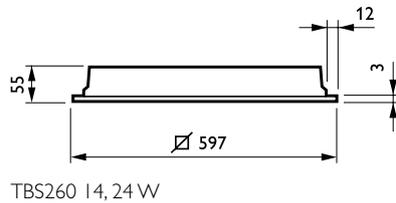
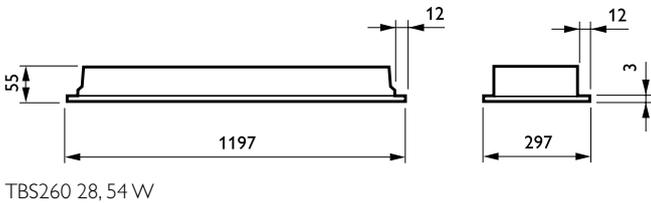
EFix recessed TBS260

Type	TBS260
Ceiling grid/system	Module size: modules 600 x 600, 300 x 1200, optional 600 x 1200 mm Exposed tee, concealed tee and plasterboard ceilings
Light source	Fluorescent: rectangular: 2 x MASTER TL5 / G5 / 28, 54 W, optional 3 x or 4 x square: 3 x or 4 x MASTER TL5 / G5 / 14, 24 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optic	High-gloss optic, double parabolic (C6) Semi-high-gloss optic, double parabolic (D6) Matt optic, double parabolic optic (M6) Matt mirror, ribbed cross louvers (M2)
Optical cover (only for 14 W square version)	Prismatic cover (P)
Connection	Wieland-like push-in connector 3 poles (W) or Wieland 5 poles (W5) Push-in connector (PI)

Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Lighting controls: Luxsense daylight controller (LX) Separate switching of lamps (SW) Safety cable (SC)
Material	Housing: pre-lacquered steel, white Optic: aluminum Optical cover: PET
Installation	Individual; lay-in in exposed ceiling grid or with ceiling brackets in concealed ceiling grids or plasterboard ceilings (plaster thickness 13, 15, 18 or 26 mm)
Accessory	Bracket ZBS160 MB (4 pcs) for concealed ceiling, clip ZGS260 PLA (40 pcs) for plaster ceiling, T-connector M/F: ZBS160 TC3 (4 pcs)
Remarks	The luminaire offers air-handling functionality via the housing (not with P cover)
Main applications	Office, education, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



EFix TBS260 recessed luminaire with Luxsense lighting control





EFix TBS260 recessed luminaire with TL5 fluorescent lamps and OLC high-gloss aluminum optics with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 2xTL5-28W/840 HFR C6 LX PI	3.20	699073 00
TBS260 2xTL5-28W/840 HFP C6 PI	3.27	699479 00
TBS260 2xTL5-28W/830 HFP C6 PI	3.27	699912 00
TBS260 2xTL5-28W/840 HFP C6 W SC	3.29	699974 00
TBS260 2xTL5-28W/840 HFR C6 PI	3.10	699998 00

Please contact your local Philips representative for additional configurations

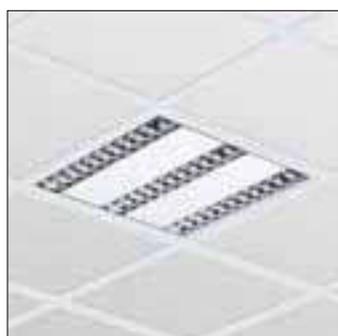


EFix TBS260 recessed luminaire with TL5 fluorescent lamps and matt aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 2xTL5-28W/830 HFP M2 PI	3.21	698458 00
TBS260 2xTL5-28W/830 HFP M2 W	3.21	698465 00
TBS260 2xTL5-54W/840 HFP M2 W	3.21	698519 00
TBS260 2xTL5-28W/840 HFP M2 PI	3.21	699967 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and OLC high-gloss aluminum optics with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 3xTL5-14W/830 HFP C6 PI	3.11	698557 00
TBS260 3xTL5-14W/840 HFP C6 PI SC	3.13	698632 00
TBS260 3xTL5-14W/840 HFR C6 PI	3.36	699516 00
TBS260 3xTL5-14W/840 HFR C6 LX PI	3.33	699523 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and OLC semi-high-gloss aluminum optics with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 3xTL5-14W/840 HFP D6 PI	3.11	698595 00
TBS260 3xTL5-14W/830 HFP D6 PI	3.11	699615 00
TBS260 3xTL5-14W/830 HFP D6 EL3 W5	3.98	699653 00
TBS260 3xTL5-14W/840 HFR D6 PI	3.36	699714 00
TBS260 3xTL5-14W/840 HFR D6 LX PI	3.33	699738 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and matt aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 3xTL5-14W/830 HFP M2 PI	3.06	698533 00
TBS260 3xTL5-24W/840 HFP M2 PI SC	3.13	698670 00
TBS260 3xTL5-14W/830 HFP M2 W	3.08	699622 00
TBS260 3xTL5-14W/840 HFP M2 PI	3.06	699684 00
TBS260 3xTL5-14W/840 HFP M2 PI SC	3.08	699691 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 3xTL5-14W/840 HFP P PI	3.42	571622 00
TBS260 3xTL5-14W/840 HFP P EL3 PI	3.34	571639 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and OLC high-gloss aluminum optics with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 4xTL5-14W/840 HFP C6 PI	3.10	698779 00
TBS260 4xTL5-14W/840 HFP C6 PI SC	3.15	698809 00
TBS260 4xTL5-14W/840 HFP C6 EL3 PI	4.01	698847 00
TBS260 4xTL5-14W/840 HFR C6 LX PI	3.37	698861 00
TBS260 4xTL5-14W/830 HFR C6 PI	3.36	699813 00

Please contact your local Philips representative for additional configurations



EFix TBS260 recessed luminaire with TL5 fluorescent lamps and OLC matt aluminum optics with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS260 4xTL5-14W/830 HFP M6 PI	3.13	698694 00
TBS260 4xTL5-14W/840 HFP M6 W SC	3.15	698816 00
TBS260 4xTL5-14W/830 HFP M6 W	3.13	699769 00
TBS260 4xTL5-14W/830 HFR M6 LX W5	3.34	699837 00

Please contact your local Philips representative for additional configurations

Accessories



Brackets for plaster ceilings (ZGS260 PLA)

Product ID	EOC
ZGS260 PLA (40PCS)	570960 99



Impala TBS I 60



Impala – functional and convenient

Impala TBS I 60 is a functional recessed luminaire for 2, 3 or 4 TL-D fluorescent lamps. It offers a wide range of optics as well as a prismatic plate. The optics/plate are fitted to the housing by means of a clip for easy installation and maintenance. An external connection system enables the mains connection to be made without opening the luminaire. The luminaire fits in visible profile ceilings as standard and, using accessories, in concealed and plaster ceilings.

www.philips.com/lighting

2-lamp



3-lamp

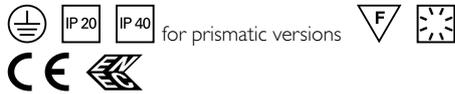


4-lamp

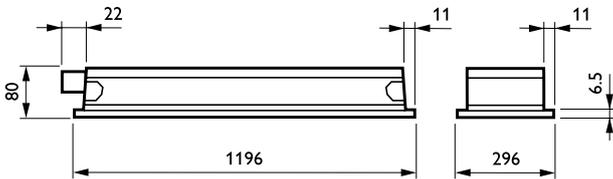


Impala	
Type	TBSI 60
Ceiling grid/system	Module size: 600 x 600, 300 x 1200 mm Exposed tee, concealed fixed and plasterboard ceilings
Light source	Fluorescent: 3 x or 4 x MASTER TL-D / G13 / 18 W 2 x MASTER TL-D / G13 / 36 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) Electronic Included (EI)
Optic	High-gloss optic, double parabolic closed, limit 1000 cd (C6-1000cd) Matt optic, double parabolic louvers, closed (M6) Matt mirror; ribbed cross louvers (M2) Lamellae louver; flat cross louvers (L1) High-gloss mirror; faceted (C3)

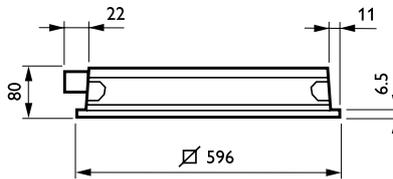
Optical cover	Prismatic cover (P) (for 18 W version only)
Connection	Push-in connector (PI) Plug-in connector: GST (GST)
Option	Lighting controls: Luxsense daylight controller (LX) Euro fuse (FU) included Cord 2.10 m with europlug (C2100CE)
Material	Pre-lacquered steel, white
Installation	Individual; in visible ceiling profiles, or with accessories in concealed and plaster ceilings
Accessory	Suspension bracket set, plaster clips, spacers
Remarks	Mains connection outside housing (without opening the luminaire) Housing has safety suspension points for chain, cable or threaded rod
Main applications	Office, recreation, retail



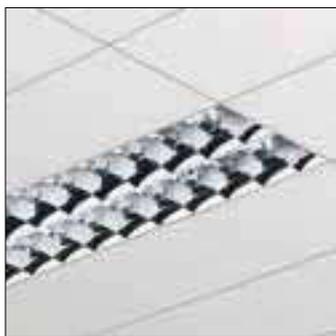
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBSI 60 2 x TL-D



TBSI 60 3, 4 x TL-D



Impala TBSI 60 recessed luminaire with TL-D fluorescent lamps and an OLC high-gloss high-quality aluminum optic with 3D lamellae, limit 1000 cd (C6-1000cd)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBSI 60 2xTL-D36W IC C6-1000 PI	3.90	571394 00
TBSI 60 2xTL-D36W EI C6-1000 PI	2.96	571400 00
TBSI 60 2xTL-D36W HFP C6-1000 PI	3.03	574623 00
TBSI 60 2xTL-D36W/840 HFP C6-1000 PI SC	3.03	574661 00

Please contact your local Philips representative for additional configurations

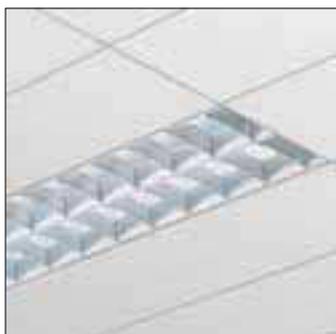


Impala TBS I 60 recessed luminaire with TL-D fluorescent lamps and an OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS I 60 2xTL-D36W IC M6 PI	4.42	296685 00
TBS I 60 2xTL-D36W EI M6 PI	3.54	296739 00
TBS I 60 2xTL-D36W/840 IC M6 FU SI	4.79	302140 00
TBS I 60 2xTL-D36W/830 EI M6 FU SI	3.90	304564 00
TBS I 60 2xTL-D36W/830 HFP M6 GST	3.97	309705 00

Please contact your local Philips representative for additional configurations



Impala TBS I 60 recessed luminaire with TL-D fluorescent lamps and a matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS I 60 2xTL-D36W IC M2 PI	3.91	296678 00
TBS I 60 2xTL-D36W/830 IC M2 C2100CE	4.45	302928 00
TBS I 60 2xTL-D36W/830 EI M2 C2100CE	4.01	309644 00
TBS I 60 2xTL-D36W/830 EI M2 GST	3.70	309668 00
TBS I 60 2xTL-D36W HFP M2 PI	3.03	683386 00

Please contact your local Philips representative for additional configurations



Impala TBS I 60 recessed luminaire with TL-D fluorescent lamps and an OLC matt high-quality aluminium optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS I 60 3xTL-D18W/830 HFP M6 PI	4.25	105260 00
TBS I 60 3xTL-D36W EI M6 PI	6.38	296951 00
TBS I 60 3xTL-D18W/840 HFP M6 GST SC	3.28	689173 00

Please contact your local Philips representative for additional configurations



Impala TBS I 60 recessed luminaire with TL-D fluorescent lamps and an OLC high-gloss high-quality aluminum optic with 3D lamellae, limit 1000 cd (C6-1000cd)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS I 60 4xTL-D18W/840 EI C6-1000 SC	3.07	693811 00
TBS I 60 4xTL-D18W/840 HFP C6-1000 SI	3.08	696898 00
TBS I 60 4xTL-D18W/840 HFP C6-1000 EL3 PI	4.67	696928 00
TBS I 60 4xTL-D18W IC C6-1000 PI	3.51	697956 00
TBS I 60 4xTL-D18W/840 HFR C6-1000 PI	3.37	571356 00
TBS I 60 4xTL-D18W/840 IC C6-1000 GST	3.97	574883 00

Please contact your local Philips representative for additional configurations



Impala TBS I 60 recessed luminaire with TL-D fluorescent lamps and a matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS I 60 4xTL-D18W HFP M2 PI	3.20	297958 00
TBS I 60 4xTL-D18W/840 IC M2 PI SC	4.26	298320 00
TBS I 60 4xTL-D18W/830 HFP M2 C2100CE	4.22	302942 00
TBS I 60 4xTL-D18W/830 IC M2 GST	4.24	309729 00
TBS I 60 4xTL-D18W/840 HFP M2 GST SC	4.20	689067 00

Please contact your local Philips representative for additional configurations



Impala TBSI 60 recessed luminaire with TL-D fluorescent lamps and a high-gloss high-quality aluminum optic faceted with matt aluminum lamellae (C3)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBSI 60 4xTL-D18W IC C3 PI	3.88	296364 00
TBSI 60 4xTL5-14W/840 HFP C3 PI	3.40	297712 00
TBSI 60 4xTL-D18W HFP C3 PI	3.20	297903 00
TBSI 60 4xTL-D18W/830 IC C3 GST SC	4.26	297965 00
TBSI 60 4xTL-D18W/830 EI C3 PI	3.38	571158 00

Please contact your local Philips representative for additional configurations



Impala TBSI 60 recessed luminaire with TL-D fluorescent lamps and a prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBSI 60 4xTL-D18W HFP P PI	4.00	306537 00
TBSI 60 4xTL-D18W/830 IC P PI	4.76	570779 00
TBSI 60 4xTL-D18W HFP P PI	3.33	570816 00
TBSI 60 4xTL-D18W/840 EI P PI	3.10	571226 00

Please contact your local Philips representative for additional configurations

Accessories



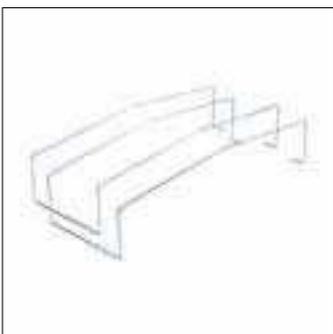
Suspension bracket set for recessed mounting in false ceilings with concealed profile

Product ID	EOC
ZBSI 60 MB (4PCS)	299600 99



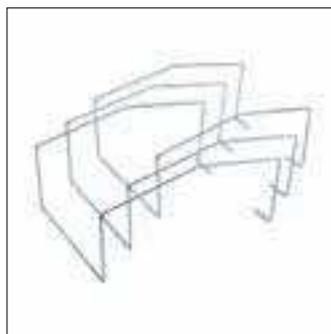
Set of plaster clips for recessed mounting in plaster ceilings and only for the 3 and 4 x 18 W versions

Product ID	EOC
ZBSI 60 PLA (40PCS)	299662 99



Spacer to create a safety space around the luminaire

Product ID	EOC
ZBSI 60 SPA-F4 (20PCS)	299624 00



Spacer F covered for 2 lamps

Product ID	EOC
ZBSI 60 SPA-F2 (30PCS)	299648 99



Impala FBS I 60



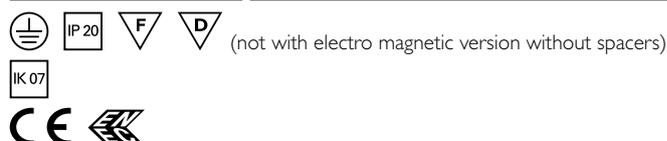
Impala – solid performance

Impala FBS I 60 is a square recessed luminaire measuring 600 x 600 mm for PL-L fluorescent lamps. It offers a choice of two optics – C6 and M6 with Omnidirectional Luminance Control (OLC) – and is available in 2- and 3-lamp versions.

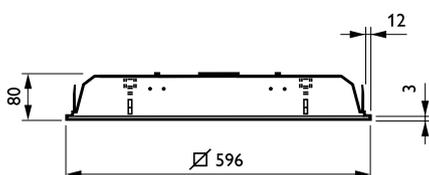
www.philips.com/lighting

Impala	
Type	FBS I 60
Ceiling grid	Module size: 600 mm Exposed, concealed fixed and plasterboard ceilings
Light source	Compact fluorescent: 2 x or 3 x MASTER PL-L 4P / 2G11 / 36, 55 W
Lamp included	Yes (lamp color 840)
Gear	Electro magnetic, 230 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)

Optic	High-gloss optic, double parabolic, closed (C6) Matt optic, double parabolic louvers, closed (M6)
Connection	Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3)
Material	Pre-lacquered steel, white
Installation	Individual; in visible ceiling profiles, or with accessories in concealed and plaster ceilings
Accessory	Suspension bracket set, plaster clips, spacers
Main applications	Office, recreation, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS I 60



Impala FBS I 60 recessed luminaire with compact fluorescent PL-L lamps and OLC high-gloss aluminum optics with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS I 60 2xPL-L36W/840 IC C6 PI	4.31	697987 00
FBS I 60 2xPL-L36W/840 HFP C6 PI	3.40	697994 00
FBS I 60 2xPL-L55W/840 HFP C6 PI	3.44	698045 00
FBS I 60 2xPL-L55W/840 HFP C6 EL3 PI	3.44	571974 00

Please contact your local Philips representative for additional configurations



Impala FBS I 60 recessed luminaire with compact fluorescent PL-L lamps and OLC matt aluminum optics with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS I 60 2xPL-L36W/840 HFP M6 PI	3.40	698007 00
FBS I 60 2xPL-L55W/840 HFP M6 PI	3.44	698052 00
FBS I 60 2xPL-L36W/840 IC M6 PI	4.31	698083 00
FBS I 60 2xPL-L55W/840 HFP M6 EL3 PI	3.44	571981 00

Please contact your local Philips representative for additional configurations



Impala FBSI 60 recessed luminaire with compact fluorescent PL-L lamps and OLC high-gloss aluminum optics with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBSI 60 3xPL-L36W/840 IC C6 PI	4.78	698014 00
FBSI 60 3xPL-L36W/840 HFP C6 PI	3.53	698021 00

Please contact your local Philips representative for additional configurations



Impala FBSI 60 recessed luminaire with compact fluorescent PL-L lamps and OLC matt aluminum optics with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBSI 60 3xPL-L36W/840 HFP M6 PI	3.53	698038 00
FBSI 60 3xPL-L36W/840 IC M6 PI	4.78	698090 00

Please contact your local Philips representative for additional configurations

Accessories



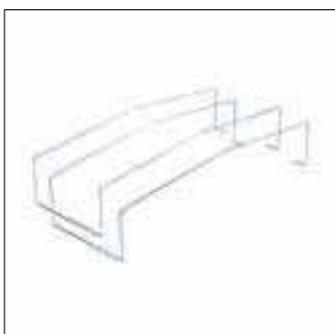
Suspension bracket set for recessed mounting in false ceilings with concealed profile

Product ID	EOC
ZBSI 60 MB (4PCS)	299600 99



Set of plaster clips for recessed mounting in plaster ceilings and only for the 3 and 4 x 18 W versions

Product ID	EOC
ZBSI 60 PLA (40PCS)	299662 99



Spacer to create a safety space around the luminaire

Product ID	EOC
ZBSI 60 SPA-F4 (20PCS)	299624 00

Spacers can be mounted quickly onto the housing of the luminaire





FBSI 63



FBSI 63 – softlight

FBSI 63 is an indirect 'softlight' luminaire for 2 PL-L compact fluorescent lamps, with symmetrical light distribution. Optics are supplied with the luminaires. It is fully integrated for mounting in modular false ceilings (600 x 600 mm) via a quick connection facility.

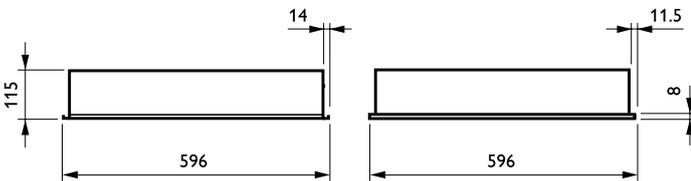
www.philips.com/lighting

FBS163	
Type	FBS163
Ceiling system	Module size: 600 mm Exposed tee ceilings
Light source	Compact fluorescent: 1 x or 2 x MASTER PL-L 4 pin / G24 q-I / 36,55 W
Lamp included	Yes (light color 840 or 830)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)

Light distribution	Indirect (IND)
Connection	Wieland connector (W) Push-in connector (PI)
Option	Safety cable (SC)
Material	Pre-lacquered sheet steel, white
Installation	Individual; lay-in in exposed ceiling grids
Main applications	Offices, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS163



FBS163 recessed luminaire with PL-L compact fluorescent lamps and symmetrical indirect light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS163 2xPL-L36W HFP IND W	3.70	495408 00
FBS163 2xPL-L55W HFP IND W	3.70	495415 00
FBS163 2xPL-L36W HFR IND W	3.70	495439 00
FBS163 2xPL-L55W HFP IND PI	3.70	789637 00
FBS163 2xPL-L36W IC IND PI	4.00	789651 00

Please contact your local Philips representative for additional configurations

TBS I 05



TBS I 05 – excellent wall-washer

TBS I 05 is a recessed luminaire for a TL-D or TL5 (16 mm) fluorescent lamp, for exposed ceiling grids or other ceiling types, modular in length. A main matt aluminum reflector provides excellent asymmetrical light distribution for high vertical illuminances (wall-washing). TBS I 05 is intended for individual mounting but can also be installed in lines.

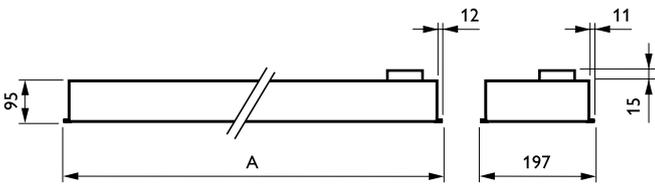
www.philips.com/lighting

TBS105	
Type	TBS105
Ceiling grid	Module size: 300 mm Concealed fixed ceilings
Light source	Fluorescent: 1 x MASTER TL-D / G13 / 36, 38, 58 W 1 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)

Optic	Asymmetrical mirror (A)
Housing configuration	Housing left (of matching pair) (H-L) Housing right (of matching pair) (H-R)
Connection	Push-in connector (PI)
Option	Safety cable (SC)
Material	Housing: zinc-coated sheet steel, white
Installation	Individual; with ceiling brackets in concealed ceiling grids Luminaires can be installed in lines (end to end), with ceiling T-bar in between
Accessory	Suspension bracket set
Main applications	Office, education, healthcare, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS105

	A
14W, 24W	575
28W, 36W, 38W, 54W	1175
35W, 49W, 58W	1475



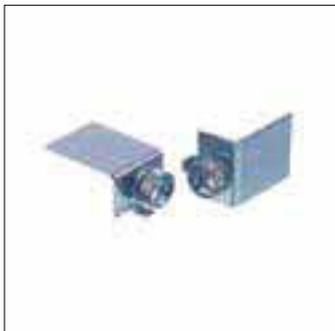
TBS105 recessed luminaire with TL5 or TL-D fluorescent lamp and asymmetric light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS105 1xTL-D36W/840 HFP H-L A PI SC	3.50	637235 00
TBS105 1xTL-D38W/830 I A PI	3.50	638089 00
TBS105 1xTL5-14W/830 HFP A PI	2.70	638102 00
TBS105 1xTL5-28W/830 HFP A PI	3.50	638119 00
TBS105 1xTL5-35W/830 HFP A PI	3.79	638126 00

Please contact your local Philips representative for additional configurations

Accessories



Brackets for plaster ceiling

Product ID	EOC
ZBS450 SMB-S	639239 99
ZBS450 SMB-L	745015 99

FBS I 05



FBS I 05 – excellent wall-washer

FBS I 05 is a functional recessed luminaire with a PL-L compact fluorescent lamp, modular in length. A main reflector provides excellent asymmetrical light distribution for high vertical illuminances (wall-washing).

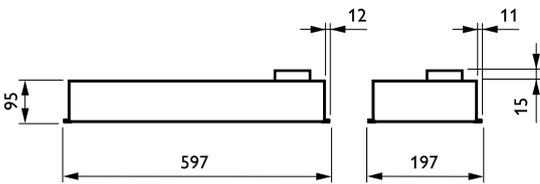
www.philips.com/lighting

FBS105	
Type	FBS105
Ceiling grid	Module size: 300 mm Exposed tee ceiling
Light source	Compact fluorescent: 1 x MASTER PL-L 4 Pin / 2GI I / 36, 40, 55 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)

Optic	Asymmetrical mirror (A)
Connection	Push-in connector (PI)
Material	Housing: zinc-coated sheet steel, white
Installation	Individual; lay-in in exposed ceiling grids Luminaires can be installed in lines (end to end), with ceiling T-bar in between
Accessory	Suspension bracket set
Main applications	Office, education, healthcare, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS105



FBS105 recessed luminaire with PL-L compact fluorescent lamp and asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS105 1xPL-L36W/830 I A PI	3.30	635897 00
FBS105 1xPL-L55W/830 HFP A PI	1.70	638072 00
FBS105 1xPL-L36W/840 IC A PI SC	3.30	639369 00
FBS105 1xPL-L55W/840 HFP A PI SC	2.70	639383 00
FBS105 1xPL-L55W/840 HFP A PI	2.70	709802 00

Please contact your local Philips representative for additional configurations



Suspended and
surface-mounted luminaires

Selection guide – Suspended and surface-mounted luminaires

Luminaire family	Product range	Page	Mounting			Light distribution	
			Suspended 	Surface-mounted 	Free standing	Direct 	Direct/indirect 

Strato 	TPH710	3.10		•		•	
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Savio 	TPS760/762/764	3.18	•			•	•
	TPS770/772	3.20	•			•	•
	TCS760	3.22		•		•	
	TCS770	3.24		•		•	

Rotaris 	TPS740/745	3.28	•				•
	TCS740	3.30		•		•	

Celino 	TPS680/682	3.34				•	•
	TCS680	3.38		•		•	

Arano 	TPS640/642/644	3.44	•			•	•
	TPS646, Nordic	3.56	•				•
	TCS640	3.48		•		•	
	TCS649, asymmetric	3.53		•			

ThinMark 	TPS580	3.58	•			•	
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X-tendolight 	TPS498	3.64	•			•	•
	TCS398 195 mm wide	3.70	•	•		•	
	TCS398 311 mm wide	3.74	•			•	
	TCS398 CLL	3.73	•	•		•	•
	TCS398 Square	3.76		•		•	
	FCS398 Square	3.90		•			

Product range	Light distribution			Number of lamps	Lamps			
	Indirect 	Asymmetric 	Double asymmetric 		Fluorescent			Compact fluorescent
					TL5 	TL5-C 	TL-D 	PL-L 
Strato								
TPH710				4x2, 4x3	•			
Savio								
TPS760/762/764				2,4	•			
TPS770/772				3,6	•			
TCS760				2,4	•			
TCS770				3,6	•			
Rotaris								
TPS740/745				1		•		
TCS740				1		•		
Celino								
TPS680/682				1,2	•			
TCS680				1,2	•			
Arano								
TPS640/642/644				1,2				
TPS646, Nordic				3	•			
TCS640				1,2,3,4	•			
TCS649, asymmetric		•		1,2	•			
ThinMark								
TPS580				1,2	•			
X-tendolight								
TPS498				1,2	•		•	
TCS398 195 mm wide		•	•	1	•		•	
TCS398 311 mm wide			•	2	•		•	
TCS398 CLL			•	1,2	•		•	
TCS398 Square				3,4	•		•	
FCS398 Square				2,3				•

Luminaire family	Product range	Page	Mounting		Free standing	Light distribution	
			Suspended 	Surface-mounted 		Direct 	Direct/indirect 

EFix							
	TPS262	3.84	•				•
	TCS260	3.86	•	•		•	•

Finess							
	TCS198	3.94		•		•	

Centura2							
	TCS160	3.100		•		•	

Modella							
	TCS125	3.104		•		•	

SuperOmni							
	TCH481	3.106	•	•		•	

Wall-mounted luminaires							
Savio							
	TWS760	3.110		•			

Arano							
	TWS640	3.114		•			

Celino							
	TWS680	3.116		•			

Free floor-standing luminaires							
Savio							
	FFS764	4.4			•		•
	TFS764	4.4			•		•

Arano							
	FFS644	4.8			•		•
	TFS644	4.8			•		•

Celino							
	FFS684	4.12			•		•

Product range	Light distribution			Number of lamps	Lamps			
	Indirect 	Asymmetric 	Double asymmetric 		Fluorescent			Compact fluorescent
					TL5 	TL5-C 	TL-D 	PL-L 
EFix								
TPS262				1,2	•			
TCS260				1,2	•			
Finess								
TCSI98				1,2			•	
Centura2								
TCSI60				1,2,4			•	
Modella								
TCSI25				1,2	•		•	
SuperOmni								
TCH481		•		2,4	•		•	•
Wall-mounted luminaires								
Savio								
TWS760				2	•			
Arano								
TWS640				1	•			
Celino								
TWS680				1	•			
Free floor-standing luminaires								
Savio								
FFS764				3				•
TFS764				3,4	•			
Arano								
FFS644				2,3				•
TFS644				4	•			
Celino								
FFS684				2				•



Philips MASTER TL5 – the perfect fit every time

Philips invented the T5 fluorescent concept in the 1990s, making Philips MASTER TL5 lamps the original 16 mm lamps. Philips has MASTER TL5 lamps to suit every application, as well as an extensive portfolio of MASTER TL5 luminaires, gear and controls.

MASTER TL5 lamps are operated on HF gear and offer the following benefits:

- up to 28% less energy consumption than T8 lamps on electromagnetic gear
- maximum energy efficiency: up to 104 lm/W
- very good color rendering
- long life of 19,000 hours (10% failure rate).

For a complete overview of all our MASTER TL5 lamps, we refer to page 12.14



Best environmental choice

Environmentally, Philips MASTER TL5 lamps and gear offer the highest energy efficiency for fluorescent lighting, resulting in the lowest CO₂ emissions. All products are RoHS-compliant. MASTER TL5 lamps use less glass, metal and packaging, and their lower weight offers transport and recycling benefits.

www.philips.com/mastertl5



Innovative luminaires

Philips has a history of innovative advances in optic design, including the renowned OLC (Omni-directional Luminance Control) optics introduced at the time of the launch of the MASTER TL5 lamp. Continuing this tradition, our latest luminaires feature OLC micro optics. These allow luminaires to be miniaturist in design, with optimum performance in terms of light distribution, visual comfort and efficiency.



Lighting controls for MASTER TL5 lamps

Philips offers control systems that switch the lights off when an area is vacated and/or react to the level of daylight by adjusting the artificial light.



MASTER TL5 lamps with Philips electronic (HF) gear

By using Philips TL5 electronic (HF) gear you can be sure that the lamp and gear work perfectly together, because they have been designed, developed, tested and optimized for each other. (HF) gear maximizes energy savings, improves user comfort by eliminating start-up flicker and strobe effects, improves safety with over-voltage detection and extends lamp life.



Philips ActiViva – get activated

Good lighting doesn't only enable us to see, it also affects how we feel. On dull, dark days, the absence of bright light can dampen our mood and make us feel as miserable as the weather. But a ray of sunshine is sometimes all it takes to lift our spirits and make us feel invigorated. For several years now we've been working with leading universities to understand the highly complex relationship between light and well-being.

This has led to the development of Philips ActiViva lamps. These revolutionary new lamps contain an optimized amount of blue light and in this way make people feel more energized. So instead of feeling tired, people are able to stay alert and focused to concentrate on the task at hand..

ActiViva Natural lamps

provide natural, cool light that contains 25% more blue light than existing cool-daylight lamps, and combine well with other light sources in existing installations. They are available in TL5 and TL-D versions.

**ActiViva Active lamps**

are available in TL5 and provide extremely cool light with 85% more blue light than current cool-daylight lamps. Due to the high blue light content, these lamps can create a real sky effect.

All types are retro-fittable into existing fittings, making them quick and easy to install.

www.philips.com/activiva



With Philips ActiViva lamps



With traditional lamps

**MASTER TL5 ActiViva
Active and Natural**

- 24 W, 49 W and 54 W
- Color Rendering Index >80
- Lumen output:
 - 24 W: 1650
 - 49 W: 4100
 - 54 W: 4250

**MASTER TL-D ActiViva
Natural**

- 18 W, 36 W and 58 W
- Color Rendering Index >80
- Lumen output:
 - 18 W: 1300
 - 36 W: 3250
 - 58 W: 5000

Strato



Strato – my sky

Strato is a modular light ceiling that brings the natural, appealing dynamic of daylight – with its changing color temperatures – into shops, offices and other public areas. It also offers dynamic constellations of color for imaginative, dedicated lighting ambiences. With its discreet design and high-quality materials, this light ceiling integrates harmoniously with the interior architecture.

The 1200 x 1200 mm Strato module has a translucent PMMA cover with an integrated patented diffuser to create a virtually homogeneous luminous surface. The cover can be suspended via a damped spring locking system to facilitate easy maintenance. Multiple Strato modules can be connected.

Strato's modularity enables it to be tailored to the specific layout of the space and to adapt to any subsequent changes to that layout. And its minimal depth (165 mm) means that it can be used in rooms with relatively low ceilings. Strato can be suspended or wall-mounted.

Strato comes in two versions:

Strato Sky features 4 x 2 x TL5 28 W lamps and light colors 827 and 865 for color mixing.

Strato Rainbow features 4 x 3 x TL5 28 W lamps and light colors red, green and blue for color mixing.

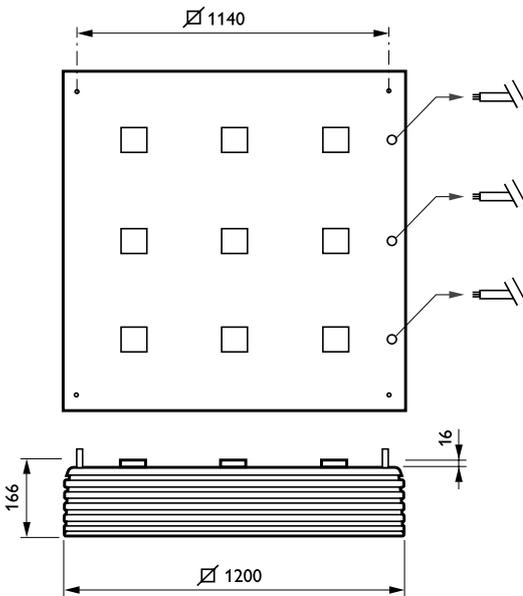
www.philips.com/lighting

Strato	
Type	TPH710
Light source	Fluorescent: Sky version: 4 x 2 x MASTER TL5 / G5 / 28 W Rainbow version: 4 x 3 x TL5 / G5 / 28 W
Lamp included	Yes (lamp color RGB or 827/865)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator (HFR) or DALI (HFD)
Option	Lighting controls: customized solutions possible

Material	Housing: sides from extruded aluminum profiles, steel top cover Cover: two layer PMMA (with integrated diffuser) Optics: high-purity aluminum mirrors
Installation	Surface (wall or ceiling): screw mounting Suspended: with various suspension sets Luminaire modules can be connected to one another with mounting accessories
Accessory	Suspension sets, mounting brackets
Remarks	Cover can be suspended via a damped spring locking system (easy maintenance)
Main applications	Shopping malls, areas with missing daylight, office, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPH710



Strato TPH710, modular lighting panel with a translucent acrylic cover with an integrated diffuser

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPH710 12xTL5-28W/RGB HFD	33.40	213511 00
TPH710 12xTL5-28W/RGB HFR	33.40	213528 00
TPH710 8xTL5-28W/827/865 HFD	31.60	213535 00
TPH710 8xTL5-28W/827/865 HFR	31.60	213542 00

Please contact your local Philips representative for additional configurations

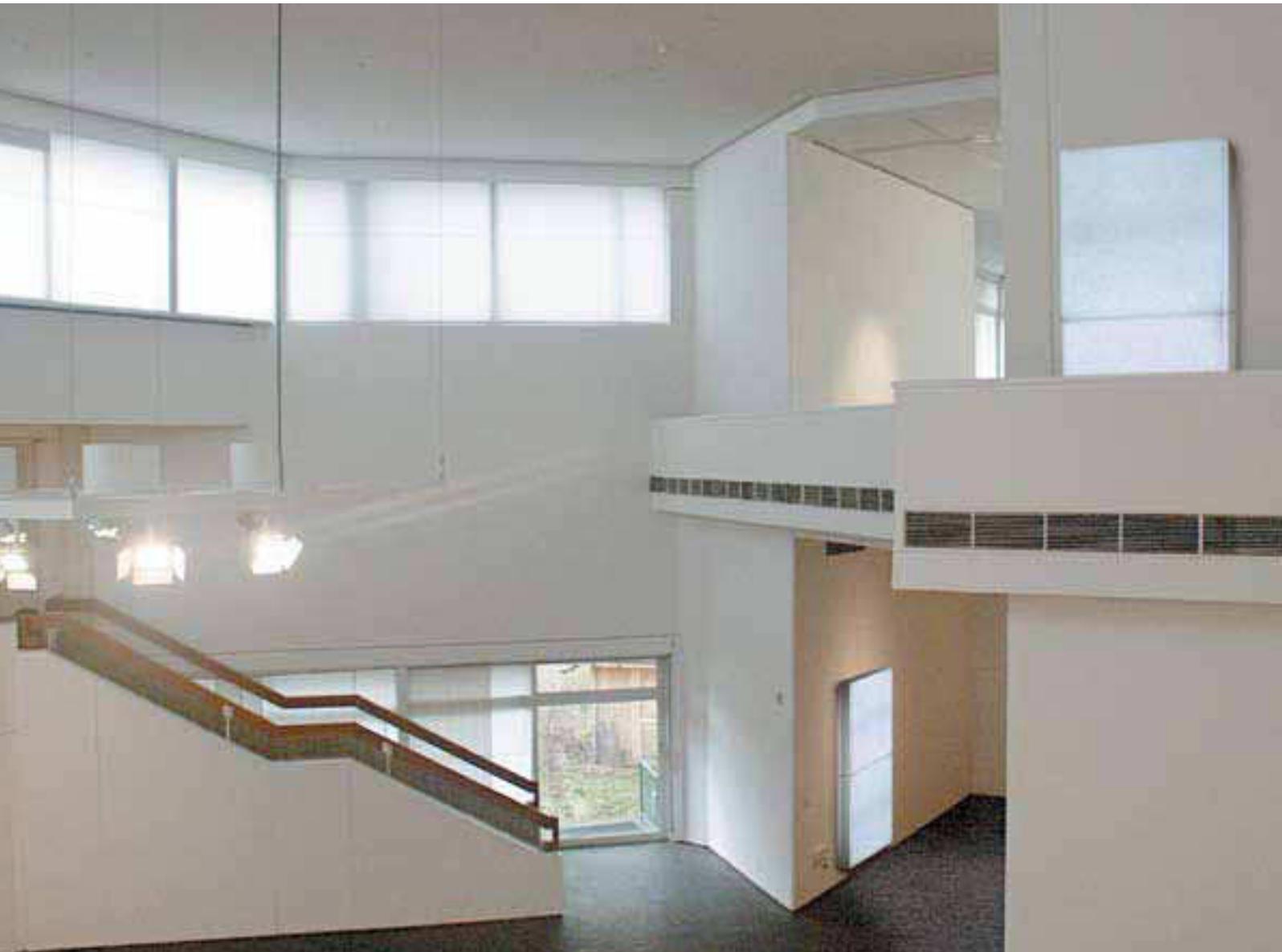
Accessories

Product ID	EOC
ZPH710 MB-SW (4PCS)	214044 00
ZPH710 CP-SW (2PCS)	214051 00
ZPH710 CPL-SW	214075 00
ZPH710 SMB (4PCS)	214082 00
ZPH710 CPX-SW	214068 00

The cover can be suspended via a damped spring locking system to facilitate maintenance.



Suspended and surface-mounted luminaires



Savio TPS760/762/764/770/772, TCS760/770



Savio – pure light

Featuring Philips' patented micro-lens optic technology, Savio is a complete luminaire range that offers the ideal combination of stylish design and optimum performance for both task and general lighting.

Savio has an edge-to-edge lighting appearance with a uniform and comfortable brightness impression – a real 'surface of light'. The micro-lens optic consists of a single plate and is embedded in a housing made of high-quality natural anodized aluminum. Savio ensures optimum light distribution and full glare control in compliance with the latest office-lighting norm (EN 12464-1).

Savio luminaires with Dynamic Lighting keep us feeling active by creating dynamic artificial light that varies over the course of the day or is set according to personal preference.

Savio is available as a full range: suspended, surface-mounted, recessed, free-standing and wall-mounted.

www.philips.com/lighting



Savio surface-mounted



Savio free floor-standing



Savio wall-mounted

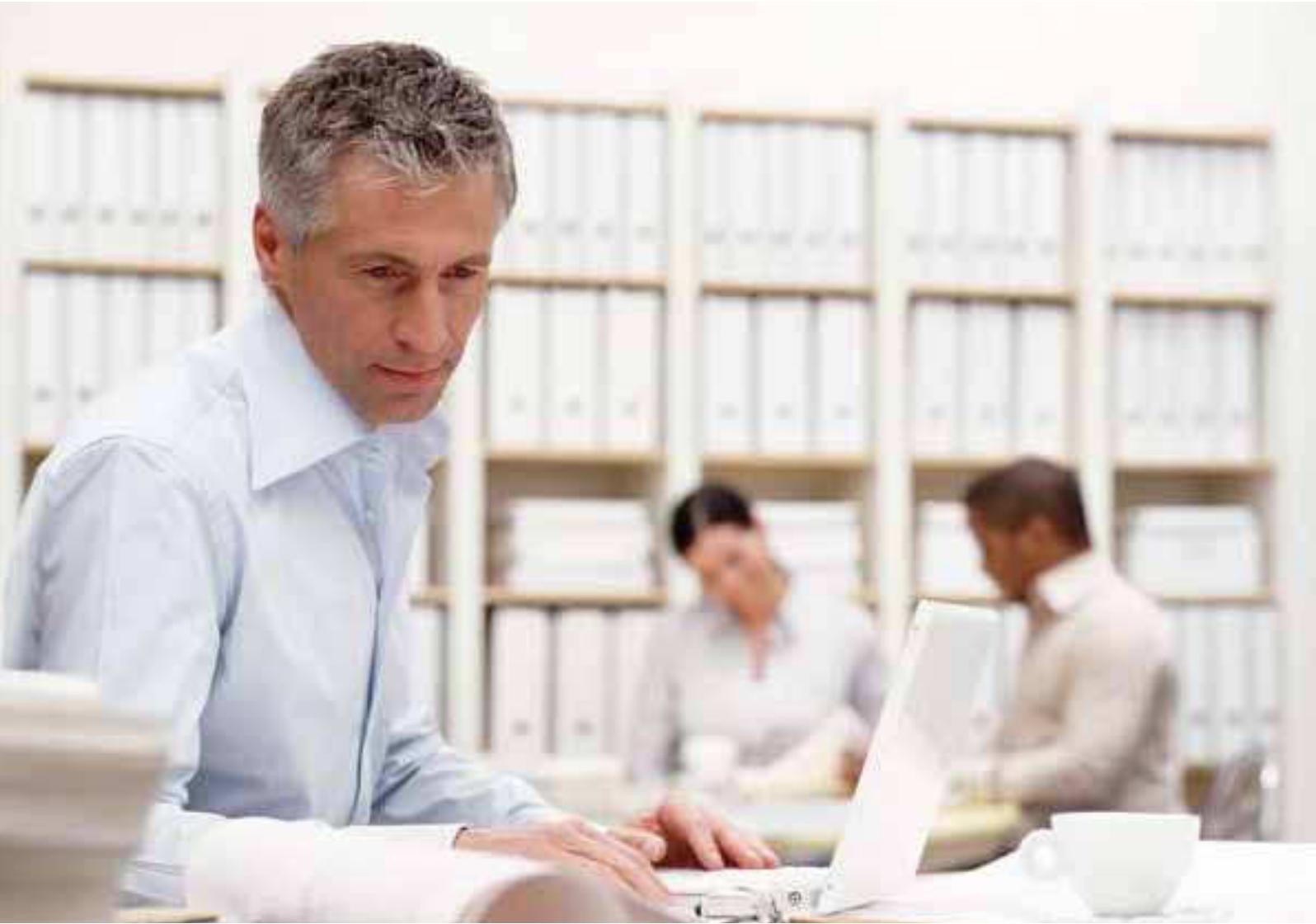


Savio suspended



Savio recessed





Savio – surface of light

Besides outstanding lighting performance, aesthetic appeal and architectural integration were key drivers in the development of Savio. The patented micro-lens optic provides a uniform light distribution, ensuring an even and comfortable brightness impression. Completing the effect of an edge-to-edge 'surface of light', the micro-lens optic is secured by a translucent rim around the luminaire.

Savio's design also allows multiple luminaires to be connected in a line or block arrangement, ensuring maximum freedom in application and configuration.

Micro-lens optic

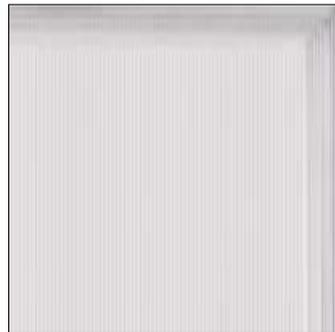
With the new patented micro-lens optic (MLO), the lamps are not directly visible and full glare control from all viewing angles is a reality (Omnidirectional Luminance Control, OLC). The micro-lens optic is highly efficient and meets the latest office standards: $L_m < 1000 \text{ cd/m}^2$ in all viewing directions at $\gamma \geq 65^\circ$ and $UGR_R < 19$ (EN 12464-1).

This means no disturbing glare on PC or laptop screens, regardless of where they are positioned in the room.

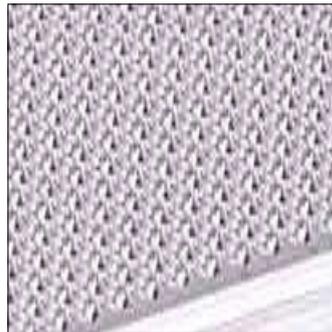
The micro-lens optic provides a uniform light distribution, ensuring an even and comfortable brightness impression – a real ‘surface of light’. The micro-lens optic is secured by a translucent rim around the luminaire.

The patented micro-lens optic design uses conical lenses with inverted tops that are positioned in a square array for the best possible glare control. The optic fully justifies the designation ‘micro’ since there are over 35 high-precision lenses per square centimeter.

Edge-to-edge lighting



The principle

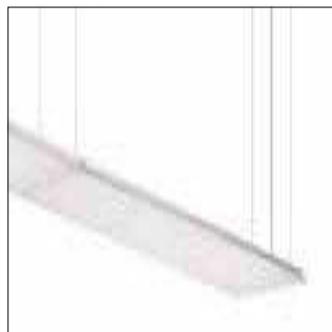


The cone



The trend towards multi-skilled knowledge workers and flattening hierarchies will transform tomorrow's office. Office spaces will take on a more social role of bringing knowledge workers together in physical proximity. They will be places where people come together to think, communicate and create. This vision has driven the design and development of Savio, with freedom in application and configuration being a key objective. Its design allows multiple luminaires to be connected in a line or block arrangement.

Line arrangement



Block arrangement

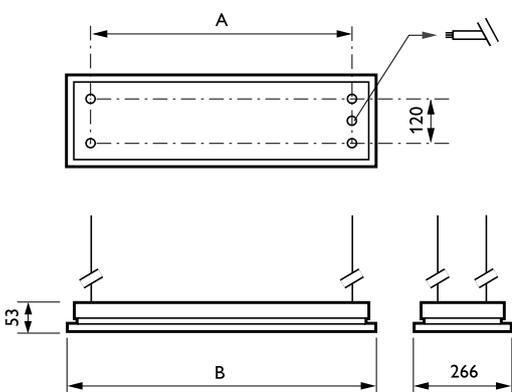


Savio	
Type	TPS760 (direct lighting, standard version) TPS762 (direct 70% / indirect 30% lighting, standard version) TPS764 (direct 30% / indirect 70% lighting, standard version)
Light source	Fluorescent: 2 x or 4 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes, lamp color 45 I (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840 No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer, Intelligent (HFP-I) High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator, touch-switch (HFD-T)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector
Option	Diffuser fitted Open housing (HO) Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature (LF), for insertion in a line
Material	Housing: anodized aluminum Optical cover: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent)

Installation	Rectangular versions: Individual or line; suspended mounting with a set of two double steel-wire suspensions (SMS) or with a set of two triangular steel-wire suspensions (SMT), both with metal-like power cord, 150 cm, and ceiling caps Square versions: Individual; suspended mounting with a set of four single steel-wire suspensions including a metal-like power cord, 150 cm and ceiling cap (SM4) Square versions in block arrangement: Suspended mounting with a set of single steel-wire suspensions including a metal-like power cord, 150 cm, and ceiling cap (SBM) Fast fine adjustment with clutch device (Reutlinger)
Accessory	Coupling set for square block arrangement
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r , 19, L _m < 1000 cd/m ² at γ > 65°) Luminaires standard delivered without diffuser (ND) Dedicated line arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring Dedicated ready to install versions available (KIT)
Main applications	Office, department stores

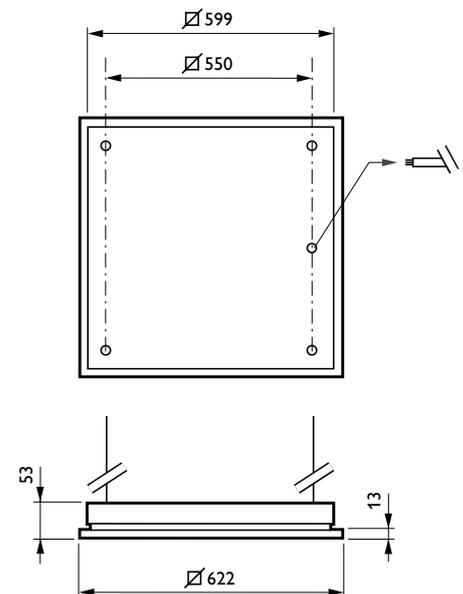


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1100	1259
35W, 49W, 80W	1400	1559

TPS760/762/764 2 x TL5, TPS770/772 3 x TL5



TPS760/762/764 3 x TL5



Savio TPS760/762/764 suspended luminaire with PMMA micro-lens optic (AC-MLO) for direct or direct/indirect lighting



Savio TPS760/762/764 suspended luminaire with PMMA micro-lens optic (AC-MLO) for direct or direct/indirect lighting

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS760 2x28W/830 HFP AC-MLO SMS	8.80	747507 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS760 4x14W/830 HFP AC-MLO SM4	8.20	747545 00
TPS760 4x14W/830 HFR AC-MLO SM4	8.20	747552 00
TPS760 4x14W/840 HFP AC-MLO SM4	8.20	749877 00
TPS760 4x14W/840 HFR AC-MLO SM4	8.20	750927 00

Please contact your local Philips representative for additional configurations

The micro-lens optic provides a uniform and comfortable light distribution



Natural anodized aluminum housing with translucent rim

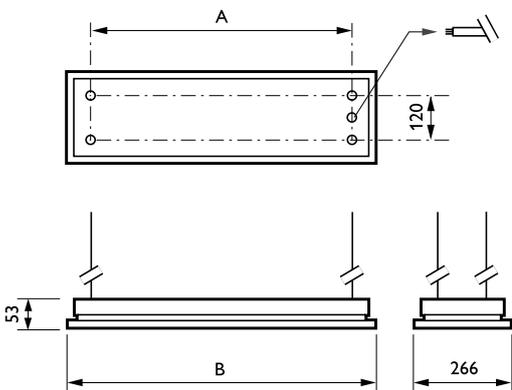


Savio	
Type	TPS770 (direct lighting, Dynamic Lighting version) TPS772 (direct 70% / indirect 30% lighting, Dynamic Lighting version)
Light source	Fluorescent: 3 x or 6 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54W
Lamp included	Yes, lamp color 827/865, 827/451 (ActiViva Natural) or 827/452 (ActiViva Active)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator, DALI (HFD)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector
Option	Open housing (HO) (only in TPS772 version) Emergency lighting: 3 hours (EL3) Lighting controls: ColorVariation Controller (CVC) Euro fuse (FU) included
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature (LF), for insertion in a line
Material	Housing: anodized aluminum Micro-lens optic: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent)

Installation	Rectangular versions: Individual or in line; suspended mounting with a set of two double steel-wire suspensions (SMS) or with a set of two triangular steel-wire suspensions (SMT), both with metal-like power cord, 150 cm, and ceiling caps Square versions: Individual; suspended mounting with a set of four single steel-wire suspensions including a metal-like power cord, 150 cm and ceiling cap (SM4) Square versions in block arrangement: Suspended mounting with a set of single steel-wire suspensions including a metal-like power cord, 150 cm, and ceiling cap (SBM) Fast fine adjustment with clutch device (Reutlinger)
Accessory	Coupling set for square block arrangement Remarks MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN12464-1, UGR _r , I9, L _m < 1000 cd/m ² at γ > 65°) Dedicated line arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring Dedicated ready to install versions available (KIT)
Main applications	Office, department stores

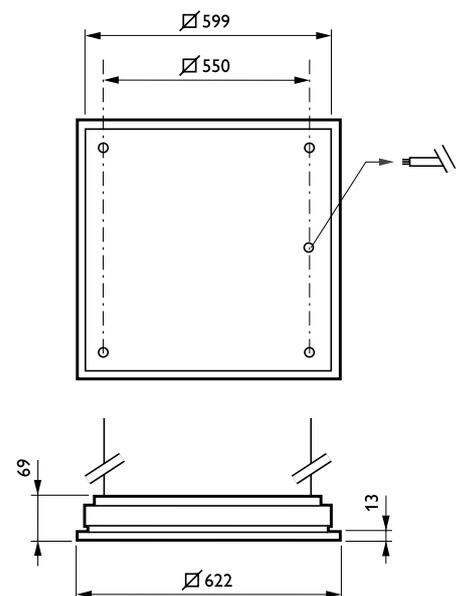


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

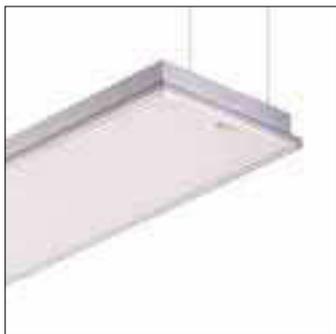


TPS760/762/764 2 x TL5, TPS770/772 3 x TL5

	A	B
28W, 54W	1100	1259
35W, 49W, 80W	1400	1559



TPS770/772 6 x TL5



Savio TPS770/772 suspended luminaire with PMMA micro-lens optic (AC-MLO) for direct or direct/indirect lighting, with Dynamic Lighting facility and CVC

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS770 3x54W/827/865 HFD AC-MLO CVC SMS	7.70	747576 00
TPS772 3x28W/827/865 HFD AC-MLO CVC SMS	7.70	759142 00
TPS772 3x35W/827/865 HFD AC-MLO CVC SMS	9.40	759180 00

Please contact your local Philips representative for additional configurations



Savio TPS770/772 suspended luminaire with PMMA micro-lens optic (AC-MLO) for direct or direct/indirect lighting, with Dynamic Lighting facility and CVC

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS770 6x14W/827/865 HFD AC-MLO CVC SM4	9.90	750941 00

Please contact your local Philips representative for additional configurations

Accessories



Power cord in metal design, 5-wire, length 10 m

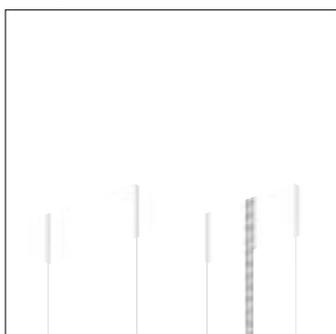
Product ID	EOC
ZPH760 C10000-5x0.75	790190 00



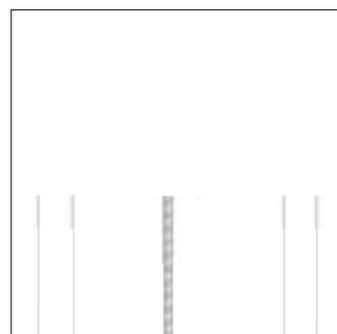
Accessories for coupling piece X-shape (4 x 90 degrees) and cable, length 1.5 m

Product ID	EOC
ZPH760 CPX C1500	750316 00

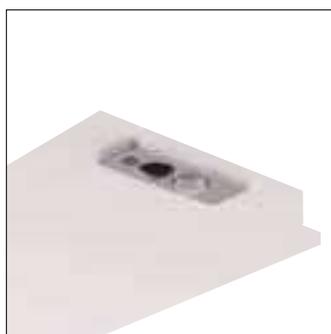
Double steel-wire suspension set with ceiling fixation and ceiling caps (SMS). Fast fine adjustment can be performed with a clutch device. A metal-like power cord is included. The set is delivered along with the rectangular luminaire versions.



Set of four single steel-wire suspensions with ceiling fixation (SM4). A separate ceiling cap is included for the metal-like power cord. The set is delivered along with the square luminaire versions



The Savio Dynamic Lighting luminaire for personal light is delivered with an integrated controller (ActiLume) to adjust the lighting level and color temperature.



Savio suspended square luminaires can be coupled in a block arrangement. Four square luminaires are needed, as well as a coupling set, which includes all coupling and suspension elements required to build a block arrangement.

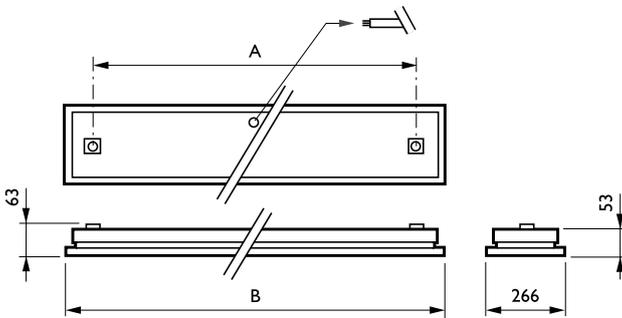


Savio	
Type	TCS760 (standard version)
Light source	Fluorescent: 2 x or 4 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes, lamp color 45 I (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840 No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator, touch-switch (HFD-T)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector
Option	Diffuser fitted Emergency lighting: 3 hours (EL3) Lighting controls: Actilume multi controller (ACL) Euro fuse (FU) included
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature (LF), for insertion in a line

Material	Housing: anodized aluminum Micro-lens optic: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent)
Installation	Individual or in line (rectangular types), mounting by screw fixing
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r 19, L _m < 1000 cd/m ² at γ > 65°) Luminaires standard delivered without diffuser (ND) Dedicated line arrangement luminaires (LE and LF types) include through-wiring facility Dedicated ready to install versions available (KIT)
Main applications	Office, department stores

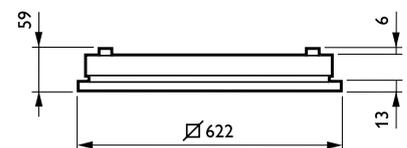
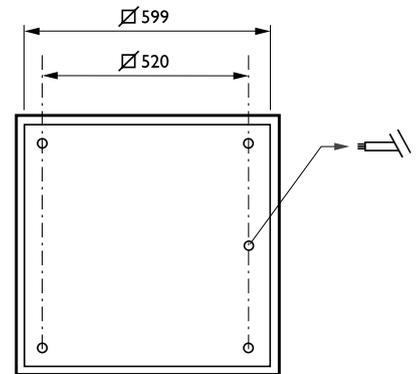


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1100	1259
35W, 49W, 80W	1400	1559

TCS760 2 x TL5, TCS770 3 x TL5



TCS760 4 x TL5



Savio TCS760 surface-mounted luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS760 2x35W/840 HFP PC-MLO	10.50	746531 00
TCS760 2x54W/830 HFP AC-MLO	8.80	747446 00

Please contact your local Philips representative for additional configurations

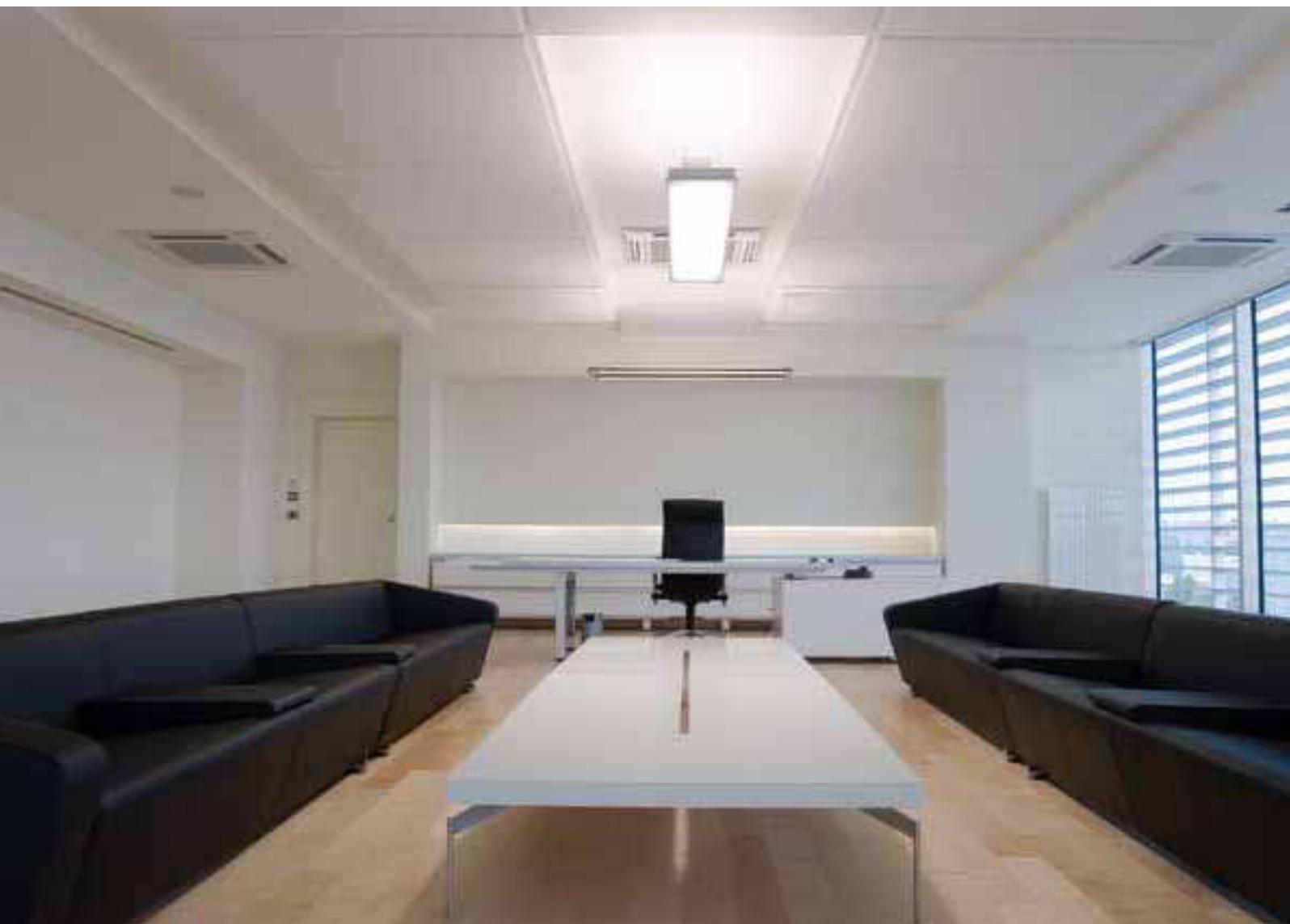


Savio TCS760 surface-mounted luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS760 4x24W/840 HFP ND AC-MLO	7.20	493831 00
TCS760 4x14W/830 HFP AC-MLO	8.20	747460 00
TCS760 4x14W/840 HFD ND AC-MLO	7.20	560275 00
TCS760 4x14W/840 HFD ND AC-MLO ACL	7.20	560282 00

Please contact your local Philips representative for additional configurations

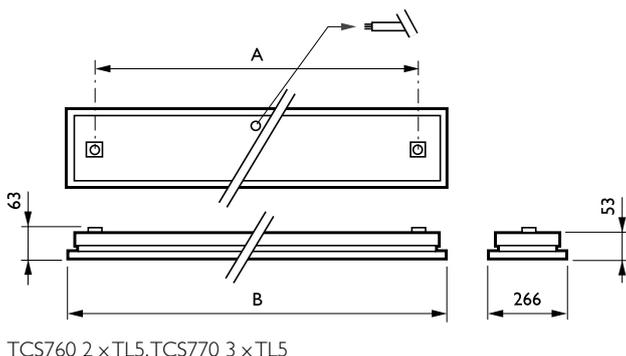


Savio	
Type	TCS770 (Dynamic Lighting version)
Light source	Fluorescent: 3 x or 6 x MASTER TL5 / G5 / 14, 28, 35, 49, 54, W
Lamp included	Yes, lamp color 827/865, 827/451 (ActiViva Natural) or 827/452 (ActiViva Active)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator, DALI (HFD)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector (PI)
Option	Emergency lighting: 3 hours (EL3) Lighting controls: ColorVariation Controller (CVC) Euro fuse (FU) included
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature (LF), for insertion in a line

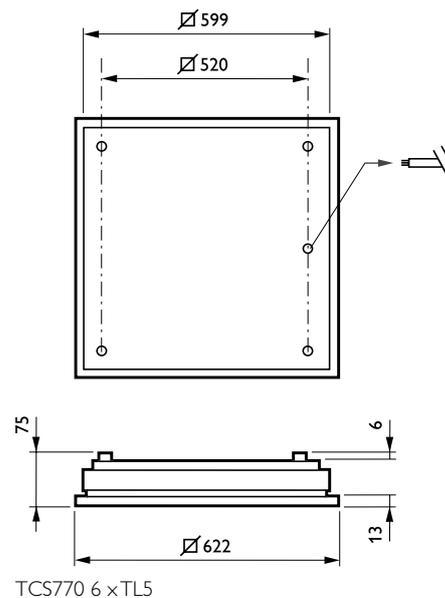
Material	Housing: anodized aluminum Micro-lens optic: PMMA (optional is polycarbonate) Rim: polycarbonate (translucent)
Installation	Individual or in line (rectangular types), mounting by screw fixing
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r 19, L _m < 1000 cd/m ² at γ > 65°) Dedicated line arrangement luminaires (LE and LF types) include through-wiring facility Dedicated ready to install versions available (KIT)
Main applications	Office, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1100	1259
35W, 49W, 80W	1400	1559





Savio TCS770 surface-mounted luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO/PC-MLO) with Dynamic Lighting facility and CVC

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS770 3x28W/827/865 HFD AC-MLO CVC	7.70	758909 00
TCS770 3x35W/827/865 HFD AC-MLO CVC	9.40	758947 00

Please contact your local Philips representative for additional configurations



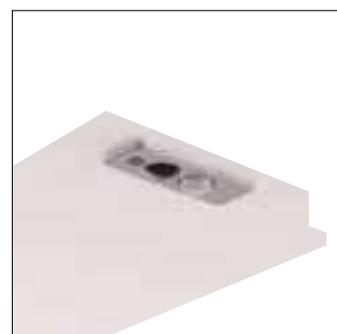
Savio TCS770 surface-mounted luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO/PC-MLO) with Dynamic Lighting facility and CVC

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS770 6x14W/827/865 HFD AC-MLO CVC	9.90	750699 00

Please contact your local Philips representative for additional configurations

The Savio Dynamic Lighting luminaire for personal light is delivered with an integrated controller (Actilume) to adjust the lighting level and color temperature.



Rotaris TPS740/745, TCS740



Rotaris – the perfect form

The defining visual characteristic of the Rotaris product range, which is based on the innovative TL5 Circular lamp, is its concentric circles. The semi-high-gloss aluminum centerpiece is surrounded by an opal or clear lamp cover, the inside of which has a prismatic structure, again in concentric circles. Continuing outwards, the high-reflectance optic is made of the same semi-high-gloss aluminum. Finally, the optic continues in the outer rim and the housing since it is all made out of one single piece of material.

With the surface-mounted version, some light is directed towards the ceiling to create a smooth transition between the ceiling and the luminaire. The suspended versions offer a choice of direct or direct/indirect light distribution. Glare is controlled in all viewing directions by Omnidirectional Luminance Control technology.

Within the Rotaris family, a complete range of surface-mounted, recessed and suspended luminaires is available.

www.philips.com/lighting

Rotaris suspended



Rotaris surface-mounted



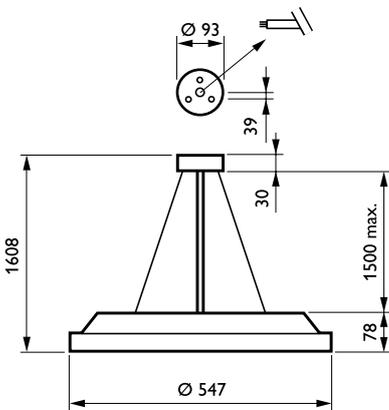
Rotaris recessed



Rotaris		
Type	TPS740 (direct lighting) TPS745 (direct / indirect lighting)	Euro fuse (FU) included
Light source	Compact fluorescent: 1 x MASTER TL5 Circular / 2GX13 / 60 W	Dedicated centre pieces: prepared for Fugato Micro, Fugato Mini, Fugato Compact or smoke detector
Lamp included	Yes (lamp color 830 or 840)	Material
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)	Frame: steel Components: polycarbonate Reflector: anodized aluminum, semi-high-gloss
Optical cover	Opal cover (O) Prismatic cover (P)	Installation
Infill plate / centre piece	Standard (IP) Enlarged (IPL) Perforated (IPP)	Individual; suspended mounting with a triple steel- wire suspension set including a metal-like power cord (SM3) Fast fine adjustment with clutch device (Reutlinger)
Connection	Push-in connector (PI)	Accessory
Color	White (WH) Aluminum (ALU)	Blue inlay sheet
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Lighting controls: Luxsense daylight controller (LX), ActiLume multi controller (ACL)	Remarks
		Glare control in all viewing directions is based on the Omnidirectional Luminance Control (OLC) technology, complying with the current office lighting norms (EN 12464-1, $L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$)
		Main applications
		Office, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS740/745



Rotaris TPS740/745 suspended luminaire for direct and direct/indirect lighting respectively

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS740 TL5C60W/840 HFP P FU SM3 IP ALU	3.00	635200 00
TPS745 TL5C60W/830 HFP P SM3 IP ALU	3.00	635217 00
TPS745 TL5C60W/840 HFP P FU SM3 IP ALU	3.00	635224 00
TPS740 TL5C60W/840 HFP P SM3 IP ALU	3.00	635606 00
TPS745 TL5C60W/840 HFP P SM3 IP ALU	3.00	635613 00

Please contact your local Philips representative for additional configurations



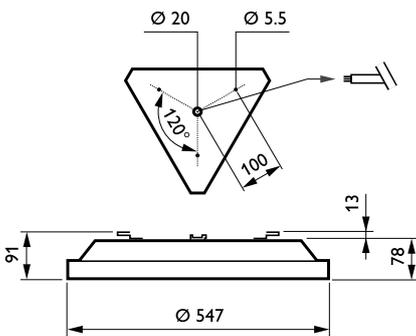
Rotaris TCS740

Rotaris	
Type	TCS740
Light source	Compact fluorescent: 1 x MASTER TL5 Circular / 2GX13 / 60 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optical cover	Opal cover (O) Prismatic cover (P)
Infill plate / centre piece	Standard (IP) Enlarged (IPL)
Connection	Push-in connector (PI)
Color	White (WH) Aluminum (ALU)

Option	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included Dedicated centre pieces: prepared for smoke detector
Material	Frame: steel Components: polycarbonate Reflector: anodized aluminum, semi-high-gloss
Installation	Individual; locking the luminaire into pre-mounted ceiling plate (delivered with the luminaire)
Accessory	Blue inlay sheet
Main applications	Office, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS740



Rotaris TCS740 surface-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS740 TL5C60W/830 HFP P IP ALU	3.00	635170 00
TCS740 TL5C60W/840 HFP P FU IP ALU	3.00	635187 00
TCS740 TL5C60W/840 HFP P IP ALU	3.00	635590 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZBS740 F-BL	Blue inlay sheet	633145 00

Aluminum centerpiece and clear prismatic lamp cover combined with blue inlay sheet accessory





Celino TPS680/682, TCS680



Celino – light beam

Celino is a complete luminaire range that reflects the market trend towards miniaturization and architectural integration, while at the same time delivering a significant advance in optical performance.

Celino features Philips' aluminum micro optic with 3D lamellae, which ensures optimum visual comfort and efficiency in compliance with the latest office-lighting norm (EN 12464-1).

Made of natural anodized aluminum, the housing of Celino is a mere 71 mm wide and has die-cast-aluminum end caps. The design allows multiple luminaires to be connected in a line arrangement.

Celino is available as a full range – suspended, surface-mounted, free-standing, recessed and wall-mounted – for maximum freedom in application.

www.philips.com/lighting



asimpleswitch.com

Celino free floor-standing



Celino wall-mounted



Celino suspended



Celino recessed TBS692



Celino surface-mounted



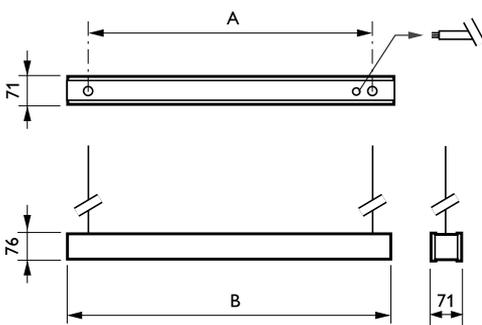
Celino recessed TBS690



Celino			
Type	TPS680 (direct lighting) TPS682 (direct 70% / indirect 30% lighting)	Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL) Euro fuse (FU) included
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W	Material	Housing: natural anodized aluminum (ALU) End caps: die-cast aluminum Optic: aluminum Optical cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No	Installation	Individual or in line; suspended mounting with a set of two single steel-wire suspensions (SM2), with metal-like power cord, 150 cm, and ceiling caps Fast fine adjustment with clutch device (Reutlinger)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFD-T)	Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r , I ₉ , L _m < 1000 cd/m ² at γ > 65°) Dedicated line arrangement luminaires (LE and LF types), for 1-lamp housing only, include all connection and suspension parts and through-wiring
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) High gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)	Main applications	Offices, education, healthcare, retail
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)		
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature phase I (LF), for insertion in a line		

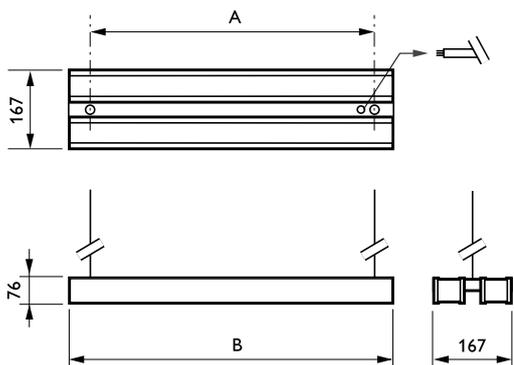


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS680 1 x TL5

	A	B
28W, 54W	1120	1220
35W, 49W, 80W	1420	1520



TPS680 2 x TL5

	A	B
28W, 54W	1120	1220
35W, 49W, 80W	1420	1520



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS682 1x35W/840 HFP C8 SM2 ALU	4.00	747279 00
TPS680 1x54W/840 HFP C8 SM2 ALU	3.20	753348 00
TPS680 1x80W/840 HFP C8 SM2 ALU	4.00	753409 00
TPS682 1x28W/840 HFP C8-VH SM2 ALU	3.20	753706 00
TPS682 1x49W/840 HFP C8 SM2 ALU	4.00	753829 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 1x35W/840 HFP D8 SM2 ALU	4.00	747125 00
TPS680 1x28W/830 HFP D8-VH SM2 ALU	3.20	748061 00
TPS680 1x49W/840 HFP D8-VH SM2 ALU	4.00	753317 00
TPS680 1x54W/840 HFP D8-VH SM2 ALU	3.20	753379 00
TPS680 1x80W/840 HFP D8 SM2 ALU	4.00	753423 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 1x28W/840 HFP M2 SM2 ALU	3.20	747101 00
TPS682 1x35W/840 HFP M2 SM2 ALU	4.00	747293 00
TPS682 1x49W/840 HFP M2 SM2 ALU	4.00	753867 00
TPS682 1x54W/840 HFP M2 SM2 ALU	3.20	753928 00
TPS682 1x80W/840 HFP M2 SM2 ALU	4.00	757551 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 1x28W/840 HFP PC-MLO SM2 ALU	3.20	747200 00
TPS682 1x35W/840 HFP PC-MLO SM2 ALU	4.00	747378 00
TPS680 1x49W/840 HFP AC-MLO SM2 ALU	4.00	753331 00
TPS680 1x80W/840 HFP AC-MLO SM2 ALU	4.00	753454 00
TPS682 1x54W/840 HFP AC-MLO SM2 ALU	3.20	753935 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with high-gloss optics with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 2x80W/840 HFP C8-VH SM2 ALU	8.30	493435 00
TPS680 2x28W/840 HFP C8 SM2 ALU	6.70	747149 00
TPS682 2x35W/840 HFP C8 SM2 ALU	7.60	747330 00
TPS680 2x49W/840 HFP C8 SM2 ALU	8.30	753584 00
TPS682 2x54W/840 HFP C8 SM2 ALU	6.70	754123 00

Please contact your local Philips representative for additional configurations

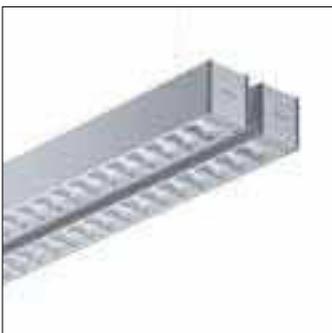


Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with semi-high-gloss optics with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 2x80W/840 HFP D8-VH SM2 ALU	8.30	493428 00
TPS680 2x28W/840 HFP D8 SM2 ALU	6.70	747156 00
TPS682 2x49W/830 HFP D8-VH SM2 ALU	8.30	752105 00
TPS680 2x35W/840 HFP D8-VH SM2 ALU	8.30	753553 00
TPS680 2x54W/840 HFP D8 SM2 ALU	6.70	753669 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with matt high-quality aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS680 2x80W/840 HFP M2 SM2 ALU	8.30	493442 00
TPS680 2x28W/840 HFP M2 SM2 ALU	6.70	747163 00
TPS682 2x35W/840 HFP M2 SM2 ALU	8.30	747354 00
TPS682 2x54W/830 HFP M2 SM2 ALU	6.70	748641 00
TPS680 2x49W/840 HFP M2 SM2 ALU	8.30	753621 00

Please contact your local Philips representative for additional configurations



Celino TPS680/682 suspended luminaire for direct and direct/indirect lighting respectively, with acrylate or polycarbonate micro-lens optics (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS682 2x80W/840 HFP AC-MLO SM2 ALU	8.30	493497 00
TPS682 2x54W/830 HFR AC-MLO SM2 ALU	6.70	748696 00
TPS680 2x28W/840 HFP AC-MLO SM2 ALU	6.70	750040 00
TPS682 2x49W/840 HFP AC-MLO SM2 ALU	8.30	754116 00
TPS682 2x54W/840 HFP AC-MLO SM2 ALU	6.70	754178 00

Please contact your local Philips representative for additional configurations

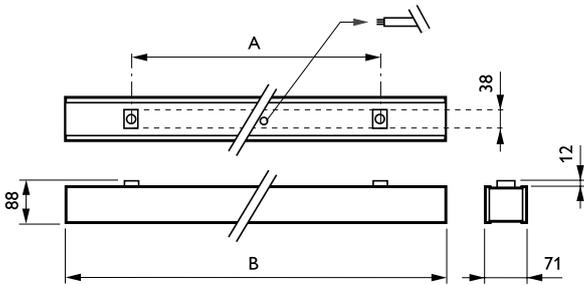


Celino	
Type	TCS680
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator, touch-switch (HFD-T)
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) High-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector Cable, length 200 cm, with plug CEE7

Housing configuration	Line end (LE), for ending a line
(for line arrangements)	Line feature (LF), for insertion in a line
Option	Emergency lighting: 3 hours (EL3) Lighting controls: Luxsense daylight controller micro (LXM) ActiLume multi controller (ACL) Euro fuse (FU) included
Material	Housing: natural anodized aluminum End caps: die-cast aluminum Optic: aluminum Cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Installation	Individual or in line, by clicking the luminaire into pre-screwed ceiling brackets to the ceiling
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, $UGR_r, 19, L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) Dedicated line arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring
Main applications	Offices, education, healthcare, retail

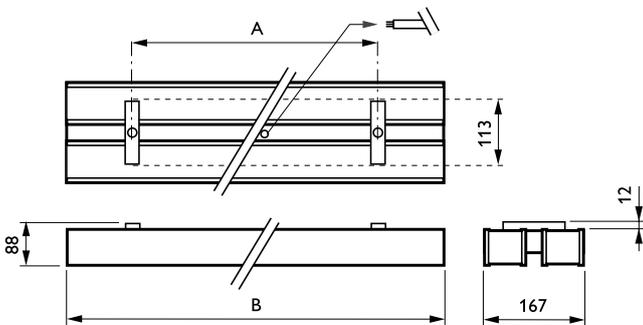


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS680 1 x TL5

	A	B
28W, 54W	1000	1220
35W, 49W, 80W	1300	1520



TCS680 2 x TL5

	A	B
28W, 54W	1000	1220
35W, 49W, 80W	1300	1520



Celino TCS680 surface-mounted luminaire with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 1x35W/840 HFP C8 ALU	4.00	746951 00
TCS680 1x28W/840 HFP C8-VH ALU	3.20	752631 00
TCS680 1x49W/840 HFP C8-VH ALU	4.00	752754 00
TCS680 1x54W/840 HFP C8 ALU	3.20	752808 00
TCS680 1x80W/840 HFP C8 ALU	4.00	752860 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 1x28W/840 HFP D8-VH ALU	3.20	752655 00
TCS680 1x35W/840 HFP D8-VH ALU	4.00	752716 00
TCS680 1x49W/840 HFP D8-VH ALU	4.00	752778 00
TCS680 1x54W/840 HFP D8 ALU	3.20	752822 00
TCS680 1x80W/840 HFP D8 ALU	4.00	752884 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 1x28W/840 HFP M2 ALU	3.20	746944 00
TCS680 1x35W/840 HFP M2 ALU	4.00	746975 00
TCS680 1x49W/840 HFP M2 ALU	4.00	752785 00
TCS680 1x54W/840 HFP M2 ALU	3.20	752846 00
TCS680 1x80W/840 HFP M2 ALU	4.00	752907 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 1x28W/840 HFP AC-MLO ALU	3.20	749983 00
TCS680 1x35W/840 HFP AC-MLO ALU	4.00	749990 00
TCS680 1x49W/840 HFP AC-MLO ALU	4.00	752792 00
TCS680 1x54W/840 HFP AC-MLO ALU	3.20	752853 00
TCS680 1x80W/840 HFP AC-MLO ALU	4.00	752914 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with high-gloss optics with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 2x80W/840 HFP C8-VH ALU	8.30	493510 00
TCS680 2x28W/840 HFP C8-VH ALU	6.70	752938 00
TCS680 2x35W/840 HFP C8-VH ALU	8.30	752990 00
TCS680 2x49W/840 HFP C8 ALU	8.30	753041 00
TCS680 2x54W/840 HFP C8 ALU	6.70	753102 00

Please contact your local Philips representative for additional configurations

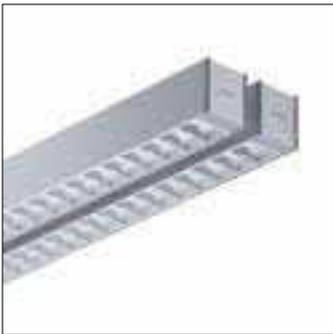


Celino TCS680 surface-mounted luminaire with semi-high-gloss optics with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 2x80W/840 HFP D8-VH ALU	8.30	493503 00
TCS680 2x28W/840 HFP D8-VH ALU	6.70	752952 00
TCS680 2x35W/840 HFP D8-VH ALU	8.30	753010 00
TCS680 2x49W/840 HFP D8-VH ALU	8.30	753072 00
TCS680 2x54W/840 HFP D8 ALU	6.70	753126 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with matt high-quality aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 2x80W/840 HFP M2 ALU	8.30	493527 00
TCS680 2x28W/840 HFP M2 ALU	6.70	747002 00
TCS680 2x35W/840 HFP M2 ALU	8.30	747033 00
TCS680 2x49W/840 HFP M2 ALU	8.30	753089 00
TCS680 2x54W/840 HFP M2 ALU	6.70	753140 00

Please contact your local Philips representative for additional configurations



Celino TCS680 surface-mounted luminaire with acrylate or polycarbonate micro-lens optics (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS680 2x80W/840 HFP AC-MLO ALU	8.30	493534 00
TCS680 2x28W/840 HFP AC-MLO ALU	6.70	750002 00
TCS680 2x35W/840 HFP AC-MLO ALU	8.30	750019 00
TCS680 2x49W/840 HFP AC-MLO ALU	8.30	753096 00
TCS680 2x54W/840 HFP AC-MLO ALU	6.70	753157 00

Please contact your local Philips representative for additional configurations

Miniaturized controls (ActiLume) can be integrated into the micro-optics with lamellae.





Arano TPS640/642/644, TCS640/649, TPS646



Arano – light box

Arano is a range of luminaires for TL5 fluorescent lamps, featuring Philips' micro-optics. The patented micro-optic with 3D lamellae combines a miniaturist design with optimum performance in terms of light distribution, visual comfort and efficiency. And it is fully in compliance with the latest office-lighting norm (EN12464-1). Surface-mounted, suspended, free-standing and wall-mounted versions are available – some with direct/indirect lighting – to create a bright, welcoming ambience. Multiple Arano luminaires can be linked to create line arrangements.

www.philips.com/lighting

Arano suspended



Arano Nordic suspended



Arano free floor-standing



Arano wall-mounted



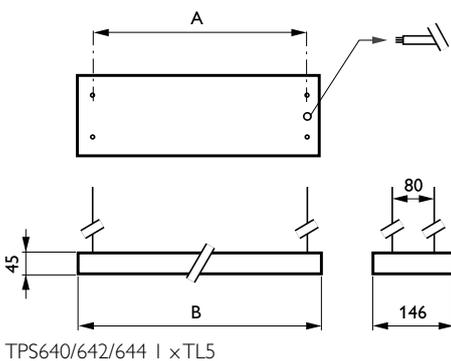
Arano surface-mounted



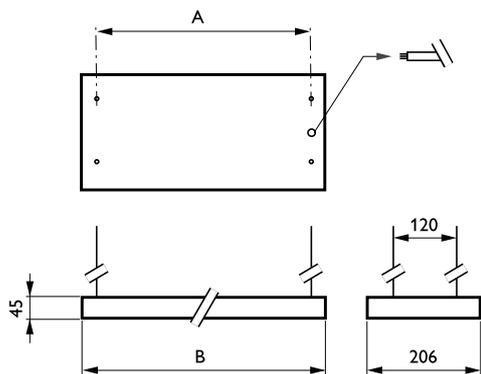
Arano			
Type	TPS640 (direct lighting) TPS642 (direct 70% / indirect 30%) TPS644 (direct 30% / indirect 70%)	Option	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Luxsense daylight controller micro (LXM) Euro fuse (FU) included
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W	Material	Housing: natural anodized aluminum (ALU) or in white (WH) End caps: natural anodized aluminum (ALU) or in white (WH) Optic: aluminum Optical cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No	Installation	Individual or in line; suspended mounting with a set of two double steel-wire suspensions (SMS) or with a set of two single steel-wire suspensions, both with metal-like power cord, 150 cm, and ceiling caps
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFD-T)	Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, $UGR_r, 19, L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) Dedicated line arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature phase I (LF), for insertion in a line	Main applications	Office, department stores
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) Semi-high-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)		
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)		



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1207	1252
35W, 49W, 80W	1507	1552



TPS640/642/644 2 x TL5

	A	B
28W, 54W	1207	1252
35W, 49W, 80W	1507	1552



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS642 1x35W/840 HFP C8 FU SMS ALU	4.20	754239 00
TPS642 1x54W/840 HFP C8-VH SMS ALU	3.40	754352 00
TPS640 1x28W/840 HFP C8-VH SMS ALU	3.40	755328 00
TPS640 1x49W/840 HFP C8-VH SMS ALU	4.20	755441 00
TPS640 1x80W/840 HFP C8-VH SMS ALU	4.20	755540 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS640 1x28W/840 HFP D8 SMS ALU	3.40	746050 00
TPS640 1x35W/840 HFP D8 SMS ALU	4.20	746081 00
TPS640 1x54W/840 HFP D8-VH SMS ALU	3.40	755502 00
TPS642 1x54W/840 HFP D8-VH SMS ALU	3.40	754369 00
TPS642 1x80W/840 HFP D8-VH SMS ALU	4.20	754413 00
TPS642 1x49W/840 HFP D8 SMS ALU	4.20	757483 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS640 1x28W/840 HFP M2 SMS ALU	3.40	746067 00
TPS642 1x35W/840 HFP M2 SMS ALU	4.20	746418 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS640 1x28W/840 HFP PC-MLO SMS ALU	3.40	746166 00
TPS642 1x35W/840 HFP PC-MLO SMS ALU	4.20	746494 00
TPS642 1x80W/840 HFP AC-MLO SMS ALU	4.20	754420 00
TPS644 1x49W/840 HFP AC-MLO SMS ALU	4.20	754680 00
TPS640 1x54W/840 HFP AC-MLO SMS ALU	3.40	755519 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS640 2x80W/840 HFP C8-VH SMS ALU	5.50	493558 00
TPS642 2x35W/840 HFP C8 FU SMS ALU	5.50	754512 00
TPS640 2x28W/840 HFP C8 FU SMS ALU	4.40	755595 00
TPS640 2x49W/840 HFP C8 SMS ALU	5.50	755694 00
TPS642 2x54W/840 HFP C8 FU SMS ALU	4.40	568066 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS642 2x35W/840 HFP D8 SMS ALU	5.50	746463 00
TPS642 2x80W/840 HFP D8-VH SMS ALU	5.50	493589 00
TPS642 2x28W/840 HFP D8-VH SMS ALU	4.40	754444 00
TPS642 2x49W/840 HFP D8-VH SMS ALU	5.50	754598 00
TPS642 2x54W/840 HFP D8-VH SMS ALU	4.40	754642 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS642 2x80W/840 HFP M2 SMS ALU	5.50	493602 00
TPS640 2x54W/840 HFP M2 SMS ALU	4.40	493763 00
TPS640 2x28W/830 HFP M2 SM2 ALU	4.40	749372 00
TPS640 2x35W/830 HFP M2 SMS ALU	5.50	752426 00
TPS642 2x49W/840 HFP M2 SMS ALU	5.50	754574 00

Please contact your local Philips representative for additional configurations



Arano TPS640/642/644 suspended luminaire for direct and direct/indirect lighting respectively, with acrylate or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS640 2x80W/840 HFP AC-MLO SMS ALU	5.50	493572 00
TPS642 2x28W/840 HFP AC-MLO SMS ALU	4.40	750231 00
TPS640 2x35W/840 HFP AC-MLO SMS ALU	5.50	750255 00
TPS642 2x49W/830 HFP AC-MLO SMS ALU	5.50	752556 00
TPS640 2x54W/840 HFP AC-MLO SMS ALU	4.40	755779 00

Please contact your local Philips representative for additional configurations



Arano suspended luminaires can be connected in a line arrangement

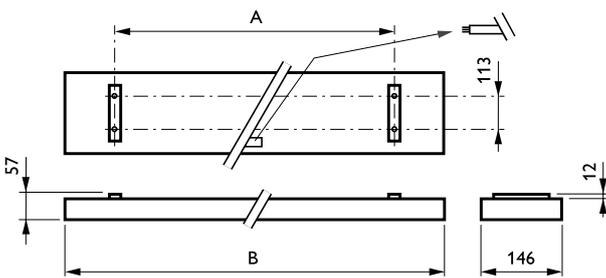


Arano	
Type	TCS640
Light source	Fluorescent: 1 x, 2 x, 3 x or 4 x MASTERTL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFD-T)
Housing configuration (for line arrangements)	Line end (LE), for ending a line Line feature phase I (LF), for insertion in a line
Optic	High-gloss optic, 3D micro-lamellae, very high- reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) Semi-high-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)
Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)

Option	Emergency lighting: 3 hours (EL3) Lighting controls: ActiLume multi controller (ACL) Luxsense daylight controller micro (LXM) Euro fuse (FU) included Connection: cable, length 200 cm, with plug CEE7 (CCE) Infill plate (Infill Profile)
Material	Housing: natural anodized aluminum (ALU) or in white (WH) End caps: natural anodized aluminum (ALU) or in white (WH) Optic: aluminum Optical cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Installation	Individual or in line (rectangular types), mounting by screw fixing
Remarks	MLO optic ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r , 19, L _m < 1000 cd/m ² at γ > 65°) Dedicated line arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring
Main applications	Office, department stores

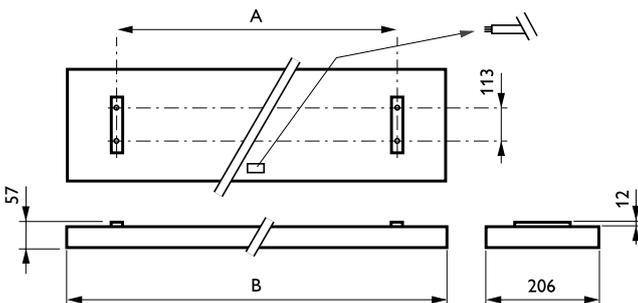


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



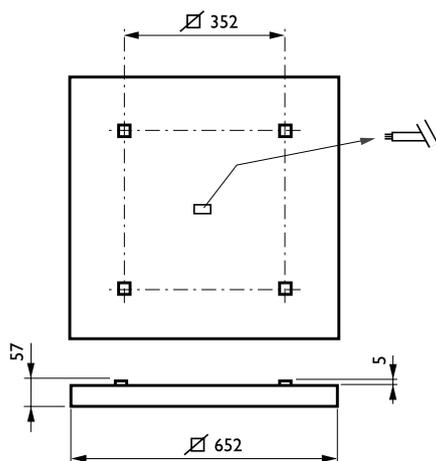
TCS640 1 x TL5

	A	B
28W, 54W	1000	1252
35W, 49W, 80W	1300	1552



TCS640 2 x TL5

	A	B
28W, 54W	1000	1252
35W, 49W, 80W	1300	1552



TCS640 3, 4 x TL5



Arano TCS640 surface-mounted luminaire with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 1x28W/840 HFP C8-VH ALU	3.40	754758 00
TCS640 1x35W/840 HFP C8-VH ALU	4.20	754789 00
TCS640 1x49W/840 HFP C8 ALU	4.20	754819 00
TCS640 1x54W/840 HFP C8 ALU	3.40	754871 00
TCS640 1x80W/840 HFP C8-VH ALU	4.20	754949 00
TCS640 2x80W/840 HFP C8-VH ALU	5.50	493671 00
TCS640 2x35W/840 HFP C8 ALU	5.50	745732 00
TCS640 2x28W/840 HFP C8-VH ALU	4.40	754970 00
TCS640 2x49W/840 HFP C8-VH ALU	5.50	755137 00
TCS640 2x54W/840 HFP C8 ALU	4.40	755151 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 1x28W/830 HFP D8-VH ALU	3.40	752167 00
TCS640 1x35W/830 HFP D8-VH ALU	4.20	752174 00
TCS640 1x49W/840 HFP D8-VH ALU	4.20	754857 00
TCS640 1x54W/840 HFP D8-VH ALU	3.40	754901 00
TCS640 1x80W/840 HFP D8 ALU	4.20	754932 00
TCS640 2x80W/840 HFP D8-VH ALU	5.50	493664 00
TCS640 2x35W/840 HFP D8 ALU	5.50	745749 00
TCS640 2x28W/830 HFP D8 ALU	4.40	748764 00
TCS640 2x49W/840 HFP D8-VH ALU	5.50	755144 00
TCS640 2x54W/840 HFP D8-VH ALU	4.40	755199 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 1x54W/840 HFP M2 ALU	3.40	493787 00
TCS640 1x80W/840 HFP M2 ALU	4.20	493800 00
TCS640 1x35W/840 HFP M2 ALU	4.20	745695 00
TCS640 1x28W/830 HFP M2 ALU	3.40	748719 00
TCS640 1x49W/840 HFP M2 ALU	4.20	754833 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 1x35W/830 HFP AC-MLO ALU	4.20	752204 00
TCS640 1x28W/840 HFP AC-MLO ALU	3.40	754772 00
TCS640 1x49W/840 HFP AC-MLO ALU	4.20	754864 00
TCS640 1x54W/840 HFP AC-MLO ALU	3.40	754918 00
TCS640 1x80W/840 HFP AC-MLO ALU	4.20	754963 00
TCS640 2x80W/840 HFP AC-MLO ALU	5.50	493695 00
TCS640 2x28W/830 HFP AC-MLO ALU	4.40	748788 00
TCS640 2x35W/830 HFP AC-MLO ALU	5.50	752259 00
TCS640 2x49W/840 HFP AC-MLO ALU	5.50	755120 00
TCS640 2x54W/840 HFP AC-MLO ALU	4.40	755175 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with matt high-quality aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 2x80W/840 HFP M2 ALU	5.50	493688 00
TCS640 2x54W/840 HFP M2 ALU	4.40	493794 00
TCS640 2x28W/830 HFP M2 ALU	4.40	748771 00
TCS640 2x35W/830 HFP M2 ALU	5.50	752242 00
TCS640 2x49W/840 HFP M2 ALU	5.50	755113 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with high-gloss optics with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 3x14W/840 HFP C8 ALU	5.90	745763 00
TCS640 3x14W/840 HFP C8-VH ALU	5.90	755205 00
TCS640 4x14W/840 HFP C8 ALU	5.90	745794 00
TCS640 4x14W/840 HFP C8-VH ALU	5.90	755267 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with semi-high-gloss optics with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 3x14W/840 HFP D8 ALU	5.90	745770 00
TCS640 3x14W/830 HFP D8-VH ALU	5.90	752266 00
TCS640 3x14W/840 HFP D8-VH ALU	5.90	755212 00
TCS640 4x14W/840 HFP D8 ALU	5.90	745800 00
TCS640 4x14W/830 HFP D8-VH ALU	5.90	752273 00
TCS640 4x14W/840 HFP D8-VH ALU	5.90	755274 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with matt high-quality aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 3x14W/840 HFP M2 ALU	5.90	745787 00
TCS640 3x14W/830 HFP M2 ALU	5.90	748955 00
TCS640 4x14W/840 HFP M2 ALU	5.90	745817 00
TCS640 4x14W/830 HFP M2 ALU	5.90	749013 00
TCS640 4x14W/830 HFR M2 ALU	5.90	749044 00

Please contact your local Philips representative for additional configurations



Arano TCS640 surface-mounted luminaire with PMMA or polycarbonate micro-lens optics (AC-MLO/PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS640 3x24W/840 HFP AC-MLO ALU	5.90	493701 00
TCS640 3x14W/840 HFP PC-MLO ALU	5.90	745862 00
TCS640 3x14W/830 HFP AC-MLO ALU	5.90	748962 00
TCS640 4x24W/840 HFP AC-MLO ALU	5.90	493718 00
TCS640 4x14W/830 HFP AC-MLO ALU	5.90	749020 00
TCS640 4x14W/840 HFP AC-MLO ALU	5.90	755281 00

Please contact your local Philips representative for additional configurations

Arano TCS649, asymmetric



Arano asymmetric – high-performance wall-washer

Arano asymmetric is a wall-washer luminaire incorporating 1 or 2 TL5 fluorescent lamps. Its best-in-class lighting performance ensures a uniform light distribution, fully compliant with the current norms for office, school and shop lighting. Featuring the Arano family design aesthetic, this luminaire is available in white and aluminum finishes.

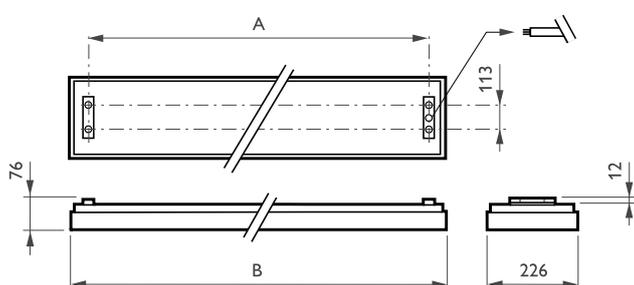
www.philips.com/lighting

Arano	
Type	TCS649
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	Yes (827, 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optic	Wall-washer; asymmetrical mirror (A)

Option	Fuse (FU) included
Material	Housing: natural anodized aluminum (ALU) or in white (WH) End caps: natural anodized aluminum (ALU) or in white (WH) Optic: aluminum
Installation	Individual, mounting by screw fixing
Main applications	Office, schools, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1194	1281
35W, 49W, 80W	1494	1581

TCS649



Arano TCS649 surface-mounted luminaire with asymmetric beam (A)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS649 1x54W/840 HFP A ALU	5.00	787879 00
TCS649 1x35W/840 HFP A ALU	6.00	787909 00
TCS649 1x49W/840 HFP A ALU	6.00	787930 00
TCS649 1x80W/840 HFP A ALU	6.00	787961 00

Please contact your local Philips representative for additional configurations



Arano TCS649 surface-mounted luminaire with asymmetric beam (A)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS649 1x35W/840 HFP A WH	6.00	788357 00

Please contact your local Philips representative for additional configurations

Arano Nordic TPS646



Arano Nordic – direct/indirect light box

Arano Nordic TPS646 is a range of luminaires for TL5 fluorescent lamps, featuring Philips' micro-optics. The patented micro-optic with 3-D lamellae combines a miniaturist design with optimum performance in terms of light distribution, visual comfort and efficiency. And it is fully in compliance with the latest office-lighting norm (EN12464-1).

Arano Nordic completes the Arano family with an efficient option for direct/indirect lighting with a 3-lamp system (30% down, 70% up), providing a pleasant indirect lighting atmosphere. It also offers personal control, allowing users to change the ratio between direct/indirect lighting and the light intensity (dimnable).

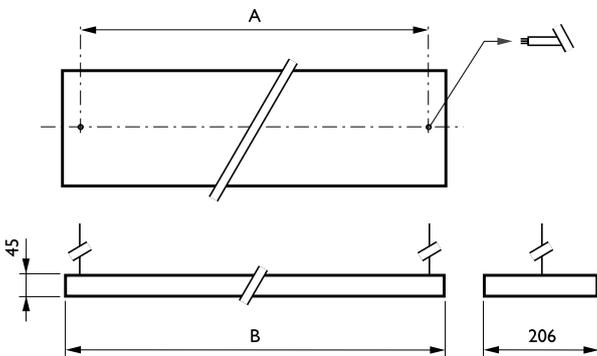
www.philips.com/lighting

Arano	
Type	TPS646
Light source	Fluorescent: MASTER TL5 / G5 / 28, 35, 49, 54 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFD-T)
Optic	Semi-high-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)
Optical cover	Acrylate micro lens optic (AC-MLO)
Option	Lighting controls: ActiLume multi controller (ACL) Luxsense daylight controller micro (LXM) Connection: cable, length 200 cm, with plug CEE7 (CCE) Individual pull switch control for direct and indirect light

Material	Housing: natural anodized aluminum (ALU) or in white (WH) Optic: aluminum Optical cover: AC-MLO cover: PMMA
Installation	Individual or in line; suspended mounting with a set of two double steel-wire suspensions (SMS) or with a set of two single steel-wire suspensions, both with metal-like power cord, 150 cm, and ceiling caps
Accessory	Remote controls
Remarks	TPS646 ensures optimum light distribution and full glare control in all viewing directions compliant with the current norm for indoor working places (EN 12464-1, UGR _r , I ₆ , L _m < 1000 cd/m ² at > 65°)
Main applications	Office



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS646

	A	B
28W, 54W	1200	1270
35W, 49W	1500	1570



Arano Nordic TPS646 suspended luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or high-reflectance 3D micro-lamellae (D8-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS646 3x35W/830 HFP D8 2PSW CCE SM1 ALU	6.10	217931 00
TPS646 3x35W/830 HFR-T D8 BSW C-5 SM2	6.10	218143 00
TPS646 3x35W/830 HFR-T D8 2DSW C-3 SM2	6.10	218167 00

Please contact your local Philips representative for additional configurations



Arano Nordic TPS646 suspended luminaire with micro-lens optic (MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS646 3x35W/830 HFP MLO C-3 SM2 ALU	6.10	218051 00
TPS646 3x49W/830 HFD MLO C-5 SM2 ALU	6.10	218501 00

Please contact your local Philips representative for additional configurations

ThinMark



ThinMark – straightforward performance

ThinMark TPS580 is a suspended luminaire range that reflects the market trend towards miniaturization and architectural integration, while at the same time delivering a significant advance in optical performance.

ThinMark features Philips' aluminum micro optic with 3D lamellae, which ensures optimum visual comfort and efficiency in compliance with the latest office-lighting norm (EN 12464-1). The range delivers maximum performance in a compact functional natural anodized aluminum housing and is available in single and double length units.

www.philips.com/lighting

ThinMark TPS580 suspended luminaire with ActiLume lighting control



ThinMark TPS580 suspended luminaire; adjustable suspension point

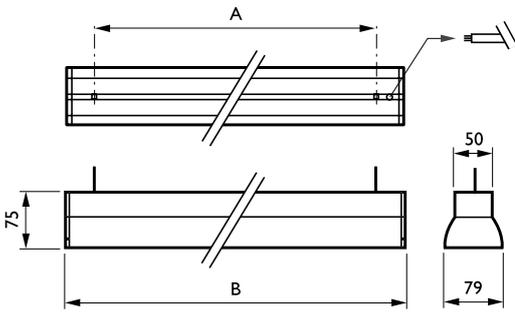


ThinMark	
Type	TPS580
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W 2 x 1 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W (double length units)
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, 3D micro-lamellae, very high-reflective (C8-VH) High-gloss optic, 3D micro-lamellae (C8) Semi-high-gloss optic, 3D micro-lamellae, very high-reflective (D8-VH) Semi-high-gloss optic, 3D micro-lamellae (D8) Matt mirror; ribbed cross louvers (M2)

Optical cover	Acrylate micro-lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO) Opal cover (O)
Connection	Push-in connector (PI)
Option	Lighting controls: ActiLume multi controller (ACL)
Material	Housing: anodized aluminum End-cap: polycarbonate Optic: aluminum Optical cover: AC-MLO: PMMA, PC-MLO and O: polycarbonate
Installation	Individual; suspended mounting with a set of two single steel-wire suspensions including a metal-like power cord (SM2) Fast fine adjustment with clutch device (Reutlinger)
Main applications	Offices



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS580



ThinMark TPS580 suspended luminaire with high-gloss optic with 3D micro-lamellae (C8) or very high-reflectance 3D micro-lamellae (C8-VH)

	A	A	B
1x28W, 1x54W	600	1100	1176
1x35W, 1x49W, 1x80W	700	1400	1476
2x1x28W, 2x1x28W AC-MLO, 2x1x54W, 2x1x54W AC-MLO	1171	2271	2347
2x1x35W, 2x1x35W AC-MLO, 2x1x49W, 2x1x49W AC-MLO, 2x1x80W, 2x1x80W AC-MLO	1471	2871	2947
2x1x28W O, 2x1x54W O	1053	2153	2229
2x1x35W O, 2x1x49W O, 2x1x80W O	1353	2753	2829

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS580 1x28W/840 HFP C8 SM2	2.60	491561 00
TPS580 1x54W/840 HFP C8 SM2	2.60	491578 00
TPS580 1x80W/840 HFP C8 SM2	3.40	491585 00
TPS580 1x35W/840 HFP C8-VH SM2	3.40	796727 00
TPS580 1x49W/840 HFP C8-VH SM2	3.40	796734 00

Please contact your local Philips representative for additional configurations



ThinMark TPS580 suspended luminaire with semi-high-gloss optic with 3D micro-lamellae (D8) or very high-reflectance 3D micro-lamellae (D8-VH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS580 1x54W/840 HFP D8 SM2	2.60	491493 00
TPS580 1x80W/840 HFP D8 SM2	3.40	491509 00
TPS580 1x28W/840 HFP D8-VH SM2	2.60	796598 00
TPS580 1x35W/830 HFP D8-VH SM2	3.40	796888 00
TPS580 1x49W/830 HFP D8-VH SM2	3.40	796895 00

Please contact your local Philips representative for additional configurations



ThinMark TPS580 suspended luminaire with matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS580 1x80W/840 HFP M2 SM2	3.40	491349 00
TPS580 1x35W/840 HFP M2 SM2	3.40	796802 00
TPS580 1x49W/840 HFP M2 SM2	3.40	796819 00

Please contact your local Philips representative for additional configurations



ThinMark TPS580 suspended luminaire with PMMA micro-lens optic (AC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS580 1x80W/840 HFP AC-MLO SM2	3.40	491394 00
TPS580 1x35W/840 HFP AC-MLO SM2	3.40	796826 00
TPS580 1x49W/840 HFP AC-MLO SM2	3.40	796833 00

Please contact your local Philips representative for additional configurations



ThinMark TPS580 suspended luminaire with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS580 1x35W/840 HFP O SM2	3.40	796840 00
TPS580 1x49W/840 HFP O SM2	3.40	796857 00
TPS580 2x1x28W/840 HFP O SM2	4.40	491455 00
TPS580 2x1x54W/840 HFP O SM2	4.40	491462 00
TPS580 2x1x80W/840 HFP O SM2	5.60	491479 00

Please contact your local Philips representative for additional configurations

X-tendolight TPS498 TL5



X-tendolight – designed for your applications

X-tendolight TPS498 TL5 is a high-performance suspended luminaire for 1 or 2 TL5 fluorescent lamps with a wide range of high-performance optics. Direct and direct/indirect versions are available. The luminaires can be mounted individually or in configurations. They also come with a choice of ballast types and lamps, and extra features can be added, such as emergency lighting, lighting controls, etc.

This luminaire range is also available with TL-D lamps.

www.philips.com/lighting

X-tendolight FCS398 surface-mounted



X-tendolight TCS398 surface-mounted



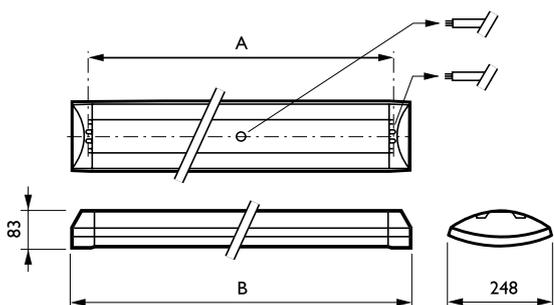
X-tendolight TPS498 suspended



X-tendolight	
Type	TPS498 (direct and direct / indirect)
Light source	Fluorescent: 1 x or 2* x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W *two lamps in one-lamp housing
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer; Intelligent (HFP-I) High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Light distribution	Direct lighting (D) Direct / Indirect lighting (D/I)
Optic	High-gloss optic, high-reflective, with top reflector (T C6-H) High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic 50° (C6) Semi-high-gloss optic, high-reflective, with top reflector (T D6-H) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflectance with top reflector (T M6-H) Matt optic, high-reflectance (M6-H) Matt optic, double parabolic louvers, closed (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic, bi-directional 30° (M6-BD30) Matt optic, double parabolic, bi-directional 45° (M6-BD45) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louver; wide beam (M2-WB) Matt mirror; ribbed louver; asymmetric (M2-A) Matt mirror; ribbed louver; bi-directional 30° (M2-BD30)
Optic	Matt mirror; ribbed louver; bi-directional 45° (M2-BD45) Lamellae louver; flat cross louvers (L1) Mirror with decorative green louvers (M-DGN) Asymmetrical mirror (A)
Optical cover	Decorative opal cover (OD)
Connection	Push-in connector; outside lamp compartment
Housing configuration (for line configurations)	Line feature phase I (LF), for insertion in a line
Option	Closed housing (DC) Emergency lighting: 3 hours (EL3), 14 W lampholder (E14) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included Protection foil (FL) to protect the luminaire during installation Counterweight (CW) to balance the luminaire
Material	Housing: powder painted steel, white or silver (SI) Corner pieces: ABS, white or silver
Installation	Individual; in line or in a configuration, suspended mounting with various suspension sets or tubing Fast fine adjustment with clutch device (Reutlinger) or screw device
Accessory	Suspension sets, coupling piece, swivel device, end caps, counter weight
Remarks	Dedicated line and configuration arrangement luminaires (LE and LF types) include all connection and suspension parts and through-wiring (1 and 3 phase versions)
Main applications	Office, retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1188	1306
35W, 49W	1488	1606

TPS498



X-tendolight TPS498 suspended luminaire with OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only



X-tendolight TPS498 suspended luminaire with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6) or high-reflectance 3D lamellae (D6-H) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only



X-tendolight TPS498 suspended luminaire with OLC matt high-quality aluminum optic with 3D lamellae (M6) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only



X-tendolight TPS498 suspended luminaire with matt high-quality aluminum optic with profiled lamellae (M2) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 2xTL5-28W/830 HFP C6-H FL	4.60	423647 00
TPS498 2xTL5-35W/830 HFP C6-H FL	5.20	423821 00
TPS498 1xTL5-35W/830 HFP C6 FL	5.10	708065 00
TPS498 2xTL5-35W/830 HFP C6 FL	5.20	629704 00
TPS498 1xTL5-35W/830 HFP D/I C6	5.10	707907 00
TPS498 1xTL5-49W/830 HFP D/I C6	5.10	707914 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 1xTL5-49W/830 HFP D6-H FL	5.10	423913 00
TPS498 2xTL5-28W/840 HFP D6 FL	4.60	629674 00
TPS498 1xTL5-49W/830 HFP D/I D6	5.10	707860 00
TPS498 2xTL5-28W/830 HFP D/I D6 IPP	4.60	742823 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 2xTL5-28W/840 HFP M6 FL	4.60	629681 00
TPS498 2xTL5-28W/830 HFP D/I M6	4.60	629667 00
TPS498 1xTL5-35W/830 HFP D/I M6	5.10	707945 00
TPS498 1xTL5-49W/830 HFP D/I M6	5.10	707952 00
TPS498 2xTL5-35W/830 HFP D/I M6 IPP	5.20	742830 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 2xTL5-49W/840 HFP M2 FU FL	5.20	632513 00
TPS498 2xTL5-49W/840 HFP D/I M2	5.20	634821 00

Please contact your local Philips representative for additional configurations



X-tendolight TPS498 suspended luminaire with asymmetric beam (A) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 1xTL5-35W/830 HFP A FL	5.10	709758 00
TPS498 1xTL5-49W/830 HFP A FL	5.10	709765 00

Please contact your local Philips representative for additional configurations



X-tendolight TPS498 suspended luminaire with decorative opal cover (OD) and end caps (set of 2) available in white and silver (ZPS498 EP); needed with line feature luminaires (LF) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS498 1xTL5-35W/830 HFP OD	5.10	704876 00
TPS498 1xTL5-49W/830 HFP OD	5.10	704883 00
TPS498 1xTL5-35W/830 HFP D/I OD	5.10	707983 00
TPS498 1xTL5-49W/830 HFP D/I OD	5.10	707990 00

Please contact your local Philips representative for additional configurations

X-tendolight TPS498 suspended luminaire with tapered ceiling cap and 400 mm suspension tube and adaptor (ZCS398 CC-T400/CC-T400-AD)



X-tendolight TPS498 suspended luminaire, with wire suspension set with fast fine adjustment with screw device; rectangular ceiling cap included; cable length 1500 mm, 1.2 m² (ZPH301 US)



X-tendolight TPS498 suspended luminaire, with wire suspension set with fast fine adjustment with clutch device; rectangular ceiling cap included; cable length 1500 mm, 1.2 m² (ZPH401 US)



X-tendolight TPS498 suspended luminaire, with wire suspension set with fast fine adjustment with clutch device; tapered ceiling cap included; cable length 1500 mm, 1.5 m² (ZPH501 US)



Accessories



Suspension tube with adaptor; length 400 mm, tapered ceiling cap included and available in silver (SI)

Product ID	EOC
ZCS398 CC-T400-AD SI	622224 99



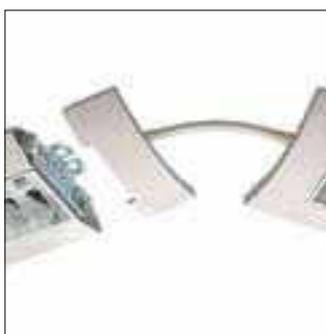
Wire suspension set with fast fine adjustment with clutch device (ZPH401/402 US) or screw device (ZPH301 US). Rectangular ceiling cap included. Available in white (WH) and silver (SI). Cable length 1500 mm, 1.2 mm²

Product ID	EOC
ZPH401 US WH	596075 00
ZPH401 US SI	636658 00
ZPH402 US WH	750262 00
ZPH402 US ALU	750279 00
ZPH301 US WH	596068 00
ZPH301 US SI	636634 00



Wire suspension set with fast fine adjustment with clutch device. Available in white (WH) and silver (SI). Tapered ceiling cap included. Cable length 1500 mm, 1.5 mm²

Product ID	EOC
ZPH501 US WH	636665 99
ZPH501 US SI	636689 99



X-tendolight TPS498 suspended luminaire, with cable duct (white color only) with an adjustable angle of 90-270°; end caps and 5 wires are included (ZPS498 CPF)

Product ID	EOC
ZPS498 CPF WH	427478 00



X-tendolight TPS498 suspended luminaire, with coupling piece available in white (WH) and silver (SI) to create straight lines (ZPS498 CP)

Product ID	EOC
ZPS498 CP WH	427461 00
ZPS498 CP SI	634579 00



X-tendolight TPS498 suspended luminaire, with end caps (set of 2) available in white (WH) and silver (SI) (ZPS498 EP); needed with line feature luminaires (LF) only

Product ID	EOC
ZPS498 EP SI (2PCS)	631585 00
ZPS498 EP WH (2PCS)	629230 00



Counterweights to paste inside the luminaire (ZCS398 CW350). In most cases not needed, depending on the kind of gear and number of lamps used, and only with 1-point suspensions (ZPH501) and mounting on light-lines

Product ID	EOC
ZCS398 CW350	631684 99



E14 lamp socket for emergency lighting

Product ID	EOC
ZCS398 ELU-E14-2	614892 99

X-tendolight TCS398 TL5



X-tendolight – designed for your applications

X-tendolight TCS398 TL5 is a high-performance luminaire for 1, 2, 3 or 4 TL5 fluorescent lamps, with a wide range of optics. It is available in direct and direct/indirect versions and can be surface-mounted or suspended. There is also a choice of ballast types and lamps, and extra features can be added, such as emergency lighting, lighting controls, etc. The luminaires can be mounted individually or in configurations.

This luminaire range is also available with TL-D lamps.

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X-tendolight FCS398 surface-mounted



X-tendolight TCS398 surface-mounted



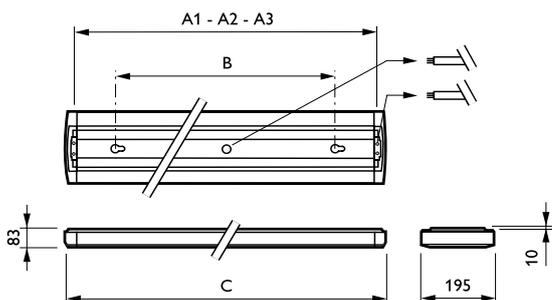
X-tendolight TPS498 suspended



X-tendolight	
Type	TCS398 (195 mm width)
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W 2* x MASTER TL5 / G5 / 28, 35, 49, 54 W *two lamps in 1-lamp housing (HIL)
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Light distribution	Direct lighting (D) Direct / Indirect lighting (D/I)
Optic	High-gloss optic, high-reflective, with top reflector (T C6-H) High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, high-reflective, with top reflector (T D6-H) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective, with top reflector (T M6-H) Matt optic, high-reflective(M6-H) Matt optic, double parabolic louvers, closed (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic, bi-directional 30° (M6-BD30) Matt optic, double parabolic, bi-directional 45° (M6-BD45) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louver; wide beam (M2-WB) Matt mirror; ribbed louver; asymmetric (M2-A) Matt mirror; ribbed louver; bi-directional 30° (M2-BD30)
Optic	Matt mirror; ribbed louver; bi-directional 45° (M2-BD45) Lamellae louver; flat cross louvers (L1) Mirror with decorative green louvers (M-DGN) Asymmetrical mirror (A)
Optical cover	Decorative opal cover (OD)
Connection	Push-in connector; either outside or inside lamp compartment BESA box
Color	White Silver (SI) (optional)
Option	Emergency lighting: 3 hours (EL3), 14 W lampholder (E14) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included Protection foil (FL) to protect the optic during installation Counterweight (CW) to balance the luminaire
Material	Housing: powder coated steel, white or silver Corner pieces: ABS, white or silver
Installation	Individual; screw mounting or optional with suspension accessories Configurations: screw mounting or optional with suspension accessories dedicated line-feature luminaire types (LF types) with 1 or 3 phase feed-through wiring and no end caps to be used (LF1 or LF3)
Accessory	Suspension sets, coupling pieces, swivel devices, end caps, mounting bracket, counter weight
Remarks	Direct closed (DC) option is available in LF luminaire types
Main applications	Office, retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS398 1, 2 x TL5

	Suspension		Surface Mounting		Total length
	Wire suspension	Tube suspension	Outside mounting	Inside mounting	
	A1	A2	A3	B	C
14W	588	603	611	410	658
24W	588	603	611	410	658
28W	1188	1203	1211	900	1258
35W	1488	1503	1511	1200	1558
49W	1488	1503	1511	1200	1558
54W	1188	1203	1211	900	1258
80W	1488	1503	1511	1200	1558



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-28W/830 HFP D6 FL	4.30	624846 00
TCS398 1xTL5-35W/830 HFP D6 FL	4.80	624914 00
TCS398 1xTL5-49W/830 HFP D6 FL	4.80	624976 00
TCS398 1xTL5-54W/830 HFP D6 FL	4.30	707013 00
TCS398 2xTL5-28W/840 HFP H I L D6 FL	4.30	627373 00
TCS398 2xTL5-35W/830 HFP H I L D6 FL	4.90	627298 00
TCS398 2xTL5-35W/840 HFP H I L D6 FL	4.90	627397 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-28W/830 HFP M6 FL	4.30	624877 00
TCS398 1xTL5-35W/830 HFP M6 FL	4.80	624938 00
TCS398 2xTL5-35W/830 HFP H I L M6 FL	4.90	627335 00
TCS398 2xTL5-28W/840 HFP H I L M6 FL	4.30	627359 00
TCS398 1xTL5-54W/830 HFP M6 FL	4.30	707150 00
TCS398 2xTL5-54W/830 HFP H I L M6 FL	4.30	707198 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-28W/830 HFP M2 FL	4.30	707228 00
TCS398 1xTL5-35W/830 HFP M2 FL	4.80	707235 00
TCS398 1xTL5-49W/830 HFP M2 FL	4.80	707242 00
TCS398 1xTL5-54W/830 HFP M2 FL	4.30	707259 00
TCS398 2xTL5-28W/830 HFP H I L M2 FL	4.30	707297 00
TCS398 2xTL5-35W/830 HFP H I L M2 FL	4.90	707303 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-28W/830 HFP L1 FL	4.30	707426 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and white painted aluminum optic with flat lamellae (L1)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-35W/830 HFP A FL	4.80	567960 00
TCS398 1xTL5-49W/830 HFP A FL	4.80	567977 00
TCS398 1xTL5-49W/840 HFP A FL	4.80	640137 00
TCS398 1xTL5-54W/840 HFP A FL	4.30	640144 00
TCS398 1xTL5-80W/840 HFP A FL	4.80	640151 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and asymmetric beam (A)



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 1xTL5-35W/830 HFP OD	4.80	707457 00
TCS398 1xTL5-49W/830 HFP OD	4.80	707464 00
TCS398 1xTL5-54W/830 HFP OD	4.30	707471 00

Please contact your local Philips representative for additional configurations

X-tendolight TCS398 suspended/ surface-mounted luminaire: two lamps in one-lamp housing (HIL)



X-tendolight TCS398 suspended/ surface-mounted luminaire with Luxsense, the economical energy saver

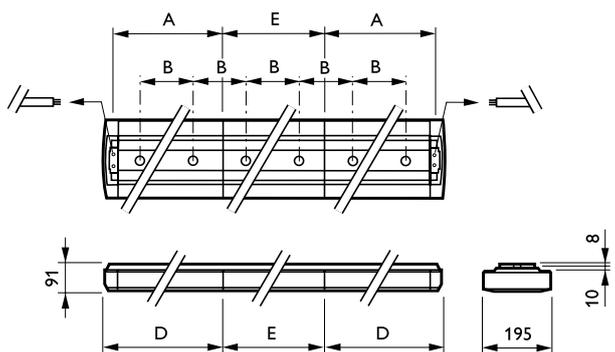


X-tendolight	
Type	TCS398 (light-line)
Light source	Fluorescent: 1 x or 2* x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W *two lamps in one-lamp housing (HIL)
Lamp included	No Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) (optional)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer; Intelligent (HFP-I) High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Housing	Line-end luminaire with 1- or 3-phase feed-through wiring and one end cap (LE1/3) Line-middle luminaire with 1- or 3-phase feed-through wiring and no end caps (LM1/3)
Light distribution	Direct lighting (D)
Optic	High-gloss optic, high-reflective, with top reflector (T C6-H) High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, high-reflective, with top reflector (T D6-H) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt mirror; ribbed cross louvers (M2)

Connection	Push-in connector, either outside or inside lamp compartment BESA box
Color	White Silver (SI) (optional)
Option	Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included
Material	Housing: powder painted steel, white or silver Corner pieces: ABS, white or silver
Installation	Individual; screw mounting or optional with suspension accessories Configurations: screw mounting or optional with suspension accessories dedicated line-feature luminaire types (LF types) with 1 or 3 phase feed-through wiring and no end caps to be used (LF1 or LF3)
Accessory	Suspension set, end caps
Remarks	No protective foil on luminaire since connection for suspension in from inside only
Main applications	Office, retail, recreational, public buildings

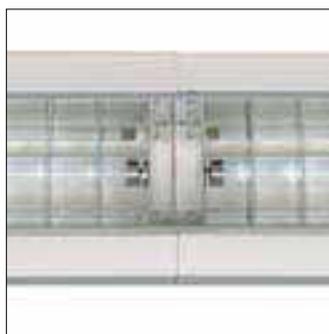


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS398 1, 2 x TL5

	Surface Mounting		Suspension	
	Line-end		Line -end	Line-middle
	A	B	D	E
28W	1217	589	1182	1177
35W	1519	740	1484	1479
49W	1217	589	1182	1177
54W	1519	740	1484	1479
80W	1519	740	1484	1479



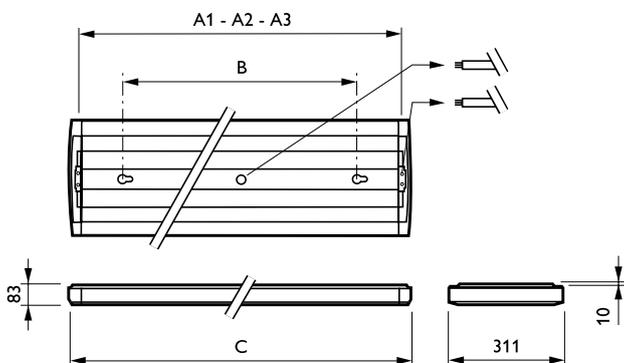
Line-end (LE) and line-mid (LM) luminaires are coupled without accessories and can be mounted onto the ceiling from the inside. Light-line luminaires have through-wiring included.

X-tendolight	
Type	TCS398 (311 mm width)
Light source	Fluorescent: 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Light distribution	Direct lighting
Optic	High-gloss optic, high-reflective, with top reflector (T C6-H) High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, high-reflective, with top reflector (T D6-H) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective, with top reflector (T M6-H) Matt optic, high-reflective (M6-H) Matt optic, double arabolic louvers, closed (M6) Matt optic, double parabolic louvers, asymmetric (M6-A) Matt optic, double parabolic, bi-directional 30° (M6-BD30) Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louver; wide beam (M2-VVB) Matt mirror; ribbed louver; asymmetric (M2-A) Matt mirror; ribbed louver; bi-directional 30° (M2-BD30) Lamellae louver; flat cross louvers (L1)

Optical cover	Mirror with decorative green louvers (M-DGN) Matt mirror; flat cross louvers for Promotelec (MI-PR)
Connection	Push-in connector; either outside or inside lamp compartment BESA box
Color	White Silver (SI) (optional)
Option	Emergency lighting: 3 hours (EL3), 14 W lampholder (E14) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included Protection foil (FL) to protect the optic during installation
Material	Housing: powder coated steel, white or silver Corner pieces: ABS, white or silver
Installation	Individual; screw mounting or optional with suspension accessories Configurations: screw mounting or optional with suspension accessories dedicated line feature luminaire types (LF types) with 1 or 3 phase feed-through wiring and no end caps to be used (LF1 or LF3)
Accessory	Suspension sets, coupling pieces, swivel devices, end caps, mounting bracket, counter weight
Main applications	Office, retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS398 2 x TL5

	Suspension		Surface Mounting		Total length
	Wire suspension	Tube suspension	Outside mounting	Inside mounting	
	A1	A2	A3	B	C
14W	588	603	611	410	658
24W	588	603	611	410	658
28W	1188	1203	1211	900	1258
35W	1488	1503	1511	1200	1558
49W	1488	1503	1511	1200	1558
54W	1188	1203	1211	900	1258
80W	1488	1503	1511	1200	1558



X-tendolight TCS398 surface-mounted basic (BASIC) or line-feature (LF) luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 2xTL5-35W/840 HFP D6 FU FL	6.30	432762 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic (BASIC) or line-feature (LF) luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

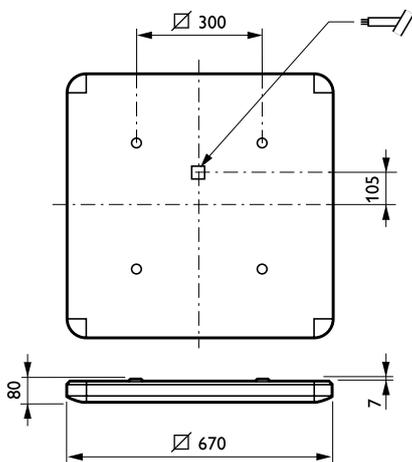
Product ID	Weight (kg)	European Order Code (EOC)
TCS398 2xTL5-49W/840 HFP M2 FU CBESA	6.30	630342 00
TCS398 2xTL5-49W/840 HFP M2 EL3 FU CBESA	7.50	632179 00

Please contact your local Philips representative for additional configurations

X-tendolight	
Type	TCS398 (square)
Light source	Fluorescent: 3 x or 4 x MASTER TL5 / G5 / 14, 24 W
Lamp included	Yes (lamp color 451 (ActiViva Natural), 452 (ActiViva Active), 827, 830 or 840) No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optic	High-gloss optic, high-reflective, with top reflector (T C6-H) High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, high-reflective, with top reflector (T D6-H) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective, with top reflector (T M6-H) Matt optic, high-reflective (M6-H) Matt optic, double parabolic louvers, closed (M6)
Optical cover	Matt mirror; ribbed ross louvers (M2) Lamellae louver; flat cross louvers (L1) Mirror with decorative green louvers (M-DGN)
Connection	Decorative opal cover (OD) Push-in connector, only at inside lamp compartment BESA box
Color	White Silver (SI) (optional)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3), 14 W lampholder (E14) Lighting controls: Luxsense daylight controller (LX) ActiLume multi controller (ACL) Euro fuse (FU) included
Material	Housing: powder coated steel, white or silver Corner pieces: ABS, white or silver
Installation	Individual; screw mounting
Remarks	No protective foil on luminaire since connection for suspension in from inside only
Main applications	Office, retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS398 3 x 14, 24W



X-tendolight TCS398 surface-mounted basic luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 3xTL5-14W HFP C6	5.60	627762 00
TCS398 3xTL5-14W/840 HFP C6 FU	5.60	632582 00
TCS398 3xTL5-14W/830 HFP C6	5.60	706658 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 3xTL5-14W/840 HFP D6	5.60	627786 00
TCS398 3xTL5-14W/840 HFP D6 FU	5.60	632599 00
TCS398 3xTL5-14W/830 HFP D6	5.60	706573 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic luminaire with TL5 fluorescent lamp(s) and OLC matt high-quality aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 3xTL5-14W HFP M6	5.60	627779 00
TCS398 3xTL5-14W/830 HFP M6	5.60	706733 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 3xTL5-14W/830 HFP M2	5.60	706818 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic (BASIC) luminaire with TL5 fluorescent lamp(s) and decorative opal cover (OD)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 3xTL5-14W/830 HFP OD	5.60	706979 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted luminaire with TL5 fluorescent lamp(s) and OLC high-gloss high-quality aluminum optic with 3D lamellae (C6) or high-reflectance 3D lamellae (C6-H)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 4xTL5-14W/830 HFP C6	5.60	706689 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic (BASIC) luminaire with TL5 fluorescent lamp(s) and matt high-quality aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 4xTL5-14W/830 HFP M2	5.60	706849 00

Please contact your local Philips representative for additional configurations



X-tendolight TCS398 surface-mounted basic (BASIC) luminaire with TL5 fluorescent lamp(s) and white painted aluminum optic with flat lamellae (L1)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS398 4xTL5-14W/830 HFP L1	5.60	706924 00

Please contact your local Philips representative for additional configurations

Accessories



Suspension tube with adaptor, length 400 mm (ZCS398 CC-T400-AD) or 1000 mm (ZCS398 CC-T1000-AD) or without adaptor, length 400 mm (ZCS398 CC-T400) or 1000 mm (ZCS398 CC-T1000), tapered ceiling cap included and available in white (WH) and silver (SI)

Product ID	EOC
ZCS398 CC-T1000-AD SI	704227 00
ZCS398 CC-T400-AD WH	619828 99
ZCS398 CC-T400-AD SI	622224 99
ZCS398 CC-T400 WH	619781 99
ZCS398 CC-T400 SI	622187 99



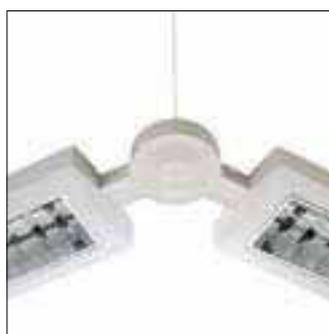
Wire suspension set with fast fine adjustment with clutch device (ZPH401 US) or screw device (ZPH301 US). Rectangular ceiling cap included. Available in white (WH) and silver (SI). Cable length 1500 mm, 1.2 mm²

Product ID	EOC
ZPH301 US WH	596068 00
ZPH301 US SI	636634 00
ZPH401 US WH	596075 00
ZPH401 US SI	636658 00



Wire suspension set with fast fine adjustment with clutch device. Available in silver (SI) and white (WH). Tapered ceiling cap included. Cable length 1500 mm, 1.5 mm²

Product ID	EOC
ZPH501 US SI	636689 99



X-tendolight TCS398 luminaires with I-point wire-suspension swivel device with adjustable angle of 90-270°; tapered ceiling cap and end caps are included; for I-lamp housing 195 mm versions, in white color only (ZCS398 CC-SW-SD)

Product ID	EOC
ZCS398 CC-SW-SD WH	619804 00



X-tendolight TCS398 luminaires with I-point tube-suspension swivel device with adjustable angle of 90-270°; tapered ceiling cap and end caps are included; for I-lamp housing 195 mm versions, in white color only (ZCS398 CC-T400-SD)

Product ID	EOC
ZCS398 CC-T400-SD WH	619811 00



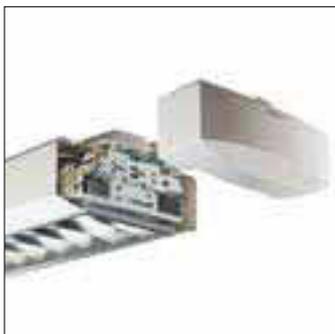
X-tendolight TCS398 luminaire, with cable duct (white color only) for I-lamp housing 195 mm version, and an adjustable angle of 90-270°; end caps and 5 wires are included (ZCS398 CPF)

Product ID	EOC
ZCS398 CPF	421391 00



X-tendolight TCS398 luminaire with coupling piece to create straight lines; for I-lamp housing 195 mm versions (ZCS398 CP-S) and for 2-lamp 311 mm versions (ZCS398 CP-T). Both available in white (WH) and silver (SI)

Product ID	EOC
ZCS398 CP-S WH	605104 00
ZCS398 CP-T WH	605937 99
ZCS398 CP-S SI	631592 00
ZCS398 CP-T SI	631677 99



X-tendolight TCS398 luminaire, with end caps (set of 2); for 1-lamp housing 195 mm versions (ZCS398 EP-S) and for 2-lamp 311 mm versions (ZCS398 EP-T), needed with line-feature luminaires (LF) only; Both available in white (WH) and silver (SI)

Product ID	EOC
ZCS398 EP-S WH (2PCS)	629193 00
ZCS398 EP-S SI (2PCS)	629209 00
ZCS398 EP-T WH (2PCS)	629216 00
ZCS398 EP-T SI (2PCS)	629223 00



X-tendolight TCS398 luminaire with bracket to mount the luminaire on a TTX400 light-line rail; for both for 195 mm and 311 mm luminaire versions (ZCS398 MB-TTX400)

Product ID	EOC
ZCS398 MB-TTX400	634548 99



Counterweights to paste inside the luminaire (ZCS398 CW350). In most cases not needed, depending on the kind of gear and number of lamps used, and only with 1-point suspensions (ZPH501) and mounting on light-lines

Product ID	EOC
ZCS398 CW350	631684 99



E14 lamp socket for emergency lighting

Product ID	EOC
ZCS398 ELU-E14-2	614892 99
ZCS398 ELU-E14-4	614915 99

EFix TPS262, TCS260



EFix TPS262/TCS260 – for a greener office

The EFix TL5 luminaire range is a dedicated, affordable choice of innovative lighting that enables massive energy savings to be made when old electromagnetic installations are replaced by the latest Philips technology. The range's optical performance complies with the latest EN-12464 norms, ensuring improved lighting quality in every application.

Used in combination with high-frequency gear, Philips MASTER TL5 lamps enable substantial energy savings to be made. These savings can be further increased by using a Luxsense daylight controller integrated into the luminaire.

The practical design of EFix combines both surface-mounted (TCS260) and suspended (TPS262) luminaires in one design. Thanks to the luminaire's easily removable top cover, the beam can be adjusted to provide direct or direct/indirect lighting. EFix is supplied with lamps and is ready to install, minimizing installation time.

EFix recessed TBS260 completes Philips' range of luminaires for general lighting applications in offices and shops.

www.philips.com/lighting

EFix suspended TPS262



EFix surface mounted TCS260



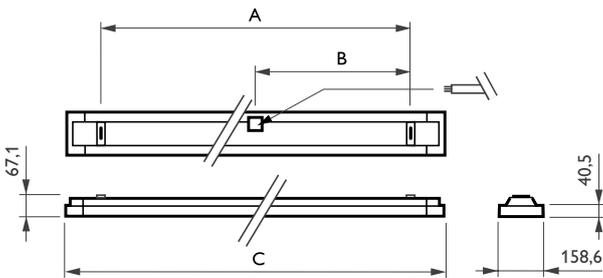
EFix suspended mounted TPS262

Type	TPS262
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optic	High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, double parabolic (D6) Matt optic, double parabolic louvers, closed (M6) Matt mirror; ribbed cross louvers (M2)
Connection	Push-in connector

Color	White, RAL9016 (WH) Silver, RAL9006 (SI)
Option	Lighting controls: Luxsense daylight controller (LX)
Material	Housing: pre-lacquered steel Optic: pre-lacquered steel or aluminum End cap: polycarbonate
Installation	Individual or in line; suspended mounting with a set of two triangular steel-wire suspensions (SMT), both with metal-like power cord, 150 cm, and ceiling caps
Accessory	Coupling piece, ZCS260 CP
Remarks	Delivered with lamps, suspension set and push-in connector



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS262

	A	B	C
28W, 54W	1000	500	1241
80W	1300	650	1541



EFix TPS262 suspended luminaire with OLC high-gloss aluminum optic with 3D lamellae (C6)



EFix TPS262 suspended luminaire with OLC semi-high-gloss aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS262 1x54W/840 HFP C6 SMT SI	3.14	613469 00
TPS262 2x28W/830 HFP C6 SMT WH	3.27	613421 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS262 1x54W/840 HFP D6 SMT SI	3.14	613476 00
TPS262 1x80W/840 HFP D6 SMT SI	4.15	614220 00
TPS262 2x54W/840 HFP D6 SMT SI	3.31	613506 00
TPS262 2x80W/840 HFP D6 SMT SI	4.50	614237 00

Please contact your local Philips representative for additional configurations



EFix TPS262 suspended luminaire with OLC matt aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS262 1x28W/830 HFP M6 SMT WH	3.11	613407 00
TPS262 2x28W/830 HFP M6 SMT WH	3.27	613445 00

Please contact your local Philips representative for additional configurations



EFix TPS262 suspended luminaire with matt aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS262 1x54W/840 HFP M2 SMT SI	3.07	613483 00

Please contact your local Philips representative for additional configurations

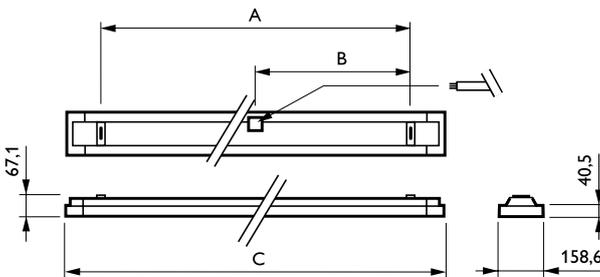
EFix surface mounted TCS260

Type	TCS260
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer Intelligent (HFPI) High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optic	High-gloss optic, double parabolic, closed (C6) Semi-high-gloss optic, double parabolic (D6) Matt optic, double parabolic louvers, closed (M6) Matt mirror, ribbed cross louvers (M2) Asymmetrical mirror (A)
Connection	Push-in connector; from outside

Color	White, RAL9016 (WH) Silver, RAL9006 (SI)
Option	Lighting controls: Luxsense daylight controller (LX)
Material	Housing: pre-lacquered steel Optic: pre-lacquered steel or aluminum End cap: polycarbonate
Installation	Individual or in line; clicking the luminaire into pre-screwed ceiling brackets
Accessory	Suspension set delivered with electrical cable, ZCS260 SME WH or SI
Remarks	Delivered with lamps, push-in connector and ceiling brackets



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS260

	A	B	C
28W, 54W	1000	500	1241
35W, 49W, 80W	1300	650	1541



EFix TCS260 surface-mounted luminaire with OLC high-gloss aluminum optic with 3D lamellae (C6)



EFix TCS260 surface-mounted luminaire with OLC high-gloss aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP C6 WH	3.06	611120 00
TCS260 1x35W/830 HFP C6 WH	3.75	611175 00
TCS260 1x54W/840 HFR C6 LX WH	3.15	612882 00
TCS260 1x28/54W HFPI C6 WH	3.00	613148 00
TCS260 1x35/49W HFPI C6 WH	3.66	613179 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP C6 SI	3.06	611533 00
TCS260 1x49W/830 HFP C6 SI	3.76	611632 00
TCS260 1x80W/830 HFP C6 SI	3.78	611731 00
TCS260 1x35W/840 HFP C6 SI	3.75	612400 00
TCS260 1x54W/840 HFP C6 SI	3.09	612509 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with OLC semi-high-gloss aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x35/49W HFPi D6 WH	3.66	611069 00
TCS260 1x28W/830 HFP D6 WH	3.06	611137 00
TCS260 1x35W/830 HFP D6 WH	3.75	611182 00
TCS260 1x35W/830 HFR D6 LX WH	3.81	612912 00
TCS260 1x28/54W HFPi D6 WH	3.00	613155 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with OLC semi-high-gloss aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP D6 SI	3.06	611540 00
TCS260 1x49W/830 HFP D6 SI	3.76	611649 00
TCS260 1x80W/830 HFP D6 SI	3.78	611748 00
TCS260 1x35W/840 HFR D6 LX SI	3.81	614428 00
TCS260 1x54W/840 HFR D6 LX SI	3.15	614565 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with matt aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP M2 WH	2.98	611151 00
TCS260 1x35W/830 HFP M2 WH	3.64	611205 00
TCS260 1x54W/840 HFP M2 WH	2.98	612127 00
TCS260 1x28/54W HFPi M2 WH	2.91	613162 00
TCS260 1x35/49W HFPi M2 WH	3.54	613186 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with matt aluminum optic with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP M2 SI	2.98	611564 00
TCS260 1x49W/830 HFP M2 SI	3.64	611663 00
TCS260 1x80W/830 HFP M2 SI	3.64	611762 00
TCS260 1x35W/840 HFP M2 SI	3.64	612431 00
TCS260 1x54W/840 HFP M2 SI	2.98	612530 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with asymmetrical reflector (A)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 1x28W/830 HFP A SI	3.13	611571 00
TCS260 1x35W/830 HFP A SI	3.79	611625 00
TCS260 1x54W/830 HFP A SI	3.14	611724 00
TCS260 1x28/54W HFPi A SI	3.07	613360 00
TCS260 1x35/49W HFPi A SI	3.70	613377 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with OLC high-gloss aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 2x28W/830 HFP C6 SI	3.22	611786 00
TCS260 2x49W/830 HFP C6 SI	4.00	611861 00
TCS260 2x35W/840 HFP C6 SI	3.94	612646 00
TCS260 2x54W/840 HFP C6 SI	3.27	612721 00
TCS260 2x80W/840 HFP C6 SI	4.12	614343 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with OLC semi-high-gloss aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 2x28W/830 HFP D6 SI	3.22	611793 00
TCS260 2x49W/830 HFP D6 SI	4.00	611878 00
TCS260 2x54W/840 HFR D6 LX SI	3.31	614305 00
TCS260 2x80W/840 HFP D6 SI	4.12	614350 00
TCS260 2x35W/840 HFR D6 LX SI	4.03	614572 00

Please contact your local Philips representative for additional configurations



EFix TCS260 surface-mounted luminaire with OLC matt aluminum optic with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS260 2x28W/830 HFP M6 SI	3.22	611809 00
TCS260 2x49W/830 HFP M6 SI	4.00	611885 00
TCS260 2x35W/840 HFP M6 SI	3.94	612660 00
TCS260 2x54W/840 HFP M6 SI	3.27	612745 00

Please contact your local Philips representative for additional configurations

Cover plate - direct/indirect light distribution can be achieved simply by removing the top reflector



Easy installation with ceiling bracket and external push-in connection



EFix TPS262/TCS260 surface-luminaire with Luxsense lighting control



EFix TPS262/TCS260 2x TL5



EFix TPS262/TCS260 1x TL5



X-tendolight FCS398



X-tendolight FCS398 - designed for your applications

X-tendolight FCS398 is a square surface-mounted luminaire, available in three different sizes for PL-L and PL-S fluorescent lamps. It provides a wide range of ballast types and a choice of different high-performance optics and covers, including Omnidirectional Luminance Control (OLC) optics.

Together with the X-tendolight TPS498 and TCS398 this FCS398 completes the X-tendolight luminaire range.

www.philips.com/lighting

X-tendolight FCS398 surface-mounted



X-tendolight TCS398 surface-mounted



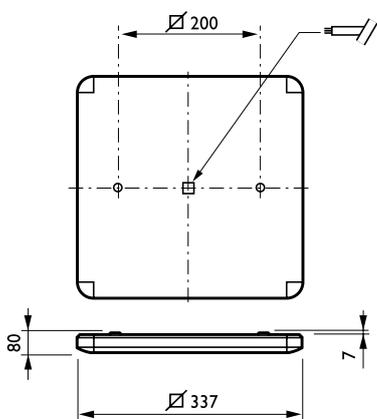
X-tendolight TPS498 suspended



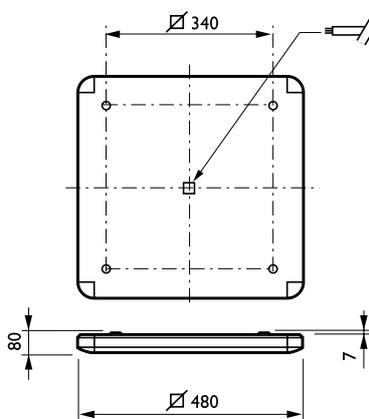
X-tendolight			
Type	FCS398	Optic	High-gloss optic, high-reflective (C6-H) High-gloss optic, double parabolic (C6) Semi-high-gloss optic, high-reflective (D6-H) Semi-high-gloss optic, double parabolic (D6) Matt optic, high-reflective (M6-H) Matt optic, double parabolic louvers, closed (M6) Matt mirror; ribbed cross louvers (M2) Lamellae louver; flat cross louvers (L1) Mirror with decorative green louvers (M-DGN)
Light source	Compact fluorescent: 2 x MASTER PL-S 4 Pin / 2G7 / 11 W (square 337 mm) 2 x MASTER PL-L 4 Pin / 2G11 / 18 W (square 337 mm) 2 x MASTER PL-L 4 Pin / 2G11 / 36 W (square 480 mm) 3 x MASTER PL-L 4 Pin / 2G11 / 40, 55 W (square 670 mm)	Optical cover	Decorative opal cover (OD)
Lamp included	Yes (lamp color 830 or 840) No	Connection	Push-in connector
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Matchbox (HFM)	Color	White Silver (SI) (optional)
		Option	Euro fuse (FU) included
		Material	Housing: powder painted steel, white or silver Corner pieces: ABS, white or silver
		Installation	Individual; screw mounting
		Main applications	Office, retail, recreational, public buildings



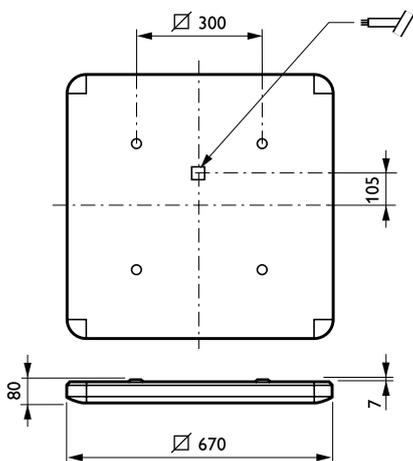
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FCS398 2 x 11, 18W



FCS398 2 x 36W



TCS398 3 x 40, 55W



X-tendolight FCS398 surface-mounted luminaire with OLC high-gloss high-quality aluminum optic with 3D lamellae (C6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FCS398 2xPL-L36W HFP C6	3.10	421025 00
FCS398 2xPL-L36W/840 HFP C6 FU	3.10	632568 00
FCS398 2xPL-L18W IC C6	2.00	495910 00
FCS398 2xPL-L36W IC C6	3.80	495958 00

Please contact your local Philips representative for additional configurations

Finess



Finess – functional basics

Finess TCSI 98 is a functional luminaire for 1, 2 or 4 TL-D fluorescent lamps and offers a choice of 5 different optics for general/low-glare lighting requirements. The luminaire is supplied complete with optic and pre-installed lamp(s); a 1- or 3-hour emergency lighting circuit is available as an option. Finess TCSI 98 can be mounted individually or in-line and is also suitable for suspension.

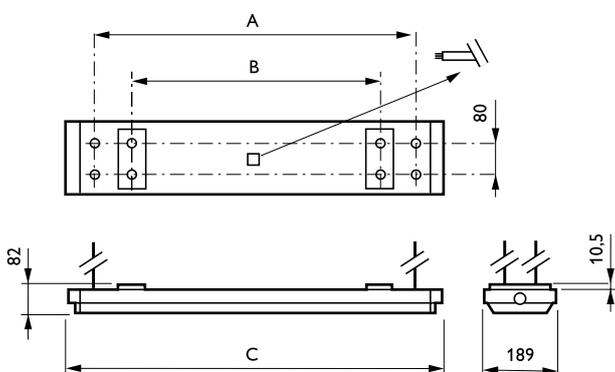
www.philips.com/lighting

Finess	
Type	TCSI98 (rectangular and square version) TCSI98 KIT (rectangular, ready to install version)
Light source	Fluorescent: 1 x, 2 x, 3 x or 4 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	Yes (lamp color 830 or 840) (optional) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive with additional connection block for capacitor (IK) Inductive with additional connection block for capacitor in parallel (IKP) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) Electronic Included (EI)
Optic	High-gloss optic, double parabolic, limit 1000 cd (C6-1000cd) Matt optic, double parabolic louvers (M6)

	Matt mirror; ribbed cross louvers (M2) Lamellae louver; flat cross louvers (L1) Asymmetrical mirror (A) Matt mirror; flat cross louvers (M1)
Connection	Push-in connector
Option	Euro fuse (FU) included Emergency lighting: 1 hour (EL1), 3 hours (EL3) Ready-to-install versions (KIT), inclusive lamp(s) and installation material Counterweight (CW) to balance the luminaire
Material	Housing: pre-lacquered steel, white End caps: plastic
Installation	Individual or in line; screw mounting or clicking the luminaire into pre-screwed ceiling brackets (ready-to-install) Suspension facility optional
Accessory	Suspension set
Main applications	Office, retail, industry, recreational, public buildings

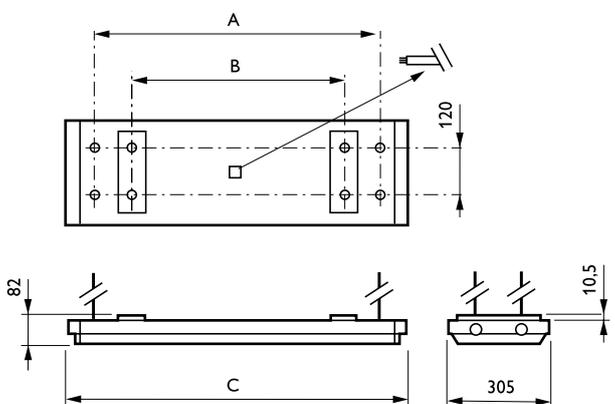


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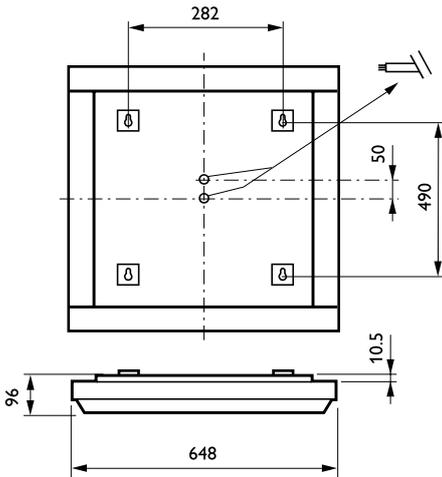
TCSI98 1 x TL-D (KIT)

	A	B	C
36W	1100	900	1257
58W	1400	1200	1557



TCSI98 2 x TL-D (KIT)

	A	B	C
18W		450	647
36W	1100	900	1257
58W	1400	1200	1557



TCS198 3,4 x TL-D



Finess TCS198 surface-mounted luminaire with OLC high-gloss high-quality aluminum optics with 3D lamellae, limit 1000 cd (C6-1000 cd)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS198 1xTL-D36W HFP C6-1000 LR	3.00	694979 00
TCS198 1xTL-D58W HFP C6-1000 LR	3.40	694993 00

Please contact your local Philips representative for additional configurations



Finess TCS198 surface-mounted luminaire with white painted aluminum optic with flat lamellae (LI)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS198 1xTL-D36W HFP LI	3.40	285832 00
TCS198 1xTL-D58W HFP LI	3.80	285931 00
TCS198 1xTL-D58W/830 IC LI KIT	4.69	694344 00

Please contact your local Philips representative for additional configurations

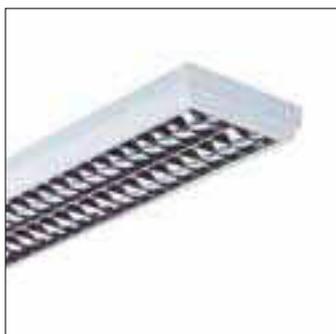


Finess TCS198 surface-mounted luminaire with asymmetric beam (A)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS198 1xTL-D36W HFP A	3.20	687568 00
TCS198 1xTL-D58W HFP A	3.60	687575 00
TCS198 1xTL-D58W/840 HFP A	3.80	687841 00

Please contact your local Philips representative for additional configurations



Finess TCSI98 surface-mounted luminaire with OLC high-gloss high-quality aluminum optics with 3D lamellae, limit 1000 cd (C6-1000 cd)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI98 2xTL-D36W HFP C6-1000 LR	3.87	694986 00
TCSI98 2xTL-D58W HFP C6-1000 LR	4.84	695006 00
TCSI98 2xTL-D36W/840 HFP C6-1000 KIT	4.18	695068 00
TCSI98 2xTL-D58W/840 HFP C6-1000 KIT	4.70	695075 00

Please contact your local Philips representative for additional configurations



Finess TCSI98 surface-mounted luminaire with OLC matt high-quality aluminum optics with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI98 2xTL-D36W HFP M6	3.87	285917 00
TCSI98 2xTL-D36W/840 HFP M6 KIT	4.18	694078 00
TCSI98 2xTL-D58W/840 HFP M6 KIT	4.70	694108 00
TCSI98 2xTL-D36W/830 HFP M6 KIT	3.75	694429 00
TCSI98 2xTL-D58W/830 HFP M6 KIT	4.60	694443 00

Please contact your local Philips representative for additional configurations



Finess TCSI98 surface-mounted luminaire with matt high-quality aluminum optics with profiled lamellae (M2)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI98 2xTL-D36W HFP M2	3.65	285900 00
TCSI98 2xTL-D58W HFP M2	4.45	286006 00
TCSI98 2xTL-D36W/830 HFP M2 KIT	3.52	694412 00
TCSI98 2xTL-D58W/830 HFP M2 KIT	4.26	694436 00

Please contact your local Philips representative for additional configurations



Finess TCSI98 surface-mounted luminaire with OLC high-gloss high-quality aluminum optics with 3D lamellae, limit 1000 cd (C6-1000 cd)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI98 4xTL-D18W HFP C6-1000 LR	3.70	695037 00

Please contact your local Philips representative for additional configurations



Finess TCSI98 surface-mounted luminaire with OLC matt high-quality aluminum optics with 3D lamellae (M6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI98 4xTL-D18W HFP M6	3.66	685939 00

Please contact your local Philips representative for additional configurations

Easy access for fast electrical connection (KIT version)



Surface-mounting bracket supplied with kit version





Centura2



Centura – lighting essentials

Centura TCSI 60 is a surface-mounted luminaire, with a contemporary design, for general lighting in offices, schools and retail outlets.

It is a cost-efficient solution, the combination of (optional) electronic (HF) gear and easy installation allowing considerable savings on energy and maintenance. The Centura range offers a choice of TL-D lamps, three sizes of housing and four types of optic.

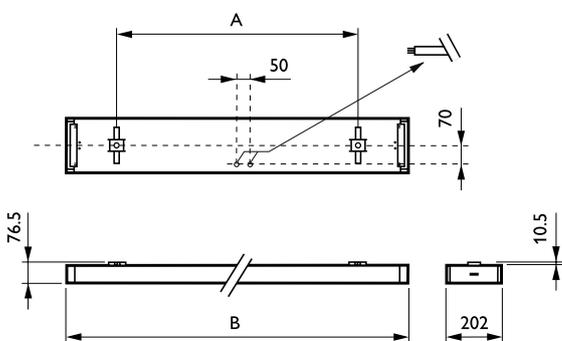
www.philips.com/lighting

Centura2	
Type	TCSI60
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W 4 x MASTER TL-D / G13 / 18 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) Electronic Included (EI)
Optic	High-gloss optic, double parabolic (C5) Lamellae louver, flat cross louvers (LI)

	High-gloss mirror; faceted (C3) Asymmetrical mirror (A) (not for square version)
Option	Ready-to-install versions (KIT), inclusive lamp(s) and installation material
Material	Housing: pre-lacquered steel, white Corners, end caps: polycarbonate Optic: pre-lacquered steel or aluminum
Installation	Individual; screw mounting or clicking the luminaire into pre-screwed ceiling brackets (ready-to-install)
Main applications	Office, retail

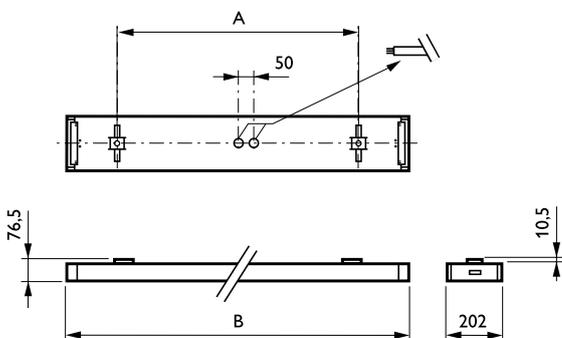


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



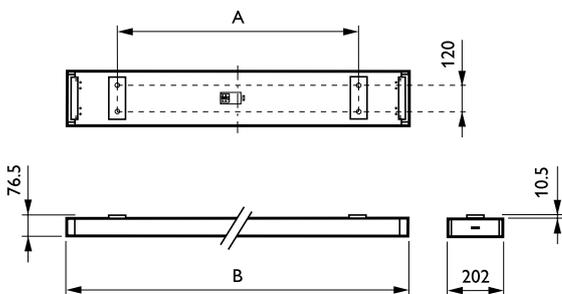
TCSI60 1xTL-D

	A	B
36W	900	1267
58W	1200	1567



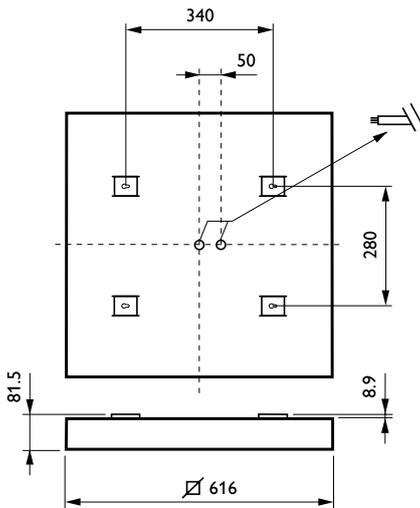
TCSI60 2xTL-D

	A	B
36W	900	1267
58W	1200	1567



TCSI60 2xTL-D (KIT)

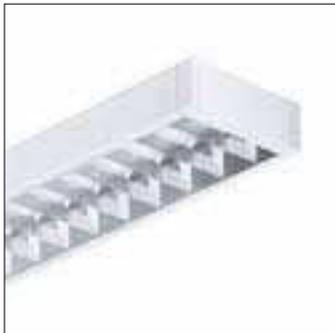
	A	B
36W	900	1267
58W	1200	1567



TCSI 60 4 x TL-D



Centura2 TCSI 60 surface-mounted luminaire with white painted optic with flat lamellae (L1)



Centura2 TCSI 60 surface-mounted luminaire with high-gloss high-quality aluminum optic faceted with matt aluminum lamellae (C3)



Centura2 TCSI 60 surface-mounted luminaire with asymmetric beam (A)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 1xTL-D36W IC LI	3.20	138114 00
TCSI 60 1xTL-D36W EI LI	2.70	138138 00
TCSI 60 1xTL-D58W EI LI	3.50	138176 00
TCSI 60 1xTL-D36W/830 IC LI	3.40	610895 00
TCSI 60 1xTL-D58W/830 IC LI	4.30	610918 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 1xTL-D36W IC C3	2.90	138213 00
TCSI 60 1xTL-D36W EI C3	2.40	138237 00
TCSI 60 1xTL-D58W EI C3	3.00	138275 00
TCSI 60 1xTL-D36W/830 IC C3	3.30	610901 00
TCSI 60 1xTL-D58W/830 IC C3	4.00	610925 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 1xTL-D36W IC A	2.90	138374 00
TCSI 60 1xTL-D36W EI A	2.50	138381 00
TCSI 60 1xTL-D58W IC A	3.80	138398 00
TCSI 60 1xTL-D58W EI A	3.00	138404 00

Please contact your local Philips representative for additional configurations



Centura2 TCSI 60 surface-mounted luminaire with high-gloss high-quality aluminum optics with parabolic lamellae (C5)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 2xTL-D36W EI C5	2.80	138329 00
TCSI 60 2xTL-D36W/830 EI C5	3.60	138589 00
TCSI 60 2xTL-D58W/830 EI C5	4.40	138602 00
TCSI 60 2xTL-D36W/840 EI C5	3.60	138756 00
TCSI 60 2xTL-D58W/840 EI C5	4.40	138770 00

Please contact your local Philips representative for additional configurations



Centura2 TCSI 60 surface-mounted luminaire with white painted optics with flat lamellae (L1)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 2xTL-D36W IC LI	3.70	138121 00
TCSI 60 2xTL-D36W/830 EI LI	3.00	138466 00
TCSI 60 2xTL-D58W/830 EI LI	3.80	138480 00
TCSI 60 2xTL-D36W/840 EI LI	3.00	138633 00
TCSI 60 2xTL-D58W/840 EI LI	3.80	138657 00

Please contact your local Philips representative for additional configurations



Centura2 TCSI 60 surface-mounted luminaire with high-gloss high-quality aluminum optics faceted with matt aluminum lamellae (C3)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 2xTL-D36W IC C3	3.40	138220 00
TCSI 60 2xTL-D36W/830 EI C3	2.80	138527 00
TCSI 60 2xTL-D58W/830 EI C3	3.50	138541 00
TCSI 60 2xTL-D36W/840 EI C3	2.80	138695 00
TCSI 60 2xTL-D58W/840 EI C3	3.50	138718 00

Please contact your local Philips representative for additional configurations



Centura2 TCSI 60 surface-mounted square luminaire with high-gloss high-quality aluminum optics with parabolic lamellae (C5)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCSI 60 4xTL-D18W IC C5	4.50	138350 00
TCSI 60 4xTL-D18W EI C5	4.70	138367 00
TCSI 60 4xTL-D18W IC C3	4.20	138299 00
TCSI 60 4xTL-D18W EI C3	3.40	138305 00
TCSI 60 4xTL-D18W IC LI	5.00	138190 00

Please contact your local Philips representative for additional configurations

Modella



Modella – perfect blend

Modella TCSI25 is a luminaire for TL-D and TL5 linear fluorescent lamps with an attractive design to suit all interiors. It comes with a choice of smooth, easy-to-clean opal or prismatic covers. The covers can be suspended from the end caps to allow easy lamp replacement without the need for any tools.

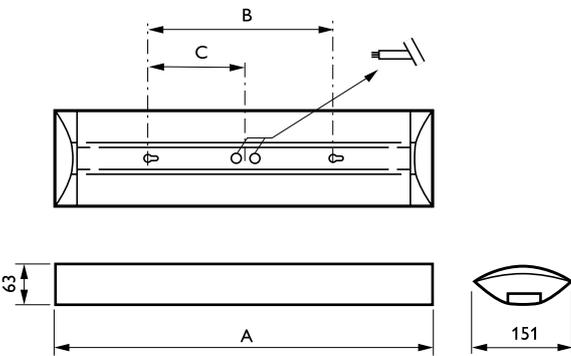
www.philips.com/lighting

Modella	
Type	TCS125
Light source	Fluorescent: 2 x or 1 x MASTER TL5 / G5 / 28, 35, 49, 54 W 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	Yes (lamp color 830 or 840) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) Electronic Included (EI)

Optical cover	Opal cover (O) Prismatic cover (P) Prismatic cover polycarbonate (PCP)
Material	Housing: powder painted steel, white End-caps: plastic, white Cover: opal, or prismatic, internally ribbed (PMMA or PC)
Installation	Individual; screw ceiling mounting
Remarks	2 Cable-entry versions available (SH)
Main applications	Office, retail, hospitality, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCS125 SH

	A	B	C
18W CONV	680	450	210
18W HFP	680	450	115
28W, 54W	1242	882	530
36W	1292	930	465
35W, 49W	1542	1182	590
58W	1592	1230	615



Modella TCS125 surface-mounted luminaire with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS125 2xTL-D18W/830 HFP SH O	1.60	136301 00
TCS125 2xTL-D18W/830 IC SH O	1.90	136349 00
TCS125 2xTL-D36W/830 HFP SH O	2.50	136363 00
TCS125 2xTL5-35W/830 HFP SH O	2.60	136486 00
TCS125 2xTL5-49W/830 HFP SH O	2.60	136509 00

Please contact your local Philips representative for additional configurations



Modella TCS125 surface-mounted luminaire with prismatic refractor (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS125 2xTL-D18W/830 HFP SH P	1.60	136318 00
TCS125 2xTL-D36W/830 HFP SH P	2.50	136370 00
TCS125 2xTL-D58W/830 HFP SH P	3.10	136431 00
TCS125 2xTL5-49W/830 HFP SH P	2.60	136516 00
TCS125 2xTL5-54W/830 HFP SH P	2.20	136530 00

Please contact your local Philips representative for additional configurations

SuperOmni



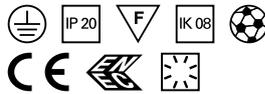
SuperOmni – impact protection

SuperOmni TCH/FCH481 is a luminaire suitable for TL-D, TL-5 and PL-L fluorescent lamps, specifically designed for multi-purpose sports halls and tennis centers. Its robust housing complete with integrated wire guard protects the lamps against ball impact. The luminaires can be surface-mounted, suspended or installed on trunking systems. The optical system features cross lamellae to prevent users looking directly into the lamps, thus reducing glare. The optical distribution can be changed to asymmetric by re-positioning the lamp holders within the optical system (TCH481 versions only).

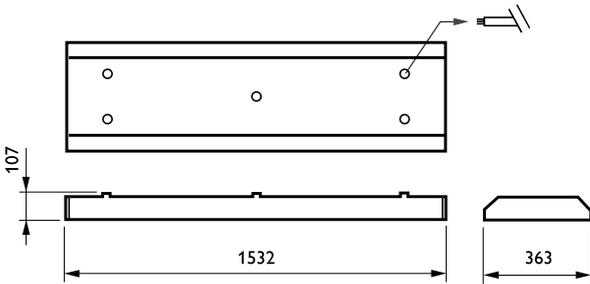
www.philips.com/lighting

SuperOmni	
Type	TCH481 (fluorescent lamp version) FCH481 (compact fluorescent version)
Light source	Fluorescent: 2 x or 3 x MASTER TL5 / G5 / 49, 80 W 2 x or 3 x MASTER TL-D / G13 / 58 W Compact fluorescent: 4 x MASTER PL-L 4 Pin / 2G11 / 55, 80 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	Matt mirror; ribbed cross louvers (M2) Matt mirror; ribbed louver; asymmetric (M2-A) (in fluorescent lamp version only)

Option	Emergency lighting: 3 hours (EL3) Switching: separate switching of lamps in 3-lamp version
Material	Housing: sheet steel, white Optic: aluminum, matt
Installation	Individual or in line; clicking the luminaire into pre-screwed ceiling brackets or suspended mounting with chains or on light-line systems
Accessory	Mounting brackets
Remarks	UK' within product designation for United Kingdom only
Main applications	Recreational



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCH/FCH481



SuperOmni TCH/FCH481 sports luminaire



SuperOmni TCH/FCH481 sports luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCH481 2xTL-D-XE58W/840 HFP M2	10.00	008257 00
TCH481 2xTL5-49W/840 HFP M2	11.00	008271 00
TCH481 2xTL5-49W/840 HFR M2	11.00	008288 00
TCH481 2xTL5-80W/840 HFP M2	11.00	008301 00
TCH481 2xTL5-80W/840 HFR M2	10.30	799551 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCH481 3xTL-D-XE58W/840 IC M2 SW	16.00	008332 00
TCH481 3xTL-D-XE58W/840 HFP M2 SW	13.00	008349 00
TCH481 3xTL5-49W/840 HFP M2 SW	14.00	008363 00
TCH481 3xTL5-80W/840 HFP M2 SW	14.00	008387 00
TCH481 3xTL5-80W/840 HFR M2	13.80	008394 00

Please contact your local Philips representative for additional configurations



SuperOmni TCH/FCH481 sports luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FCH481 4xPL-L55W/840 HFP M2-A EL3	11.00	008462 00
FCH481 4xPL-L55W/840 HFR M2-A EL3	11.00	008479 00
FCH481 4xPL-L55W/840 HFP M2	9.00	008400 00
FCH481 4xPL-L55W/840 HFR M2	9.00	008417 00
FCH481 4xPL-L80W/840 HFP M2	9.00	008424 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZCH481 MB-TTX400 SET4	TTX400 light-line mounting set	008196 00
ZCH481 2/4 MB (2PCS)	Simple mounting bracket (housing W = 363 mm)	008493 00
ZCH481 3 MB (2PCS)	Simple mounting bracket (housing W = 519 mm)	145884 00
ZCH481 2/4 MB-A30 (2PCS)	Asymmetrical (30°) mounting bracket (housing W = 363 mm)	008509 00
ZCH481 3 MB-A30 (2PCS)	Asymmetrical (30°) mounting bracket (housing W = 519 mm)	008516 00
ZCH481 2/4 RA SET9	Rail mounting kit (housing W = 363 mm)	008523 00
ZCH481 3 RA SET9	Rail mounting kit (housing W = 519 mm)	008530 00

Integral wire guard



Angled, 30°, mounting bracket used in conjunction with rail mounting



Angled, 30°, mounting bracket (ZCH481 MB-A30)



Rail mounting kit (ZCH481 RA)



Simple mounting bracket (ZCH481 MB)



Savio TWS760



Savio - pure light

Featuring Philips' patented micro-lens optic technology, Savio is a complete luminaire range that offers the ideal combination of stylish design and optimum performance for both task and general lighting.

Savio has an edge-to-edge lighting appearance with a uniform and comfortable brightness impression – a real 'surface of light'. The micro-lens optic consists of a single plate and is embedded in a housing made of high-quality natural anodized aluminum. Savio ensures optimum light distribution and full glare control in compliance with the latest office-lighting norm (EN 12464-1).

Savio is available as a full range: suspended, surface-mounted, recessed, free-standing and wall-mounted.

www.philips.com/lighting



Savio wall-mounted



Savio free floor-standing



Savio surface-mounted



Savio suspended



Savio recessed

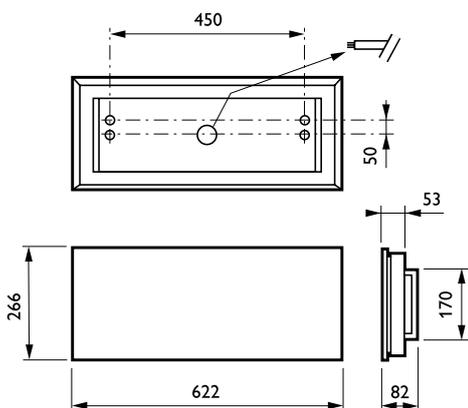


Savio	
Type	TWS760
Light source	Fluorescent: 2 x MASTER TL5 / G5 / 14 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Optical cover	Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector
Option	Euro fuse (FU) included

Material	Housing: anodized aluminum Micro-lens optic: polycarbonate Rim: polycarbonate (translucent)
Installation	Screw mounting, directly on surface
Remarks	Custom made solutions available on request
Main applications	Office, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TWS760



Savio TWS760 wall-mounted luminaire with polycarbonate micro-lens optic (PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TWS760 2x14W/840 HFP PC-MLO	4.40	750392 00
TWS760 2x14W/830 HFP PC-MLO	4.40	750408 00
TWS760 2x14W/840 HFP PC-MLO FU	4.40	751894 00

Please contact your local Philips representative for additional configurations



Arano TWS640



Arano – uplight box

Arano wall-mounted TWS640 is a luminaire for decorative and accent lighting, featuring TL5 fluorescent lamp technology and Philips' MLO micro-optics.

Besides the wall-mounted TWS640, the Arano range also includes surface-mounted, suspended and free floor-standing luminaires, making this product family an excellent choice with complete project solutions.

www.philips.com/lighting

Arano wall-mounted



Arano Nordic suspended



Arano free floor-standing



Arano suspended



Arano surface-mounted

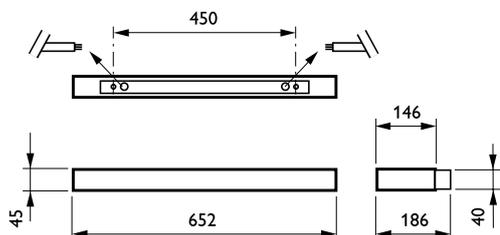


Arano	
Type	TWS640
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 24 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Optical cover	Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector

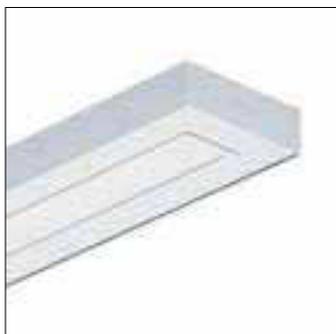
Option	Emergency lighting: 3 hours (EL3) Euro fuse (FU) included
Material	Housing: anodized aluminum Micro-lens optic: polycarbonate Rim: polycarbonate (translucent)
Installation	Screw mounting, directly on surface
Remarks	Custom made solutions available on request
Main applications	Office, department stores



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TWS640



Arano TWS640 wall-mounted luminaire with polycarbonate micro-lens optic (PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TWS640 1xTL5-24W/830 HFP PC-MLO EL3 ALU	2.50	493138 00
TWS640 1xTL5-24W/840 HFP PC-MLO ALU	2.50	750514 00
TWS640 1xTL5-24W/830 HFP PC-MLO ALU	2.50	750521 00
TWS640 1xTL5-24W/840 HFP PC-MLO FU ALU	2.50	757865 00

Please contact your local Philips representative for additional configurations

Celino TWS680



Celino - light beam

Celino is a complete luminaire range that reflects the market trend towards miniaturization and architectural integration, while at the same time delivering a significant advance in optical performance.

Celino features Philips' aluminum micro optic with 3D lamellae, which ensures optimum visual comfort and efficiency in compliance with the latest office-lighting norm (EN 12464-1). Made of natural anodized aluminum, the housing of Celino is a mere 71 mm wide and has die-cast-aluminum end caps. The design allows multiple luminaires to be connected in a line arrangement.

Celino is available as a full range – suspended, surface-mounted, free-standing and wall-mounted – for maximum freedom in application.

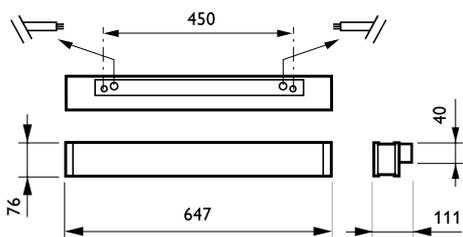
www.philips.com/lighting

Celino	
Type	TWS680
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 24 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Optical cover	Polycarbonate micro lens optic (PC-MLO)
Connection	Push-in connector

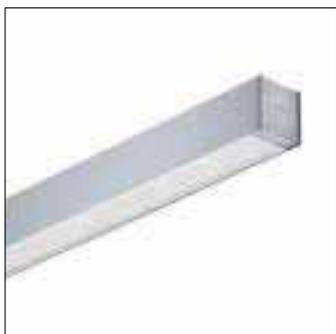
Option	Euro fuse (FU) included
Material	Housing: natural anodized aluminum End caps: die-cast aluminum Cover: polycarbonate
Installation	Screw mounting, directly on surface
Main applications	Offices, education, healthcare, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TWS680



Celino TWS680 wall-mounted luminaire with polycarbonate micro-lens optic (PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TWS680 1xTL5-24W/840 HFP PC-MLO ALU	2.20	750453 00
TWS680 1xTL5-24W/830 HFP PC-MLO ALU	2.20	750460 00
TWS680 1xTL5-24W/840 HFP PC-MLO FU ALU	2.20	757834 00

Please contact your local Philips representative for additional configurations

Celino wall-mounted



Celino recessed TBS692



Celino free floor-standing



Celino surface-mounted



Celino suspended



Celino recessed TBS690







Free floor-standing – moving the light closer

The free floor-standing range is a lighting solution that provides maximum flexibility in the office space as a stand-alone light source or secondary task lighting. Available with MASTER PL-L or MASTER TL5 lamps, these luminaires combine the latest micro-lens optic (MLO) innovations with a stylish design that will blend in with the office environment.

The MLO ensures optimum light distribution and full glare control in compliance with the latest office-lighting norm (EN 12464-1). The luminaires offer both direct and indirect lighting, ensuring a pleasant light atmosphere for general or task lighting.

The free floor-standing luminaires allow you to personalize your working environment by using the handy switch to regulate the light level or even the color temperature of the light (Dynamic Lighting version).

The free floor-standing line completes the Savio, Arano and Celino ranges and is available with ActiLume (daylight and presence detection) to provide an excellent energy-saving solution.

www.philips.com/lighting



Savio free floor-standing

Savio has an edge-to-edge lighting appearance with a uniform and comfortable brightness impression – a real 'surface of light'.

Savio free floor-standing luminaires with Dynamic Lighting enhance your personal space by offering adjustable color temperature settings to give you personal light.



Arano free floor-standing

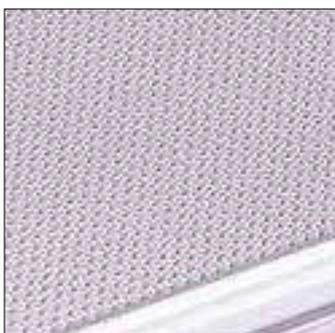
Arano's pure, form-follows-function design is optimized for efficient and comfortable light installation.

With its compact dimensions, Arano reflects the market trend towards miniaturization and architectural integration. The housing is made of natural anodized extruded aluminum.



Celino free floor-standing

Made of natural anodized aluminum, the Celino housing is a mere 71 mm wide and has die-cast aluminum end caps.



MLO optic

With the new patented micro-lens optic (MLO), the lamps are not directly visible and full glare control from all viewing angles is a reality (Omnidirectional Luminance Control, OLC). The microlens optic is highly efficient and meets the latest office standards: $L_m < 1000 \text{ cd/m}^2$ in all viewing directions at $\gamma \geq 65^\circ$ and $UGR < 19$ (EN 12464-1). This means no disturbing glare on PC or laptop screens, regardless of where they are positioned in the room.



ActiLume

Philips ActiLume provides daylight regulation, occupancy control and personal regulation for maximum visual comfort and automatic energy saving.



Dimming

Savio's precisely integrated switch is intuitive to use and offers both on/off and dimming functions.



Switch

Arano makes the choice easy because it has separate switches – one or two lamps can be switched off if less light is required. A dimmable version is also available, which works as intuitively as in the Savio / Celino dimmable version.

Savio FFS/TFS764



Savio – pure light

Featuring Philips' patented micro-lens optic technology, Savio is a complete luminaire range that offers the ideal combination of stylish design and optimum performance for both task and general lighting.

Savio has an edge-to-edge lighting appearance with a uniform and comfortable brightness impression – a real 'surface of light'. The micro-lens optic consists of a single plate and is embedded in a housing made of high-quality natural anodized aluminum. Savio ensures optimum light distribution and full glare control in compliance with the latest office-lighting norm (EN 12464-1).

Savio luminaires with Dynamic Lighting keep us feeling active by creating dynamic artificial light that varies over the course of the day or is set according to personal preference.

Savio is available as a full range: suspended, surface-mounted, recessed, free-standing and wall-mounted.

www.philips.com/lighting



Savio wall-mounted



Savio free floor-standing



Savio surface-mounted



Savio suspended



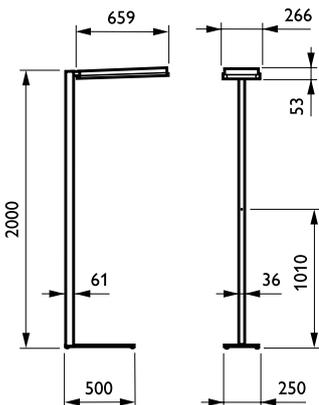
Savio recessed



Savio			
Type	FFS764 (standard, PL-L-lamp version) TFS764 (standard, TL5-lamp version) TFS772 (Dynamic lighting, TL5-lamp version)	Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Light source	Compact fluorescent: 3 x MASTER PL-L 4 Pin / 2G11 / 55, 80 W Fluorescent: 3 x or 4 x MASTER TL5 / G5 / 24 W	Option	Lighting controls: ColorVariation Controller (CVC) ActiLume multi controller (ACL) Euro fuse (FU) included
Lamp included	Yes (lamp color 830 or 840) (standard version) Yes (lamp color 827 and 865) (Dynamic Lighting version)	Material	Housing: post-lacquered aluminum, pole and foot in silver grey Optical cover: AC-MLO: PMMA, PC-MLO: polycarbonate
Light distribution	Direct / Indirect (D/I)	Remarks	Delivered as complete luminaire with lamps and plug cable TFS772 delivered as KIT with remote control
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator, touch-switch, DALI interface (HFD-T)	Main applications	Office



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Savio FFS/TFS764/TFS772



Savio FFS/TFS764/TFS772 free-standing luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO), and Dynamic Lighting option (TFS772 only)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FFS764 3xPL-L55W/840 HFD-T AC-MLO	18.10	561296 00
FFS764 3xPL-L80W/840 HFD-T AC-MLO	18.10	561302 00
TFS764 4xTL5-24W/840 HFD-T AC-MLO	17.85	561319 00
FFS764 3xPL-L55W/840 HFD-T AC-MLO ACL	18.15	561326 00
TFS772 3xTL5-24W/827/865 HFD AC-MLO CVC	18.30	561456 00

Please contact your local Philips representative for additional configurations

Savio FFS/TFS764/TFS772 free-standing luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO), and Dynamic Lighting option (TFS772 only)

Switch for Savio FFS/TFS764/TFS772 free floor-standing luminaire



Arano FFS/TFS644



Arano – standing light box

Arano FFS/TFS640 is an innovative range of indirect/direct free-standing luminaires for PL-L (FFS640) and TL5 fluorescent lamps (TFS640), featuring Philips' micro-lens optic (MLO). The patented micro-lens optic ensures full glare control in all viewing directions, in compliance with the latest office-lighting norm (EN12464-1). A complete range of surface-mounted, suspended and wall-mounted Arano luminaires is also available.

www.philips.com/lighting

Arano free floor-standing



Arano wall-mounted



Arano suspended



Arano surface-mounted



Arano Nordic suspended

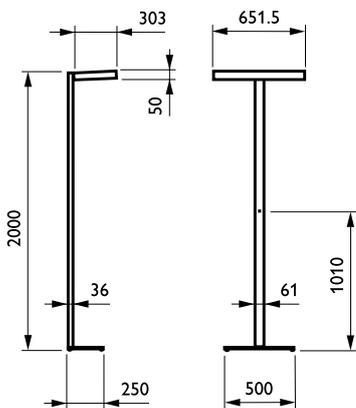


Arano	
Type	FFS644 (PL-L-lamp version) TFS644 (TL5-lamp version)
Light source	Compact fluorescent: 2 x or 3 x MASTER PL-L 4 Pin / 2G11 / 55, 80 W Fluorescent: 4 x MASTERTL5 / G5 / 24 W
Lamp included	Yes (lamp color 830 or 840)
Light distribution	Direct / Indirect (D/I)
Gear	Electronic, 220 - 240V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; touch-switch, DALI interface (HFD-TD)

Optical cover	Acrylate micro lens optic (AC-MLO) Polycarbonate micro lens optic (PC-MLO)
Option	Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included
Material	Housing: post-lacquered aluminum, pole and foot in silver grey Optical cover: AC-MLO cover: PMMA, PC-MLO cover: polycarbonate
Remarks	Delivered as complete luminaire with lamps and plug cable
Main applications	Office



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FFS644/TFS644



Arano FFS/TFS644 free floor-standing luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TFS644 4xTL5-24W/840 HFP AC-MLO	17.25	561692 00
FFS644 3xPL-L80W/840 HFP AC-MLO SW	17.90	561685 00
FFS644 3xPL-L55W/840 HFP AC-MLO SW	17.90	561678 00
FFS644 3xPL-L55W/840 HFD-T AC-MLO ACL	17.95	561500 00
FFS644 3xPL-L55W/840 HFD-T AC-MLO FU	18.00	561746 00

Please contact your local Philips representative for additional configurations

Arano FFS/TFS644 free floor-standing luminaire with PMMA or polycarbonate micro-lens optic (AC-MLO, PC-MLO)

Switch for Arano FFS/FTFS644 free floor-standing luminaire





Celino FFS684



Celino – light beam

Celino is a complete luminaire range that reflects the market trend towards miniaturization and architectural integration, while at the same time delivering a significant advance in optical performance.

Celino features Philips' aluminum micro optic with 3D lamellae, which ensures optimum visual comfort and efficiency in compliance with the latest office-lighting norm (EN 12464-1).

Made of natural anodized aluminum, the housing of Celino is a mere 71 mm wide and has die-cast-aluminum end caps. The design allows multiple luminaires to be connected in a line arrangement.

Celino is available as a full range – suspended, surface-mounted, free-standing and wall-mounted – for maximum freedom in application.

www.philips.com/lighting

Celino wall-mounted



Celino recessed TBS692



Celino free floor-standing



Celino surface-mounted



Celino suspended



Celino recessed TBS690



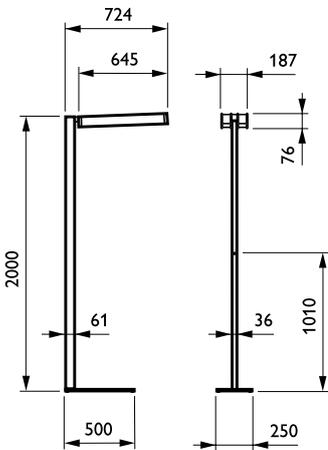
Celino FFS684

Celino	
Type	FFS684
Light source	Compact fluorescent: 2 x MASTER PL-L 4 Pin / 2G11 / 80 W
Lamp included	Yes (lamp color 830 or 840)
Light distribution	Direct / Indirect (D/I)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Regulator; touch-switch, DALI interface (HFR-TD)
Optical cover	Polycarbonate micro lens optic (PC-MLO)

Option	Lighting controls: ActiLume multi controller (ACL) Euro fuse (FU) included
Material	Housing: post-lacquered aluminum, pole and foot in silver grey Optical cover: polycarbonate
Remarks	Delivered as complete luminaire with lamps and plug cable
Main applications	Office



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FFS684



Celino FFS684 free-standing luminaire with polycarbonate micro-lens optic (PC-MLO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FFS684 2xPL-L80W/840 HFR-T PC-MLO ACL	18.40	561753 00
FFS684 2xPL-L80W/840 HFR-T PC-MLO	18.30	561760 00
FFS684 2xPL-L80W/830 HFD-T PC-MLO ACL	18.40	561777 00
FFS684 2xPL-L80W/830 HFD-T PC-MLO	18.30	561784 00
FFS684 2xPL-L80W/840 HFD-T PC-MLO FU	18.50	561791 00

Please contact your local Philips representative for additional configurations

Celino FFS684 free floor-standing luminaire with polycarbonate micro-lens optic (PC-MLO)



Switch for Celino FFS684 free floor-standing luminaire





Downlights

Selection guide – Downlights

Luminaire family	Product range	Page	LED	Lamps										
				HID MASTERColour							HID White SON		HID	
				LED	CDM-Tm	CDM-TC	CDM-T	CDM-TD	CDM-R111	CDM-R	CDO-ET	SDW-T	SDW-TG	SON P
														
Fugato														
	Compact	175	5.16			•	•			•	•			
	Performance	225	5.18			•								
	Power	275	5.22											
	Full-Metal	175/225	5.28							•			•	•
	Micro	95	5.38											
	Mini	125	5.40		•					•				
Scrabble														
			5.52			•	•			•	•			
Europa 2														
			5.62											
Dueta														
			5.66				•	•			•			
Spot LED Dynamic														
			5.72	•										
Spot LED														
			5.76	•										
Zadora														
			5.84											
eW Downlight Powercore														
			5.94	•										
Latina														
			5.98											
Odyssey														
			5.108					•						



MASTER PL-R Eco system – start saving, go Eco

Philips MASTER PL-R Eco. An outstanding energy-efficient downlighting solution that saves money and much more.

Sustainable in more ways

The Philips MASTER PL-R Eco is a Philips Green Product, offering substantially better performance than closest commercial competitors in terms of energy efficiency and hazardous substances. It is entirely lead-free, and together with Philips MASTER PL-C/T lamps, has the lowest mercury content (1.4 mg) of any non-integrated compact fluorescent lamp available.

The MASTER PL-R Eco also has significantly improved lumen maintenance behavior compared to MASTER PL-C/T lamps, and still emits 90% of its initial lumen value after 10,000 burning hours. This lengthens the service life (20% longer than PL-C on HF gear), which means less frequent lamp replacement and therefore another way of reducing operating costs.

Two types of high-frequency electronic gear are available for MASTER PL-R Eco system.

The HF-Performer is for continuous lighting levels while the HF-Regulator enables dynamic effects and dimming down to 3%. These compact, light-weight ballasts are based on EII technology, which brings further advantages like miniaturized dimensions and quick-programmed, flicker-free start. Further energy savings (up to 75%) can be achieved by using the HF-Regulator in combination with automatic lighting control systems like Philips ActiLume.

HF-Performer II based on EII Technology

1. Optimized system efficiency, minimized power losses
2. Miniaturized dimensions for HF-Performer gear, allowing for compact luminaire designs
3. Simplified standardized portfolio allowing flexible, modular luminaire design
4. Cooler product allows for long reliable lifetime of the gear
5. Fast preheat for short ignition time (0.5 s)

HF-Regulator II based on EII Technology

- Up to 75% energy savings with automatic lighting control systems like ActiLume
- Digital control input according to the DALI (Digital Addressable Lighting Interface) industry standard combined with the Touch and Dim push-button protocol
- Low-energy consumption in standby (0.35 W) through EII technology
- Dims the Master PL-R Eco lamp down to 3%





Philips MASTER PL Xtra lamps – keep on going

Philips MASTER PL lamps are renowned for their light quality and lifetime reliability.

Philips MASTER PL Xtra raises the bar, offering more than twice the lifetime of standard PL lamps while maintaining their excellent light quality. With its long, reliable life, lowest mercury content and energy-saving performance, the Philips MASTER PL Xtra range sets a new standard in professional compact fluorescent lighting.

Designed specifically for professional users, the range is optimized for 12-hour switching cycles (1 switch per day) and group replacement. Once the lamps are in place, you don't have to worry about them for years to come. The result? Lower maintenance costs and fewer business interruptions.



Friendly to our environment

The MASTER PL Xtra range is also a best-in-class solution with regard to environmental impact. MASTER PL Xtra lamps are classified as Philips Green Flagship products. Containing industry-leading low levels of mercury (3 mg), they minimize the use of hazardous substances. And thanks to their long lifetime, recycling costs and waste are also reduced.

Fully retrofit

MASTER PL Xtra lamps are fully retrofit with any other compact fluorescent lamp of the same type. This means you don't have to change your lighting installation to enjoy the benefits of Philips MASTER PL Xtra lamps

www.philips.com/long-life.



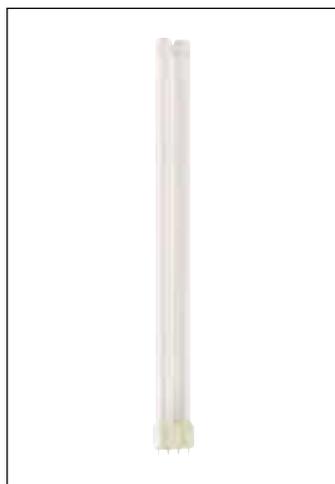
MASTER PL-C Xtra

- 2-pin and 4-pin
- 18 W and 26 W
- color temperature 830 and 840
- lifetime of 25,000 hrs.*



MASTER PL-T Xtra

- 4-pin
- 32 W, 42 W and 57 W
- color temperature 830 and 840
- lifetime of 25,000 hrs.*



MASTER PL-L Xtra

- 4-pin
- 36 W and 55 W
- color temperature 830 and 840
- lifetime of 32,000 hrs.*

* based on 10% failures, electronic gear and 12 hr: switching cycle

SceneOn



SceneOn recessed system – play with light

In the world of retail lighting we are currently witnessing a number of trends: the merging of different lighting systems; maximum integration into the shop architecture; minimalist detailing combined with smooth materials and finishes. In addition, there is a growing need for more flexible lighting solutions to enable shops to change to suit their customer groups, communication strategies, special events, etc. This need is served by Philips' AmbiScene concept, of which SceneOn is a possible ingredient.

SceneOn is a completely modular recessed lighting system for fashion stores and showrooms, consisting of TL5 RGB luminaires, TL5 cool/warm-white luminaires, TL5 louver and TL5 asymmetric luminaires, mini adjustable downlights and even projectors. Featuring integrated lighting controls (DALI and DMX), it can be used in plaster ceilings and suspended ceiling systems.

The SceneOn recessed system lets retailers play with light to create the optimum ambience for their products. It is flexible in use, offering dynamics in lighting level, in tone of white light (from very cool to very warm white) and in choice of color. It is also flexible in terms of lighting (re)design, allowing, for example, creative combinations of diffuse fluorescent lighting and accent lighting.

This customized project solution offers a choice in the type and number of luminaires. Infill plates of various lengths are available. The SceneOn recessed system can also be used to create continuous lines of soft light. With the AmbiScene concept and SceneOn, stores can easily adapt their lighting to address different shopper motivations and support brand identity, product presentation and retail promotion.

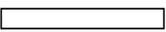
www.philips.com/lighting

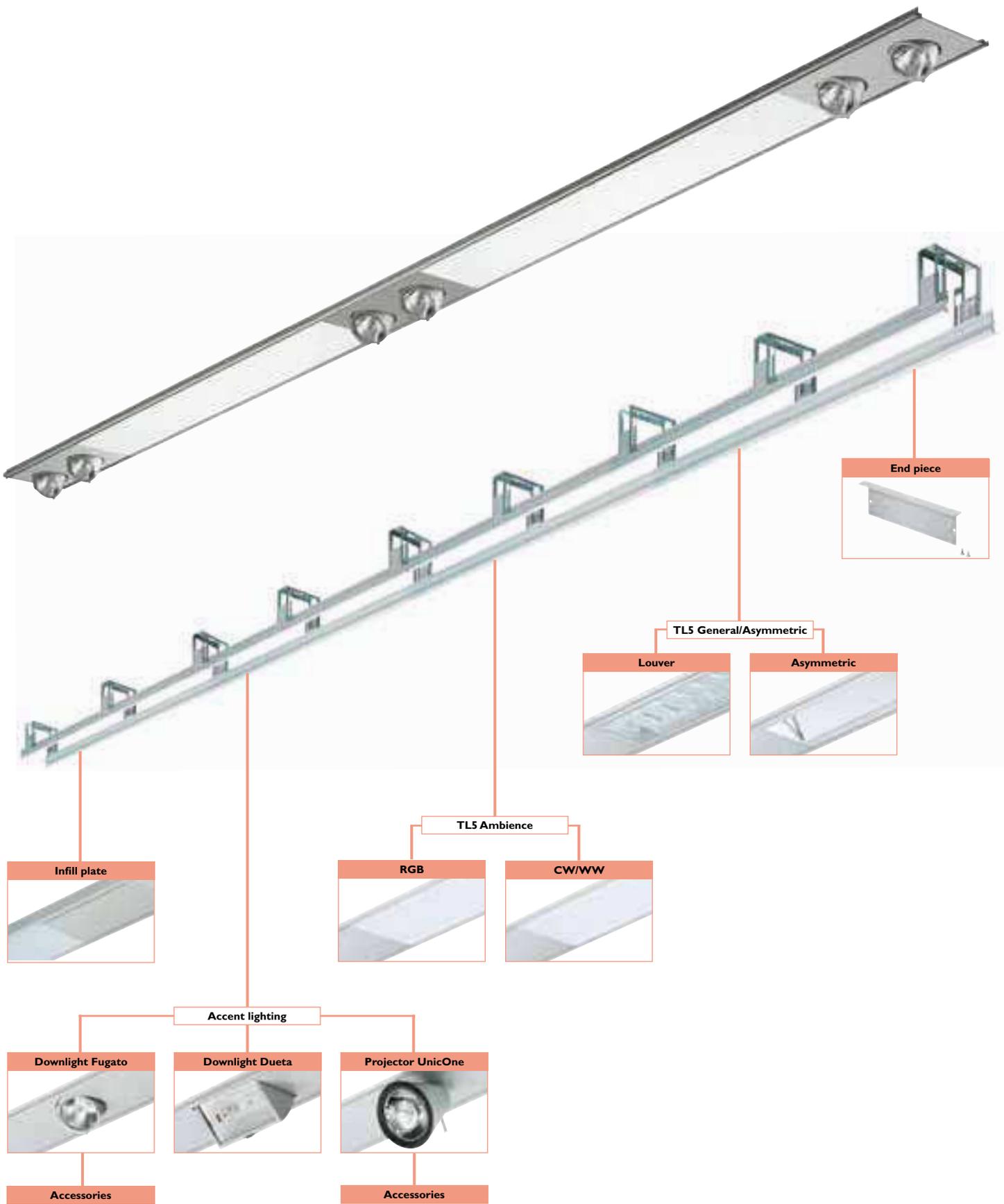


Specifications

Module	Ambience lighting: Red/Green/Blue - TL5 luminaire and/or Cool-White/Warm-White TL5 luminaire	Accent lighting: adjustable downlights	Accent lighting: UnicOne projector	General and asymmetric lighting
Light source	RGB: 3 x MASTER TL5 HO Colored / G5 / 54 W CWWWW: 1 x TL5 / G5 / 28 W/827 and 2 x TL5 / G5 / 28 W/865	MASTERColour CDM-TC 35, 70 W and CDM-TD 70, 150 W MASTERLine TC 60 W	MASTERColour CDM-Tm Mini 20, 35 W, CDM-TC 35, 70 W and CDM-R III MASTERLine III 30, 45, 60 W and TC 60 W	Fluorescent MASTER TL5 / G5 / 28, 54 W
Optic	Diffuse opal cover	Choice of beams	Choice of beams	Louver M2 lamellae or asymmetric
Classification	IP20	IP20	IP20	IP20
Color	Natural aluminum	Grey aluminum	Grey aluminum	Natural aluminum
Materials (modules and infill plates)	Anodized extruded aluminum	Anodized extruded aluminum	Anodized extruded aluminum	Anodized extruded aluminum
System dimensions	Width: 190 mm Cut-out width: 176 mm Minimum installation height: 200 mm Thickness false ceiling: 8 - 50 mm			

Modules

960°C		300 mm	600 mm	1200 mm
	• TL5: Ambience lighting			
	General and asymmetric lighting			
• Accent lighting: Downlight	Fugato			
	Dueta			
Projector	UnicOne			
• Infill plates				





Fugato – style and performance in a new light

Comprising both fixed and adjustable downlights, the Fugato range provides exceptional freedom in terms of lighting design. Furthermore, Fugato's adjustable luminaires offer a choice of models with cardanic suspension or full internal/external adjustability. The flexibility that this allows, combined with the extensive selection of optics (including, for some models, an innovative dual-optic), ensures maximum design freedom. At the same time, visual consistency is assured, as the adjustable versions have the same dimensions and family look as the fixed models.

The Fugato downlights come in five different sizes (for 95, 125, 175, 225 and 275 mm cut-outs).

Fixed Fugato downlights accommodate compact fluorescent lamps, high-intensity discharge lamps and halogen lamps, while the adjustable and cardanic versions take high-intensity discharge and halogen lamps.

www.philips.com/lighting

Fugato general lighting



Fugato - general lighting

The range of Fugato fixed downlights for general lighting consists of Fugato Compact (cut-out 175 mm), Fugato Performance (cut-out 225 mm), Fugato Power (cut-out 275 mm) and Fugato Full Metal (both 175 and 225 mm). Optically and thermally designed for optimum performance using compact fluorescent lamps. A wide range of accessories is available for both Fugato and Fugato Full Metal.

Optical variation is provided by the Fugato's "dual optic" concept. The top optic is made of high-gloss aluminium. The lower polymer optic can be ordered in a high-gloss, matt-satin or white finish. The high-gloss (C) version complies with the UGR_r 19 norm (in accordance with EN12464-1, $L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) when used with the innovative round louver.

www.philips.com/lighting

Fugato Compact General Lighting



Fugato Performance General Lighting



Fugato Power General Lighting



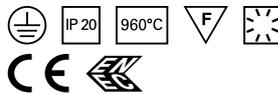
Fugato Full-Metal General Lighting



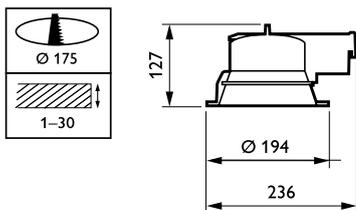
Fugato Compact general lighting

Type	FBS261
Light source	Compact fluorescent: 1 x MASTER PL-R 4 Pin / GRI 4q-1 / 14 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-1 / 13 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-1 / 13 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W 1 x MASTER PL-T 4 Pin / GX24q-3 / 32 W
Lamp included	Yes (lamp color 830 or 840)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	Matt mirror (M) High-gloss mirror (C) White reflector without lamellae (WR)

Connection	Wieland connector (W) Push-in connector (PI)
Color	Grey (GR) White (WH)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)
Material	Top reflector: pure high-gloss aluminum Mounting rim: die-casted, moulded Lamp holder box and lower optic: polycarbonate
Installation	Directly into the ceiling after installing mounting frame Through-wiring possible
Maintenance	Direct lamp acces or after removing the front glass/louwer
Accessory	Decorative accessories, ring louwer, colored and opal cristal ring louwer, frosted glass and disk, opal glass
Remarks	High-gloss mirror (C) complies with UGR _r 19 norm; in accordance with EN12464-1, L _m < 1000 cd/m ² at γ > 65° Protection foil is optional Decorative accessories will be delivered separately
Main applications	Office, retail, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS261



Fugato Compact FBS26I fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS26I 2xPL-C/2P18W/830 IC M PI GR	1.95	711492 00
FBS26I 2xPL-C/2P26W/830 IC M PI GR	1.95	711515 00
FBS26I 2xPL-C/4P18W/830 HFP M PI GR	1.44	711577 00
FBS26I 2xPL-C/4P26W/830 HFP M PI GR	1.46	711645 00

Please contact your local Philips representative for additional configurations



Fugato Compact FBS26I fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS26I 1xPL-C/4P18W/830 HFP M PI WH	1.30	711362 00
FBS26I 1xPL-C/4P26W/830 HFP M PI WH	1.31	711416 00
FBS26I 2xPL-C/4P13W/830 HFP M PI WH	1.43	711546 00
FBS26I 2xPL-C/4P18W/830 HFP M PI WH	1.44	711584 00
FBS26I 2xPL-C/4P26W/830 HFP M PI WH	1.46	711652 00

Please contact your local Philips representative for additional configurations



Fugato Compact FBS26I fixed downlight with compact fluorescent lamp(s) and high-gloss mirror (C)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS26I 2xPL-C/4P13W/830 HFP C PI WH	1.43	711539 00
FBS26I 2xPL-C/4P18W/830 HFP C W WH	1.44	712932 00
FBS26I 1xPL-T/4P32W/830 HFP C PI WH	1.05	713045 00
FBS26I 2xPL-C/4P18W/830 HFP C PI WH	1.44	941196 00
FBS26I 2xPL-C/4P26W/830 HFP C PI WH	1.46	941271 00

Please contact your local Philips representative for additional configurations



Fugato Compact FBS26I fixed downlight with compact fluorescent lamp(s) and white reflector

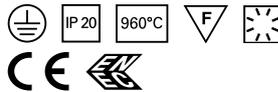
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS26I 1xPL-C/4P26W/830 HFP WR PI WH	1.31	711423 00
FBS26I 2xPL-C/4P13W/830 HFP WR PI WH	1.43	711553 00
FBS26I 2xPL-C/4P18W/830 HFP WR PI WH	1.44	711591 00
FBS26I 2xPL-C/4P18W/840 HFP WR PI WH	1.44	943473 00

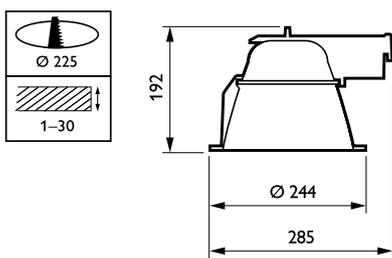
Please contact your local Philips representative for additional configurations

Fugato Performance	
Type	FBS270, FBS271
Light source	Compact fluorescent: 1 x or 2 x MASTER PL-R 4 Pin / GRI4q-1 / 14, 17 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W 1 x MASTER PL-T 4 Pin / GX24q-3 / 32 W 1 x MASTER PL-T 4 Pin / GX24q-4 / 42 W
Lamp included	Yes (lamp color 830 or 840)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR)
Optic	Matt mirror (M) High-gloss mirror (C) White reflector without lamellae (WR)
Connection	Wieland connector (W) Push-in connector (PI)

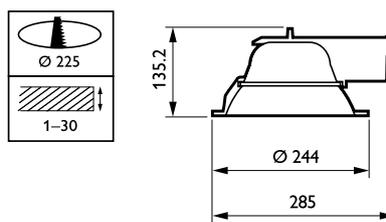
Color	Grey (GR) White (WH)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)
Material	Top reflector: pure high-gloss aluminum Mounting rim: die-casted, moulded Lamp holder box and lower optic: polycarbonate
Installation	Directly into the ceiling after installing mounting frame Through-wiring possible
Maintenance	Direct lamp access or after removing the front glass/louver
Accessory	Decorative accessories, ring louver, colored and opal crystal ring louver; frosted glass and disk, opal glass
Remarks	High-gloss mirror (C) complies with UGR _r 19 norm; in accordance with EN12464-1, L _m < 1000 cd/m ² at γ > 65° Protection foil is optional Decorative accessories will be delivered separately
Main applications	Office, retail, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS270



FBS271



Fugato Performance FBS270 fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS270 2xPL-C/4P18W/830 HFP M PI GR	1.72	711706 00
FBS270 2xPL-C/4P26W/830 HFP M PI GR	1.78	711782 00
FBS270 2xPL-C/4P18W/840 HFP M PI GR	1.72	938356 00
FBS270 2xPL-C/4P26W/840 HFP M PI GR	1.78	938394 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS270 fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS270 2xPL-C/4P18W/830 HFP M PI WH	1.72	711713 00
FBS270 2xPL-C/4P26W/830 HFP M PI WH	1.78	711799 00
FBS270 2xPL-C/4P18W/840 HFP M PI WH	1.72	938332 00
FBS270 2xPL-C/4P26W/840 HFP M PI WH	1.78	942025 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS270 fixed downlight with compact fluorescent lamp(s) and high-gloss mirror (C)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS270 1xPL-T/4P32W/830 HFP C PI WH	2.20	711690 00
FBS270 2xPL-C/4P26W/830 HFP C PI WH	1.78	711775 00
FBS270 2xPL-T/4P42W/830 HFP C PI WH	1.37	711829 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS271 fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS271 2xPL-C/4P18W/840 HFP M PI GR	1.73	938448 00
FBS271 2xPL-C/4P26W/840 HFP M PI GR	1.75	938462 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS271 fixed downlight with compact fluorescent lamp(s) and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS271 2xPL-C/4P18W/830 HFP M PI WH	1.73	711966 00
FBS271 2xPL-C/4P26W/830 HFP M PI WH	1.75	712048 00
FBS271 2xPL-C/4P18W/840 HFP M PI WH	1.73	941851 00
FBS271 2xPL-C/4P26W/840 HFP M PI WH	1.75	941868 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS271 fixed downlight with compact fluorescent lamp(s) and high-gloss mirror (C)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS271 2xPL-T/4P32W/830 HFP C PI WH	1.27	711126 00
FBS271 1xPL-C/4P18W/830 HFP C PI WH	1.59	711867 00
FBS271 1xPL-C/4P26W/830 HFP C PI WH	1.60	711874 00
FBS271 1xPL-T/4P42W/830 HFP C PI WH	2.30	711881 00
FBS271 2xPL-C/4P18W/830 HFP C PI WH	1.73	711959 00
FBS271 2xPL-C/4P26W/830 HFP C PI WH	1.75	712024 00

Please contact your local Philips representative for additional configurations



Fugato Performance FBS271 fixed downlight with compact fluorescent lamp(s) and white reflector without lamellae (WR)

Preferred selection

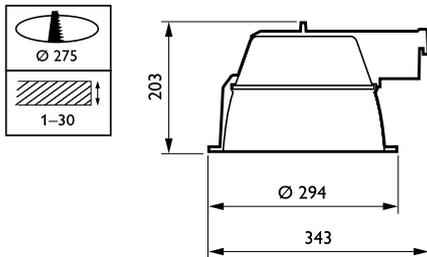
Product ID	Weight (kg)	European Order Code (EOC)
FBS271 2xPL-C/4P26W/830 HFP WR PI WH	1.75	712055 00
FBS271 2xPL-C/4P18W/840 HFP WR PI WH	1.73	938431 00
FBS271 2xPL-C/4P26W/840 HFP WR PI WH	1.75	941936 00

Please contact your local Philips representative for additional configurations



Fugato Power			
Type	FBS280 (compact fluorescent version) KBS280 (QL system version)	Option	Emergency lighting: 3 hours (EL3)
Light source	Compact fluorescent: 3 × MASTER PL-C 2 Pin / G24d-3 / 26 W 3 × MASTER PL-C 4 Pin / G24q-3 / 26 W 2 × MASTER PL-T 4 Pin / GX24q-4 / 42 W 2 × MASTER PL-T 4 Pin / GX24q-5 / 57 W Induction lamp system: 1 × MASTER QL system / 55, 85 W	Material	Top reflector: pure high-gloss aluminum Mounting rim: die-casted, moulded Lamp holder box and lower optic: polycarbonate
Lamp included	Yes (lamp color 830 or 840)	Installation	Directly into the ceiling after installing mounting frame Through-wiring possible
Lamp position	Horizontal and vertical (QL version)	Maintenance	Direct lamp access or after removing the front glass/louver
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF) High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)	Accessory	Decorative accessories, round louver; blue ring louver; frosted glass and disk, opal glass
Optic	Matt mirror (M) High-gloss mirror (C)	Remarks	High-gloss mirror (C) complies with UGR _r 19 norm; in accordance with EN12464-1, L _m < 1 000 cd/m ² at γ > 65° Decorative accessories will be delivered separately No possibility of technical and decorative accessories for MASTER QL 85 W version
Connection	Wieland connector (W) Push-in connector (PI)	Main applications	Office, retail, public buildings
Color	Grey (GR) White (WH)		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS280



Fugato Power FBS280 fixed downlight with compact fluorescent lamps and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS280 2xPL-T/4P42W/830 HFP M PI GR	1.70	712130 00
FBS280 2xPL-T/4P57W/830 HFP M PI GR	2.65	712161 00
FBS280 3xPL-C/4P26W/830 HFP M PI GR	2.50	712239 00
FBS280 2xPL-T/4P57W/840 HFP M PI GR	2.65	938677 00

Please contact your local Philips representative for additional configurations



Fugato Power FBS280 fixed downlight with compact fluorescent lamps and matt mirror (M) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS280 2xPL-T/4P42W/830 HFP M PI WH	1.70	712147 00
FBS280 2xPL-T/4P57W/830 HFP M PI WH	2.65	712178 00
FBS280 3xPL-C/4P26W/830 HFP M PI WH	2.50	712246 00

Please contact your local Philips representative for additional configurations



Fugato Power FBS280 fixed downlight with compact fluorescent lamps and high-gloss mirror (C)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS280 2xPL-T/4P42W/830 HFP C PI WH	1.70	712123 00
FBS280 3xPL-C/4P26W/830 HFP C PI WH	2.50	712222 00

Please contact your local Philips representative for additional configurations

Universal 3-pole plug-in connector (Wieland GST18/3) for fast connection from outside the housing



Standard push-in connection block with two contacts per pole for all connections, such as mains and controls on the gearbox



CFL-range	Optics			Accessories							
	High gloss C	Matt M	White WR	1 Ring louver	2 Crystal ring louver				3 Ring louver opal		
					blue	red	green	yellow	opal	blue	pastel green
Compact FBS261 175mm	•	•	•	GBS261 RL	ZBS261 RL-BL	ZBS261 RL-RD	ZBS261 RL-GN	ZBS261 RL-YE	ZBS261 RL-O	ZBS261 RL-O BL	ZBS261 RL-O GN
Performance FBS270 225mm	•	•									
Performance FBS271 225mm	•	•	•	GBS271 RL	ZBS271 RL-BL	ZBS271 RL-RD	ZBS271 RL-GN	ZBS271 RL-YE	ZBS271 RL-O	ZBS271 RL-O BL	ZBS271 RL-O GN
Power FBS280 275mm	•	•		GBS280 RL					ZBS280 RL-O	ZBS280 RL-O BL	ZBS280 RL-O GN

Optics



High gloss C



Matt M



White WR

Accessories



1 Ring louver

High-gloss circular ring louver to reduce glare. Available in all CFL platforms with high-gloss optics



2 Crystal ring louver
blue | red | green | yellow

Creating colored glow effects in the luminaire with a set of separate filters



3 Ring louver opal

Milky white element creating brilliance

Accessories								
4	5	6	7	8	9	10	Protection glass (IP44)	Ceiling support plate
Frosted glass	Frosted haloring	Frosted disc	Opal glass	Surface floating diffusor	Suspended floating diffusor	Asymmetric inlay		
ZBS261 FRG	ZBS261 HR	ZBS261 FRG-C	ZBS261 SG-O				ZBS261 PG	ZBS261 FR
ZBS270 FRG	ZBS270 HR	ZBS270 FRG-C	ZBS270 SG-O				ZBS271 PG	ZBS270 FR
ZBS271 FRG	ZBS271 HR	ZBS271 FRG-C	ZBS271 SG-O	ZBS271 WAV-SURF	ZBS271 WAV-SUSP	GBS271 A	ZBS271 PG	ZBS270 FR
ZBS280 FRG	ZBS280 HR	ZBS280 FRG-C	ZBS280 SG-O				ZBS280 PG	ZBS280 FR

Accessories



4 Frosted glass

Fully frosted glass in suspended position



5 Frosted haloring

Frosted glass ring in suspended position



6 Frosted disc

Glass with inner part frosted in suspended position



7 Opal glass

Milky white opal glass in suspended position



8 Surface floating diffusor

Creating a soft pattern on the ceiling



9 Suspended floating diffusor

Creating a soft pattern on the ceiling



10 Asymmetric inlay

Wall washer with CFL lamps, available in FBS271. The inlay creates a clear asymmetric effect from a fixed position

Accessories



High-gloss ring louver to reduce glare in compliance with UGRr19

Product ID	EOC
GBS261 RL	710259 00
GBS271 RL	710266 00
GBS280 RL	710273 00



Transparent louver with blueish effect in the luminaire

Product ID	EOC
ZBS261 RL-BL	710570 00
ZBS271 RL-BL	710587 00
ZBS261 RL-RD	779270 00
ZBS271 RL-RD	779287 00
ZBS261 RL-GN	779256 00
ZBS271 RL-GN	779263 00
ZBS261 RL-YE	779294 00
ZBS271 RL-YE	779300 00



Opal ring louver creating brilliance on the ceiling

Product ID	EOC
ZBS261 RL-O WH	710600 00
ZBS271 RL-O WH	710617 00
ZBS280 RL-O WH	710624 00
ZBS280 RL-O GN	718026 00
ZBS261 RL-O BL	771656 00
ZBS271 RL-O BL	771663 00
ZBS280 RL-O BL	771670 00
ZBS261 RL-O GN	942995 00
ZBS271 RL-O GN	943008 00



Frosted glass in suspended position

Product ID	EOC
ZBS261 FRG	710488 00
ZBS271 FRG	710495 00
ZBS280 FRG	710501 00
ZBS270 FRG	771618 00



Frosted-glass halo ring in suspended position

Product ID	EOC
ZBS261 HR	710457 00
ZBS271 HR	710464 00
ZBS280 HR	710471 00
ZBS270 HR	771601 00



Glass disk with frosted inner part in suspended position

Product ID	EOC
ZBS261 FRG-C	710518 00
ZBS271 FRG-C	710525 00
ZBS280 FRG-C	710532 00
ZBS270 FRG-C	771625 00



Pendent opal glass

Product ID	EOC
ZBS261 SG-O	710549 00
ZBS271 SG-O	710556 00
ZBS280 SG-O	710563 00
ZBS270 SG-O	771632 00



Surface-mounted diffuser, creating a soft pattern on the ceiling

Product ID	EOC
ZBS271 WAV-SURF	710679 00



Suspended floating diffuser, creating a soft pattern on the ceiling

Product ID	EOC
ZBS271 WAV-SUSP	710648 00



Asymmetric inlay to create an asymmetric light distribution

Product ID	EOC
GBS271 A	710242 00



Protection glass which provides IP 44 protection

Product ID	EOC
ZBS261 PG	710426 00
ZBS271 PG	710433 00
ZBS280 PG	710440 00

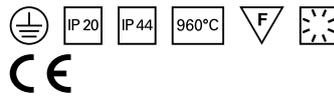


Ceiling plate to support the product when installed in soft ceilings

Product ID	EOC
ZBS270 FR-D225	710303 00
ZBS280 FR-D275	710310 00

Fugato Full-Metal general lighting

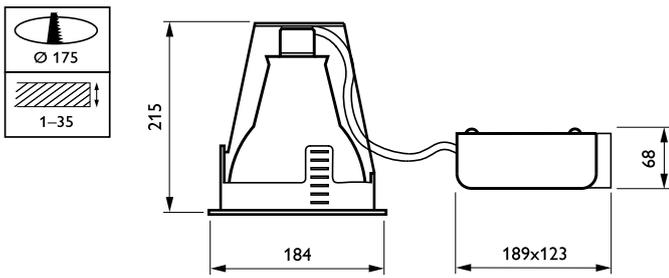
Fugato Full-metal	
Type	FBS290/291/295/296/297, FCS291/296
Light source	Compact fluorescent: 1 x or 2 x MASTER PL-C 2 Pin / G24d-1 / 13 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-1 / 13 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W 1 x MASTER PL-TT 2 Pin / GX24d-2 / 18 W 1 x MASTER PL-TT 2 Pin / GX24d-3 / 26 W 1 x MASTER PL-TT 4 Pin / GX24q-2 / 18 W 1 x MASTER PL-TT 4 Pin / GX24q-3 / 26 W 1 x MASTER PL-TT 4 Pin / GX24q-4 / 32, 42 W FBS296/297 2 x MASTER PL-TT 2 Pin / GX24d-2 / 18 W 2 x MASTER PL-TT 2 Pin / GX24d-3 / 26 W 2 x MASTER PL-TT 4 Pin / GX24q-2 / 18 W 2 x MASTER PL-TT 4 Pin / GX24q-3 / 26 W 2 x MASTER PL-TT 4 Pin / GX24q-3 / 32 W FBS297 2 x MASTER PL-TT 4 Pin / GX24q-3 / 42 W 2 x MASTER PL-TT 4 Pin / GX24q-5 / 57 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator, touch-switch (HFR-T)
Optic	Matt mirror (M) High-gloss mirror (C) Facetted, rotational symmetric beam (FR)
Connection	Wieland connector (W) Enstonet connector (EN) Push-in connector (PI)
Color	Grey (GR) White (WH) Aluminum (ALU)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) SON-P, HPL4, CDO-ET and incandescent lamps for FBS296 Asymmetric light distribution FBS291 Suspension set for FCS291/296
Material	Reflector: metallized aluminum Mounting frame: sheet steel Gearbox: sheet steel
Installation	Recessed versions directly into the ceiling after installing mounting frame Surface mounted directly to the ceiling Through-wiring possible
Maintenance	Direct lamp access or after removing the front glass/louver/accessory
Accessory	Decorative accessories, ring louver, frosted glass and disk, opal glass, MLO
Remarks	Version that complies with UGR _r 19 norm; in accordance with EN12464-1, L _m < 1 000 cd/m ² at γ > 65° Protection foil is optional
Main applications	Office, retail, public buildings



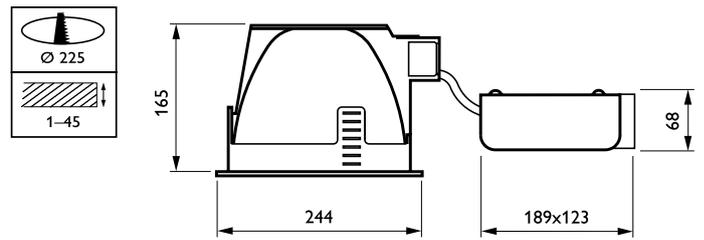
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



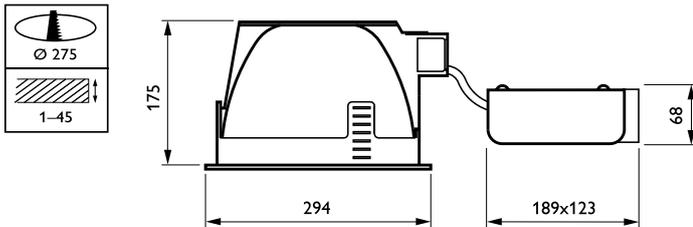
FBS290/291



FBS295



FBS296



FBS297



Fugato Full-Metal FBS290 fixed downlight with compact fluorescent lamp(s) and high-gloss aluminum (C) optic



Fugato Full-Metal FBS290 fixed downlight with compact fluorescent lamp(s) and faceted aluminum (FR) optic



Fugato Full-Metal FBS291 fixed downlight with compact fluorescent lamp(s) and high-gloss aluminum (C) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS290 1xPL-TT/4P18W/840 HFP C PI ALU	1.09	021675 00
FBS290 1xPL-T/4P26W/840 HFP C ALU	1.09	022160 00
FBS290 1xPL-TT/4P26W/830 HFR C PI ALU	1.21	048306 00
FBS290 1xPL-C/2P13W/840 IC C PI ALU	1.28	263303 00
FBS290 1xPL-C/4P13W/840 HFP C PI ALU	1.11	263310 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS290 1xPL-TT/4P18W/840 HFP FR PI ALU	1.09	021552 00
FBS290 1xPL-C/4P13W/840 HFP FR PI ALU	1.11	263327 00
FBS290 1xPL-T/4P26W/840 HFP FR ALU	1.09	022184 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS291 2xPL-C/4P18W/840 HFP C PI ALU	1.45	021606 00
FBS291 2xPL-C/4P26W/840 HFP C PI ALU	1.48	021743 00
FBS291 2xPL-C/4P13W/840 HFP C ALU	1.48	022207 00
FBS291 2xPL-C/4P18W/840 HFR C ALU	1.68	022221 00
FBS291 1xPL-T/4P26W/840 HFP C ALU	1.31	022269 00
FBS291 1xPL-T/4P32W/840 HFP C ALU	1.31	022276 00
FBS291 1xPL-T/4P42W/840 HFP C ALU	1.31	022283 00

Please contact your local Philips representative for additional configurations



Fugato Full-Metal FBS291 fixed downlight with compact fluorescent lamp(s) and faceted aluminum (FR) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS291 2xPL-C/4P18W/840 HFP FR PI ALU	1.45	021620 00
FBS291 1xPL-T/4P18W/840 HFP FR ALU	1.31	022290 00
FBS291 1xPL-T/4P26W/840 HFP FR ALU	1.31	022306 00
FBS291 1xPL-T/4P32W/840 HFP FR ALU	1.31	022313 00
FBS291 1xPL-T/4P42W/840 HFP FR ALU	1.31	022320 00

Please contact your local Philips representative for additional configurations



Fugato Full-Metal FBS295 fixed downlight with compact fluorescent lamp(s) and high-gloss aluminum (C) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS295 1xPL-TT/4P18W/840 HFP C PI ALU	1.16	042250 00
FBS295 1xPL-TT/4P26W/840 HFP C PI ALU	1.16	267004 00
FBS295 1xPL-TT/4P32W/840 HFP C PI ALU	1.16	267028 00
FBS295 1xPL-TT/4P42W/840 HFP C PI ALU	1.16	267042 00

Please contact your local Philips representative for additional configurations



Fugato Full-Metal FBS296 fixed downlight with compact fluorescent lamp(s) and faceted aluminum (FR) optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS296 1xPL-TT/4P26W/840 HFP FR PI ALU	1.41	267165 00
FBS296 1xPL-TT/4P32W/840 HFP FR PI ALU	1.41	267202 00
FBS296 1xPL-TT/4P42W/840 HFP FR PI ALU	1.41	267240 00
FBS296 2xPL-TT/4P18W/840 HFP FR PI ALU	1.55	267325 00
FBS296 2xPL-TT/4P26W/840 HFP FR PI ALU	1.58	267370 00

Please contact your local Philips representative for additional configurations



Fugato Full-Metal FBS297 fixed downlight with compact fluorescent lamp(s) and high-gloss aluminum (C) optic

Preferred selection

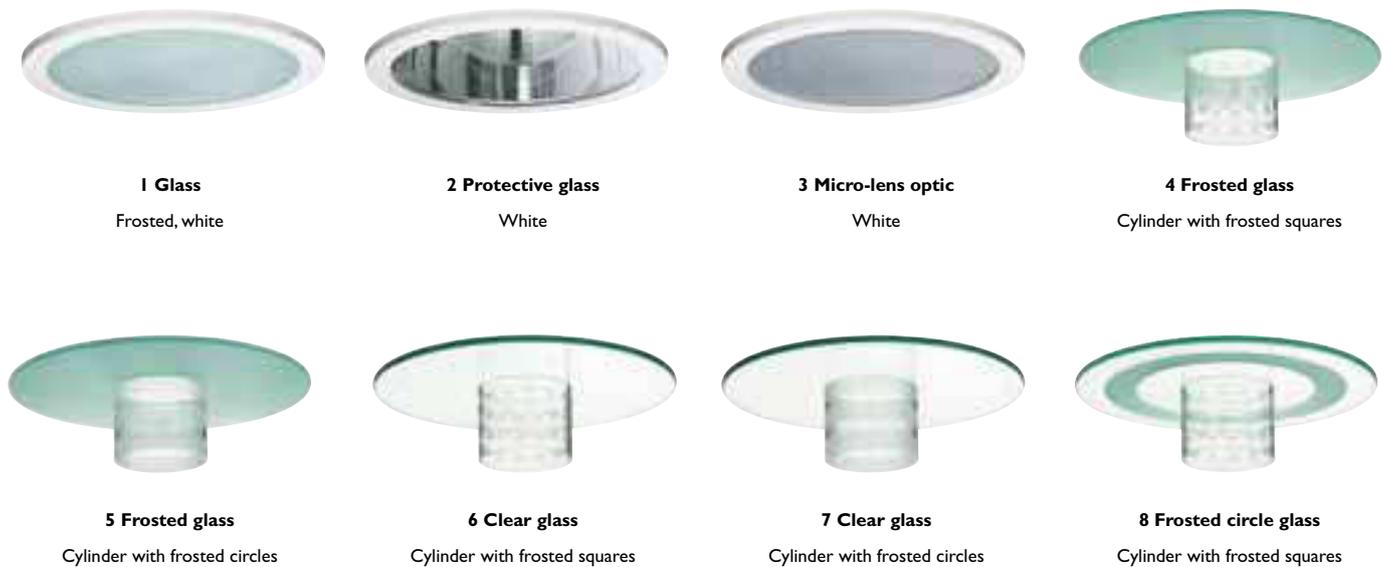
Product ID	Weight (kg)	European Order Code (EOC)
FBS297 2xPL-TT/4P32W/840 HFP C PI ALU	1.58	267554 00
FBS297 2xPL-TT/4P42W/840 HFP C PI ALU	1.58	267592 00
FBS297 2xPL-TT/4P57W/840 HFP C PI ALU	1.67	267639 00

Please contact your local Philips representative for additional configurations



	Optics								
	Facetted high-gloss aluminum	High-gloss aluminum	Matt anodized aluminum	Protective			Ring louver (UGR 19)	Frosted glass	
				1 Glass clear IP44	2 Glass frosted IP44	3 PC-MLO IP44		4 Cylinder + squares	5 Cylinder + circles
FBS290	•	•	•	ZBS290 GF WH	ZBS290 PG WH	ZBS290 MLO WH			
FBS291	•	•	•	ZBS291 GF WH	ZBS291 PG WH	ZBS291 MLO WH	ZBS291 RL	ZBS291 FR-CYL-SQR	ZBS291 FR-CYL-C
FBS295	•	•		ZBS290 GF WH	ZBS290 PG WH	ZBS290 MLO WH			
FBS296	•	•	•	ZBS291 GF WH	ZBS291 PG WH	ZBS291 MLO WH		ZBS291 FR-CYL-SQR	ZBS291 FR-CYL-C
FBS297	•	•	•						
FCS291	•	•	•	ZBS291 GF	ZBS291 PG				
FCS296	•	•	•	ZBS291 GF	ZBS291 PG				

Accessories



Accessories												
Clear glass		Frosted circle glass		Glass						Suspended		I 6
6	7	8	9	Ball BL/GN/ WH/YE/OR	Cone BL/GN/ WH/YE/OR	I 10	I 11	I 12	I 13	I 14	I 15	Mounting plate (+ rail profile)
Cylinder + squares	Cylinder + circles	Cylinder + squares	Cylinder + circles			Frosted centre	Frosted	Clear	Halo ring frosted	Frosted glass	Opal glass	
						ZBS290 SG-FRC-CLP			ZBS290 HR-FR-CLP	ZBS290 SG-FR	ZBS290 SG-O	ZBS290 MP(-RA)
ZBS291 CL-CYL-SQR	ZBS291 CL-CYL-C	ZBS291 FRC-CYL-SQR	ZBS291 FRC-CYL-C		ZBS291 CONE	ZBS291 SG-FRC-CLP	ZBS291 SG-FR-CLP	ZBS291 SG-CL-CLP	ZBS291 HR-FR-CLP	ZBS291 SG-FR	ZBS291 SG-O	ZBS291 MP(-RA)
						ZBS290 SG-FRC-CLP			ZBS290 HR-FR-CLP			ZBS290 MP(-RA)
ZBS291 CL-CYL-SQR	ZBS291 CL-CYL-C	ZBS291 FRC-CYL-SQR	ZBS291 FRC-CYL-C	ZBS291 BALL	ZBS291 CONE	ZBS291 SG-FRC-CLP	ZBS291 SG-FR-CLP	ZBS291 SG-CL-CLP	ZBS291 HR-FR-CLP			ZBS291 MP(-RA)
				ZBS291 BALL	ZBS291 CONE	ZBS297 SG-FRC-CLP			ZBS297 HR-FR-CLP			ZBS297 MP(-RA)
					ZBS291 CONE							
				ZBS291 BALL	ZBS291 CONE							

Accessories



9 Frosted circle glass
Cylinder with frosted circles



10 Pendent glass
Frosted circle, clamp version



11 Pendent glass
Frosted, clamp version



12 Pendent glass
Clear, clamp version



13 Halo ring
Frosted, clamp version



14 Pendent glass
Frosted



15 Pendent glass
Opal



16 Mounting plate

	Accessories						
	Wire guard	IP44 cover for the top of the barrel	Dust cover foil	Adjustable recessing ring	Adjustable 3-wire suspension kit	Surface mounting ring	Frame for recessing
FBS290	ZBS290 WG-WH		ZBS290 FL				
FBS291	ZBS291 WG-WH		ZBS291 FL				
FBS295	ZBS290 WG-WH		ZBS290 FL				
FBS296	ZBS291 WG-WH		ZBS291 FL				
FBS297			ZBS297 FL				
FCS291		ZCS291 GRC-WH	ZBS291 FL	ZCS291 MRA-B-WH	ZCS291 SMI	ZCS291 MR-S-WH	ZCS291 CFRM-WH
FCS296		ZCS291 GRC-WH	ZBS291 FL	ZCS291 MRA-B-WH	ZCS291 SMI	ZCS291 MR-S-WH	ZCS291 CFRM-WH



Accessories

	<p>Glass, frosted, white</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS290 GFWH</td> <td>263815 00</td> </tr> <tr> <td>ZBS291 GFWH</td> <td>263846 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS290 GFWH	263815 00	ZBS291 GFWH	263846 00		<p>Protective glass, white</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS290 PGWH</td> <td>263808 00</td> </tr> <tr> <td>ZBS291 PGWH</td> <td>263839 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS290 PGWH	263808 00	ZBS291 PGWH	263839 00
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ZBS290 GFWH	263815 00														
ZBS291 GFWH	263846 00														
Product ID	EOC														
ZBS290 PGWH	263808 00														
ZBS291 PGWH	263839 00														
	<p>Micro-lens optic, white</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS290 MLOWH</td> <td>263822 00</td> </tr> <tr> <td>ZBS291 MLOWH</td> <td>263853 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS290 MLOWH	263822 00	ZBS291 MLOWH	263853 00		<p>Frosted glass, cylinder with frosted squares</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS291 FR-CYL-SQR</td> <td>042298 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS291 FR-CYL-SQR	042298 00		
Product ID	EOC														
ZBS290 MLOWH	263822 00														
ZBS291 MLOWH	263853 00														
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ZBS291 FR-CYL-SQR	042298 00														
	<p>Frosted glass, cylinder with frosted circles</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS291 FR-CYL-C</td> <td>042281 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS291 FR-CYL-C	042281 00		<p>Clear glass, cylinder with frosted squares</p> <table border="1"> <thead> <tr> <th>Product ID</th> <th>EOC</th> </tr> </thead> <tbody> <tr> <td>ZBS291 CL-CYL-SQR</td> <td>042274 00</td> </tr> </tbody> </table>	Product ID	EOC	ZBS291 CL-CYL-SQR	042274 00				
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Product ID	EOC														
ZBS291 CL-CYL-C	042267 00														
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Product ID	EOC														
ZBS291 FRC-CYL-C	042304 00														
Product ID	EOC														
ZBS290 SG-FRC-CLP	042151 00														
ZBS291 SG-FRC-CLP	042168 00														
ZBS297 SG-FRC-CLP	042175 00														



Pendent glass, frosted, clamp version

Product ID	EOC
ZBS291 SG-FR-CLP	263877 00



Pendent glass, clear, clamp version

Product ID	EOC
ZBS291 SG-CL-CLP	042076 00



Halo ring, frosted, clamp version

Product ID	EOC
ZBS290 HR-FR-CLP	042120 00
ZBS291 HR-FR-CLP	042137 00
ZBS297 HR-FR-CLP	042144 00



Pendent glass, frosted

Product ID	EOC
ZBS290 SG-FR	042182 00
ZBS291 SG-FR	042199 00



Pendent glass, opal

Product ID	EOC
ZBS290 SG-O	042526 00
ZBS291 SG-O	263884 00



Mounting plate

Product ID	EOC
ZBS290 MP	451359 00
ZBS291 MP	451366 00
ZBS297 MP	451373 00



Mounting rail/profile

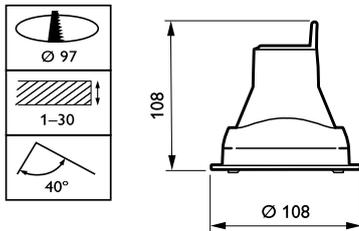
Product ID	EOC
ZBS290 RA (2PCS)	414705 99

Product ID	Description	EOC
ZCS291 GF	Protective glass frosted IP44, white rim	042328 00
ZCS291 PG	Protective glass clear IP44, white rim	042335 00
ZCS291 GRC WH	IP44 cover for top of the barrel, white	042359 00
ZCS291 MR-S GRC WH	Surface mounting ring	042366 00
ZCS291 CFRM WH	Frame for recessing the luminaire	042373 00
ZCS291 MRA-B GRC WH	Recession cylinder for the surface mounted luminaires	042380 00
ZBS290 PG GR	Protective glass clear IP44, grey rim	052495 00
ZBS290 GF GR	Protective glass frosted IP44, grey rim	052501 00
ZBS290 MLO GR	Micro-lens optic, grey rim	052518 00
ZBS291 PG GR	Protective glass clear IP44, grey rim	052525 00
ZBS291 GF GR	Protective glass frosted IP44, grey rim	052532 00
ZBS291 MLO GR	Micro-lens optic, grey rim	052549 00
ZCS291 GRC GR	IP44 cover for top of the barrel, grey	052556 00
ZCS291 MR-S GRC GR	Surface mounting ring	052563 00
ZCS291 CFRM GR	Frame for recessing the luminaire	052570 00
ZCS291 MRA-B GRC GR	Recession cylinder for the surface mounted luminaires	052587 00

Fugato Micro accent lighting

Fugato Micro Cardanic			
Type	MBS244 (HID lamp version) LBS244 (halogen lamp version)	Connection	Push-in connector (PI) Screw connection block (SI)
Light source	HID: 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20 W Halogen: 1 x Capsuleline / GY6.35 / 50 W	Color	Grey (GR) White (WH) RAL colors available on request
Lamp included	Yes (K or lamp color 830 or 930)	Material	Housing: die-cast aluminum Reflector: aluminum Mounting clips: stainless steel
Lamp position	Vertical	Installation	Fixation by means of spring fasteners
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)	Maintenance	Direct lamp access
Transformer	Electronic (ET) (for halogen lamp version)	Main applications	Office, retail, public buildings
Optic	Narrow beam (12°) Medium beam (24° and 36°)	   	

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MBS/LBS244



Fugato Micro MBS/LBS244 cardanic downlight with halogen and discharge lamp respectively and narrow or medium beam optic



Fugato Micro MBS/LBS244 cardanic downlight with halogen and discharge lamp respectively and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS244 1xCDM-Tm20W/830 K EB 12 PI GR	0.42	780405 00
MBS244 1xCDM-Tm20W/830 K EB 24 PI GR	0.42	780412 00
MBS244 1xCDM-Tm20W/830 K EB 36 PI GR	0.42	780429 00
LBS244 1xHAL-C50W K ET 24 SI GR	0.34	781747 00
LBS244 1xHAL-C50W K ET 36 SI GR	0.34	781754 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS244 1xCDM-Tm20W/830 K EB 12 PI WH	0.42	780375 00
MBS244 1xCDM-Tm20W/830 K EB 24 PI WH	0.42	780382 00
MBS244 1xCDM-Tm20W/830 K EB 36 PI WH	0.42	780399 00
LBS244 1xHAL-C50W K ET 24 SI WH	0.34	780443 00
LBS244 1xHAL-C50W K ET 36 SI WH	0.34	781723 00

Please contact your local Philips representative for additional configurations



Fugato Mini fixed

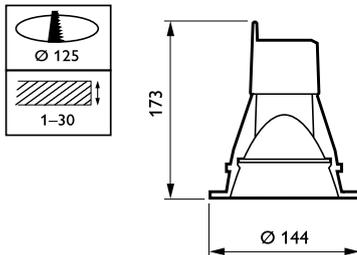
Fugato Mini (cardanic) adjustable

Type	MBS250 (fixed, HID lamp version) LBS250, QBS250 (fixed, halogen lamp version) MBS252 (adjustable, HID lamp version) LBS252, QBS252 (adjustable, halogen lamp version) MBS254 (cardanic adjustable, HID lamp version) LBS254, QBS254 (cardanic adjustable, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W 1 x MASTERColour CDM-R PAR20 / E27 / 35W Halogen: 1 x MASTERLineTC / G8.5 / 60 W 1 x Capsuline / GY6.35 / 75 W 1 x HalogenA PAR20 / E27 / 50 W
Lamp included	Yes (lamp color 830 or 930)
Lamp position	Vertical
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC)

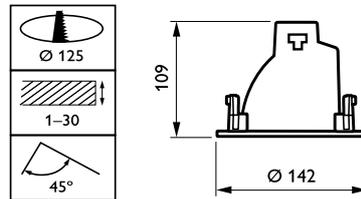
Transformer	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB) Electronic (ET) (for halogen lamp version)
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Connection	Push-in connector (PI) Screw connection block (SI)
Color	Grey (GR) White (WH)
Material	Housing: die-cast aluminum Reflector: aluminum Mounting clips: stainless steel
Installation	Fixation by means of spring fasteners
Maintenance	Direct lamp access
Accessory	Various filters and glasses
Main applications	Office, retail, public buildings



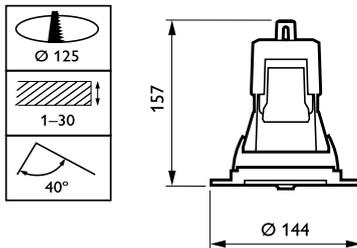
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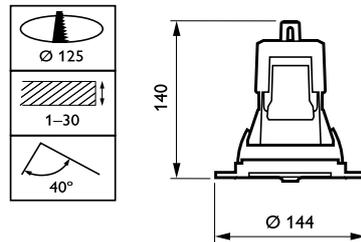
MBS/LBS/QBS250



MBS/LBS252



MBS/QBS254



LBS254



Fugato Mini MBS/LBS/QBS250 miniaturized fixed downlight with miniature halogen or compact discharge lamps and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LBS250 1xHAL-TC60W K ET 24 SI GR	0.87	712284 00
MBS250 1xCDM-TC70W/930 EB 36 PI GR	0.96	785530 00
MBS250 1xCDM-TC70W/930 EB 24 PI GR	0.96	785554 00
MBS250 1xCDM-TC35W/830 EB 36 PI GR	0.92	938264 00

Please contact your local Philips representative for additional configurations



Fugato Mini MBS/LBS/QBS250 miniaturized fixed downlight with miniature halogen or compact discharge lamps and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS250 1xCDM-TC70W/930 EB 36 PI WH	0.96	785523 00
MBS250 1xCDM-TC70W/930 EB 24 PI WH	0.96	785547 00
MBS250 1xCDM-TC70W K EB 36 PI WH	0.96	941721 00
MBS250 1xCDM-TC70W/830 EB 24 PI WH	0.92	942834 00
LBS250 1xHAL-TC60W K ET 24 SI WH	0.87	942889 00
MBS250 1xCDM-TC70W K EB 36 PI WH	0.92	941738 00

Please contact your local Philips representative for additional configurations



Fugato Mini MBS/LBS252 adjustable downlight with miniature halogen and compact discharge lamps respectively and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS252 1xCDM-TC35W/830 EB 12 PI GR	0.93	781792 00
MBS252 1xCDM-TC35W/830 EB 24 PI GR	0.93	781808 00
MBS252 1xCDM-TC70W/930 EB 12 PI GR	0.93	781853 00
MBS252 1xCDM-TC70W/830 EB 24 PI GR	0.93	781860 00
MBS252 1xCDM-TC70W/830 EB 36 PI GR	0.93	781877 00

Please contact your local Philips representative for additional configurations



Fugato Mini MBS/LBS252 adjustable downlight with miniature halogen and compact discharge lamps respectively and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS252 1xCDM-TC35W/830 EB 12 PI WH	0.93	781761 00
MBS252 1xCDM-TC35W/830 EB 24 PI WH	0.93	781778 00
MBS252 1xCDM-TC70W/930 EB 12 PI WH	0.93	781822 00
MBS252 1xCDM-TC70W/930 EB 24 PI WH	0.93	781839 00
MBS252 1xCDM-TC70W/930 EB 36 PI WH	0.93	781846 00

Please contact your local Philips representative for additional configurations



Fugato Mini MBS/LBS/QBS254 miniaturized cardanic recessed downlight with miniature halogen or compact discharge lamps and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS254 1xCDM-TC35W/830 EB 24 PI GR	0.83	712338 00
MBS254 1xCDM-TC70W/830 EB 24 PI GR	0.83	712345 00
MBS254 1xCDM-TC70W/930 EB 36 PI GR	0.96	785202 00
MBS254 1xCDM-TC35W/830 EB 36 PI GR	1.17	938226 00
MBS254 1xCDM-R20-30-35W/830 EB PI GR	1.20	943428 00

Please contact your local Philips representative for additional configurations



Fugato Mini MBS/LBS/QBS254 miniaturized cardanic recessed downlight with miniature halogen or compact discharge lamps and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS254 1xCDM-TC70W/930 EB 24 PI WH	0.96	785189 00
MBS254 1xCDM-TC70W/930 EB 36 PI WH	0.96	785196 00
MBS254 1xCDM-TC35W/830 EB 36 PI WH	1.17	941684 00
MBS254 1xCDM-R20-30-35W/830 EB PI WH	1.20	942759 00

Please contact your local Philips representative for additional configurations

Universal 3-pole plug-in connector (Wieland GST18/3) for fast connection from outside the housing



Standard push-in connection block with two contacts per pole for all connections, such as mains and controls on the gearbox



For MASTERColour (30/70 W) lamps a miniature independent electronic ballast will be offered with push-in connection. This makes the total system extremely compact and easier to use





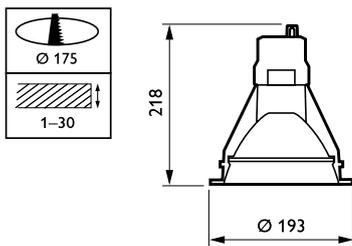
Fugato Compact accent lighting

Fugato Compact accent lighting

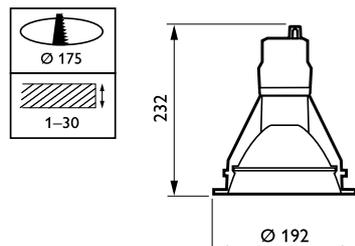
Type	MBS260 (fixed, HID lamp version) QBS260 (fixed, halogen lamp version) MBS262 (internally/externally adjustable, HID lamp version) LBS262 (internally/externally adjustable, general lamp version) MBS264 (cardanic adjustable, HID lamp version) LBS264, QBS264 (cardanic adjustable, halogen lamp version)	Gear	Electro magnetic (low loss), 230 or 240V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240V / 50 - 60 Hz: Electronic Ballast (EB)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 35, 70, 150 W 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W 1 x MASTERColour CDM-R111 / GX8.5 / 35, 70 W 1 x MASTERColour CDM-R PAR30L / E27 / 35, 70 W 1 x MASTER SDW-TG Mini / GX12-1 / 50, 100 W 1 x MASTER SDW-T / PG12-1 / 35, 50, 100 W Halogen: 1 x Aluline 111 / G53 / 100 W 1 x MASTERLine TC / G8.5 / 60 W 1 x HalogenA PAR30S / E27 / 75 W	Transformer	Electronic (ET) (for halogen lamp version)
Lamp included	Yes (lamp color 830, 930 or 942)	Optic	Narrow beam (12°) Medium beam (24° and 36°) Wide beam (60°) Champaign colored optics available
Lamp position	Vertical	Connection	Wieland connector (W) Push-in connector (PI) Screw connection block (SI)
Lamp beam angle	HalogenA PAR30S 10° or 30°	Color	Grey (GR) White (WH) RAL colors available on request
		Material	Housing: die-cast aluminum Mounting frame: stainless steel Reflector: aluminum
		Installation	Directly into the ceiling after installing mounting frame
		Maintenance	Direct lamp access
		Accessory	Various filters and glasses
		Main applications	Office, retail, public buildings, recreational



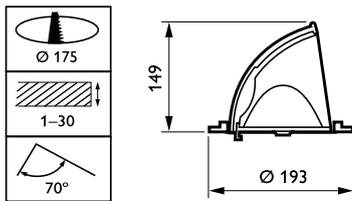
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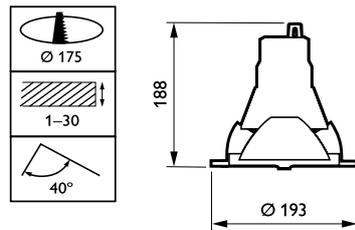
MBS/QBS260 CDM



MBS260 SDW / QBS260 HAL-P30s



MBS/LBS262



LBS/MBS264



Fugato Compact MBS/QBS260 fixed downlight with discharge and halogen lamp respectively and narrow, medium or wide beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS260 1xCDM-T150W/830 EB 36 PI GR	1.28	712369 00
MBS260 1xCDM-T70W/930 EB 36 PI GR	1.28	785615 00
MBS260 1xCDM-T70W/930 EB 24 PI GR	1.28	785622 00
MBS260 1xCDM-T35W/830 EB 36 PI GR	2.25	943367 00
MBS260 1xSDW-TG100W K EB 36 PI GR	1.35	943435 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/QBS260 fixed downlight with discharge and halogen lamp respectively and narrow, medium or wide beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS260 1xCDM-T70W/930 EB 36 PI WH	1.28	785592 00
MBS260 1xCDM-T70W/930 EB 24 PI WH	1.28	785608 00
MBS260 1xCDM-T35W K EB 36 PI WH	2.25	941622 00
MBS260 1xSDW-TG100W K EB 36 PI WH	1.35	942650 00
MBS260 1xCDM-T150W/830 EB 36 PI WH	1.28	943404 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS262 adjustable downlight with halogen and discharge lamp respectively and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS262 1xCDM-T150W/830 EB 24 PI GR	1.98	712437 00
MBS262 1xCDM-T35W/830 EB 24 PI GR	1.51	712482 00
MBS262 1xCDM-T70W/830 EB 24 PI GR	1.51	712529 00
MBS262 1xSDW-TG50W K EB 36 PI GR	1.94	712673 00
MBS262 1xSDW-TG100W K EB 36 PI GR	1.94	943282 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS262 adjustable downlight with halogen and discharge lamp respectively and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS262 1xCDM-T150W/830 EB 24 PI WH	1.98	712444 00
MBS262 1xCDM-T35W/830 EB 24 PI WH	1.51	712499 00
MBS262 1xCDM-T70W/830 EB 24 PI WH	1.51	712536 00
MBS262 1xSDW-TG100W K EB 36 PI WH	1.94	941455 00
MBS262 1xSDW-TG50W K EB 36 PI WH	1.94	941462 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS/QBS264 cardanic downlight with discharge or halogen lamp and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS264 1xCDM-T70W/830 EB 24 PI GR	1.42	712680 00
MBS264 1xCDM-T70W/930 EB 36 PI GR	1.69	785264 00
MBS264 1xCDM-T70W/830 EB 36 PI GR	1.42	943329 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS/QBS264 cardanic downlight with discharge or halogen lamp and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS264 1xCDM-T150W/830 EB 36 PI WH	1.86	710723 00
MBS264 1xCDM-T70W/930 EB 36 PI WH	1.69	785240 00
MBS264 1xCDM-T35W/830 EB 36 PI WH	1.42	942919 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS/QBS264 cardanic downlight with discharge or halogen lamp and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS264 1xCDM-R111-24-70W/830 EB PI GR	1.39	784809 00
MBS264 1xCDM-R111-24-35W/830 EB PI GR	1.39	943312 00

Please contact your local Philips representative for additional configurations



Fugato Compact MBS/LBS/QBS264 cardanic downlight with discharge or halogen lamp and narrow or medium beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS264 1xCDM-R111-24-35W/830 EB PI WH	1.39	710686 00
MBS264 1xCDM-R111-24-70W/830 EB PI WH	1.39	784793 00

Please contact your local Philips representative for additional configurations



HID / Halogen-range	Optics				Accessories									
	12°	24°	36°	60°	1 Color filter				2 Sculptural lens	3 Anti-glare filter	4 Fresh Food filter	Protection glass suspended	Anti-UV filter (UV-A)	Ceiling support plate
					blue	green	red	yellow						
Micro Cardanic ...BS244 95mm	•	•	•											
Mini Fixed ...BS250 125 mm	•	•	•					ZBS250 LS	ZBS250 GCG		ZBS250 PG	ZBS250 UV	ZBS250 FR	
Mini Adjustable ...BS252 125mm	•	•	•		ZBS254 DF-BL	ZBS254 DF-GN	ZBS254 DF-RD	ZBS254 DF-YE	ZBS254 LS	ZBS254 GCG		ZBS254 PG	ZBS254 UV	ZBS250 FR
Mini Cardanic ...BS254 125mm	•	•	•		ZBS254 DF-BL	ZBS254 DF-GN	ZBS254 DF-RD	ZBS254 DF-YE	ZBS254 LS	ZBS254 GCG		ZBS254 PG	ZBS254 UV	ZBS250 FR
Compact Fixed ...BS260 175mm	•	•	•	•					ZBS260 LS	ZBS260 GCG		ZBS260 PG	ZBS260 UV	ZBS260 FR
Compact Adjustable ...BS262 175mm	•	•*	•*		ZBS262 DF-BL	ZBS262 DF-GN	ZBS262 DF-RD	ZBS262 DF-YE	ZBS262 LS	ZBS262 GCG	ZBS262 DF-MT	ZBS262 PG	ZBS262 UV	ZBS260 FR
Compact Cardanic ...BS264 175mm	•	•*	•*		ZBS264 DF-BL	ZBS264 DF-GN	ZBS264 DF-RD	ZBS264 DF-YE	ZBS264 LS	ZBS264 GCG	ZBS264 DF-MT	ZBS264 PG	ZBS264 UV	ZBS260 FR

•* Also available in silver and gold

Optics



12°, narrow beam



24°, medium beam

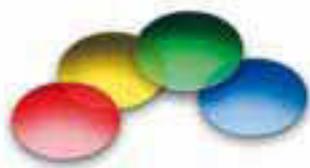


36°, medium beam



60°, wide beam

Accessories



1 Color filter

blue / green / red / yellow

High-efficiency dichroic filters in saturated red, blue, yellow and green



2 Sculptural lens

Lens to elongate the beam in one direction



3 Anti-glare filter

Filter to reduce glare, ensuring that displays are easy on the eye



4 Fresh Food filter (pink + red)

Lens to elongate the beam in one direction

Type	Lamp	Wattage	Color filter	Sculptural lens	Anti-glare filter	Protection glass	Anti-UV filter	Fresh Food filter
MBS250								
	CDM-TC	35/70		•	•	•	•	
LBS250								
	HAL-TC	60		•	•	•	•	
	HAL-C	75						
QBS250								
	HAL-P20	50						
MBS260								
	CDM-T	35/70/150		•	•	•	•	
	SDW-T	35/50/100		•	•	•	•	
	SDW-TG	50/100		•	•	•	•	
QBS260								
	HAL-P30S	100						
MBS254								
	CDM-TC	35/70	•	•	•	•	•	
	CDM-R20	35						
LBS254								
	HAL-TC	60		•	•	•	•	
	HAL-C	75						
QBS254								
	HAL-P20	50						
MBS264								
	CDM-T	35/70	•	•	•	•	•	•
		150				•	•	
	SDW-T	35/50/100	•	•	•	•	•	•
	SDW-TG	50/100	•	•	•	•	•	•
	CDM-R30	35/70						
	CDM-R111	35						
LBS264								
	HAL-R111	100						
QBS264								
	HAL-P30S	100						
MBS262								
	CDM-TC	35/70	•	•	•	•	•	•
	CDM-T	35/70/100	•	•	•	•	•	•
	SDW-TG	50/100	•	•	•	•	•	•
LBS262								
	HAL-TC	60	•	•	•	•	•	•

Accessories



High-efficiency dichroic filters in saturated red, green, blue and yellow

Product ID	EOC
ZBS254 DF-RD	710006 00
ZBS262 DF-RD	710013 00
ZBS264 DF-RD	710020 00
ZBS262 DF-GN	710044 00
ZBS262 DF-BL	710075 00



Sculptural lens to elongate the beam in one direction

Product ID	EOC
ZBS250 LS	710143 00
ZBS254 LS	710150 00
ZBS262 LS	710167 00
ZBS264 LS	710174 00
ZBS260 LS	710181 00



Filter to enhance rendering of red in light for food applications

Product ID	EOC
ZBS262 DF-MT	710129 00
ZBS264 DF-MT	710136 00



Protection glass which provides IP 44 protection

Product ID	EOC
ZBS250 PG	710372 00
ZBS254 PG	710389 00
ZBS262 PG	710396 00
ZBS264 PG	710402 00
ZBS260 PG	710419 00



UV filter (UV-A) to prevent yellowing of merchandise on display

Product ID	EOC
ZBS250 UV	710327 00
ZBS254 UV	710334 00
ZBS262 UV	710341 00
ZBS264 UV	710358 00
ZBS260 UV	710365 00



Ceiling plate to support the product when installed in soft ceilings

Product ID	EOC
ZBS250 FR-D125	710280 00
ZBS260 FR-D175	710297 00



Anti-glare filter to reduce glare, ensuring that displays are easy on the eye

Product ID	EOC
ZBS250 GCG	710327 00
ZBS254 GCG	710334 00
ZBS260 GCG	710341 00
ZBS262 GCG	710358 00
ZBS264 GCG	710365 00



Scrabble gridlights recessed



Scrabble gridlights recessed – freedom of configuration

Scrabble is a complete range of gridlights comprising frames for 1, 2, 3 or 4 adjustable cardanic luminaires for compact discharge and halogen lamps.

They are available in recessed (MBX500), suspended (QPX500) and surface-mounted (QCX500) versions. The adjustable cardanic systems offer full freedom for accent lighting in various directions from a single elegant gridlight.

www.philips.com/lighting

Scrabble recessed



Scrabble suspended

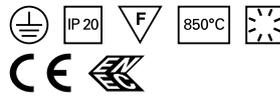


Scrabble surface-mounted

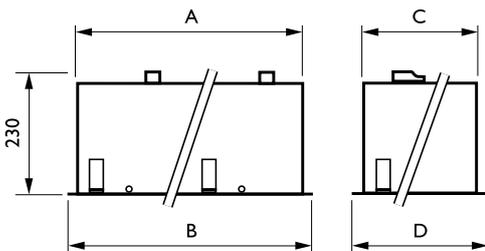


Scrabble gridlights recessed

Scrabble			
Type	CBX/MBX/SBX500 (recessed, rectangular version) CBX502 (recessed, square version)	Orientation	Cardanic swivel system on two axis to adjust 40° in all directions
Light source	Halogen: Aluline III / G53 / 100 W MASTERLine III / G53 / 30, 45, 60 W (HAL-RIII) HID: MASTERColour CDM-T / G12 / 35, 70 W MASTER SDW-TG Mini / GX12-I / 50, 100 W MASTER SDW-T / PG12-I / 50, 100 W	Color	Grey (GR) White (WH) RAL colors available on request
Lamp beam angle	10° to 45° (only for MASTERLine III)	Material	Aluminum and steel
Lamp included	Yes (K or lamp color 830 or 840)	Installation	Fixation by means of spring fasteners Maintenance: direct lamp access or after removing the front glass
Lamp position	Vertical	Accessory	Electronic transformer; gear box
Optic	Narrow beam (12°) Medium beam (24° and 36°) Wide beam (60°)	Remarks	Transformer and gear box to be ordered separately according to lamp type
		Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



CBX/MBX/SBX500/CBX502

	A	B	C	D
MBX500 1xx, SBX500 1xx	198	215	198	215
MBX500 2xx, SBX500 2xx	390	408	198	215
CBX500 2x 1x, MBX500 3xx, SBX500 3xx	578	600	198	215
CBX500 2x 2x	778	794	198	215
CBX502 2x 2x	390	408	390	408



Scrabble MBX/SBX500 cardanic recessed gridlight with discharge lamp and narrow, medium or wide beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX500 1xCDM-T35W MB36 GR	1.90	557878 00
MBX500 1xCDM-T70W MB36 GR	1.90	558035 00
SBX500 1xSDW-TG100W K 36 GR	1.80	770345 00
SBX500 1xSDW-TG50W K 36 GR	1.80	770383 00
MBX500 1xCDM-T35W/830 MB36 GR	1.90	774718 00

Please contact your local Philips representative for additional configurations



Scrabble MBX/SBX500 cardanic recessed gridlight with discharge lamps and narrow, medium or wide beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX500 2xCDM-T35W NB12 GR	3.10	557816 00
MBX500 2xCDM-T70W NB12 GR	3.10	557977 00
MBX500 2xCDM-T70W MB36 GR	3.10	558059 00
SBX500 2xSDW-T50W NB12 GR	3.10	558172 00
SBX500 2xSDW-TG100W K 24-24 GR	2.90	770413 00

Please contact your local Philips representative for additional configurations



Scrabble MBX/SBX500 cardanic recessed gridlight with discharge lamps and narrow, medium or wide beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX500 2xCDM-T35W NB12 WH	3.10	557809 00
MBX500 2xCDM-T70W NB12 WH	3.10	557960 00
MBX500 2xCDM-T70W MB36 WH	3.00	558042 00
SBX500 2xSDW-T50W NB12 WH	3.10	558165 00
SBX500 2xSDW-TG100W K 24-24 WH	2.90	770420 00

Please contact your local Philips representative for additional configurations



Scrabble CBX500 cardanic recessed gridlight with discharge and halogen lamps and narrow or medium beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
CBX500 2xHAL-RI11-100W 1xCDM-T70W 60 GR	4.80	558653 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 60 GR	4.80	775296 00
CBX500 2xHAL-RI11-45- 1xCDM-T/830 60 GR	4.80	775302 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 12 GR	4.80	775364 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 36 GR	4.80	775388 00

Please contact your local Philips representative for additional configurations



Scrabble CBX500 cardanic recessed gridlight with discharge and halogen lamps and narrow, medium or wide beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
CBX500 2xHAL-RI11-100W 1xCDM-T70W 60 WH	4.80	558646 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 60 WH	4.80	775272 00
CBX500 2xHAL-RI11-45- 1xCDM-T/830 60 WH	4.80	775289 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 12 WH	4.80	775357 00
CBX500 2xHAL-RI11-24- 1xCDM-T/830 36 WH	4.80	775371 00

Please contact your local Philips representative for additional configurations



Scrabble CBX500 cardanic recessed gridlight with discharge and halogen lamps and narrow, medium or wide beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
CBX500 2xHAL-RI11-100W 2xCDM-T70W 12 WH	6.50	559780 00
CBX500 2xHAL-RI11-100W 2xCDM-T70W 36 WH	6.50	559803 00
CBX500 2xHAL-RI11-100W 2xSDW-T100W 36 WH	6.50	559841 00
CBX500 2xHAL-RI11-45- 2xSDW-T K 12 WH	6.50	775401 00
CBX500 2xHAL-RI11-45- 2xSDW-T K 36 WH	6.50	775449 00

Please contact your local Philips representative for additional configurations



Scrabble CBX502 cardanic recessed gridlight with discharge and halogen lamps and narrow or medium beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
CBX502 2xHAL-RI11-100W 2xCDM-T70W 36 GR	6.50	559896 00
CBX502 2xHAL-RI11-45- 2xCDM-T/830 12 GR	6.50	775500 00
CBX502 2xHAL-RI11-24- 2xCDM-T/830 36 GR	6.50	775531 00
CBX502 2xHAL-RI11-45- 2xCDM-T/830 36 GR	6.50	775548 00
CBX502 2xHAL-RI11-24- 2xSDW-T K 36 GR	6.50	775616 00

Please contact your local Philips representative for additional configurations

Accessories



Gear box, electronic (EB for CDM) to connect to the housing with 3-pole plug

Product ID	EOC
ZNX500 35 GRB-EB	575018 00
ZNX500 70 GRB-EB	575025 00



Electronic transformer (for HAL-R111) with 2-pole screw connector:

Product ID	EOC
ZNV920TRF-105 230/12V CLII	559988 00



Gear box with compensated conventional (IC for SDW-T and CDM) to connect to the housing with 3-pole plug

Product ID	EOC
ZNX500 35 GRB-IC 230V	558912 00
ZNX500 70 GRB-IC 230V	558936 00
ZNX500 50 GRB-IC 230V	558950 00
ZNX500 100 GRB-IC 230V	558974 00



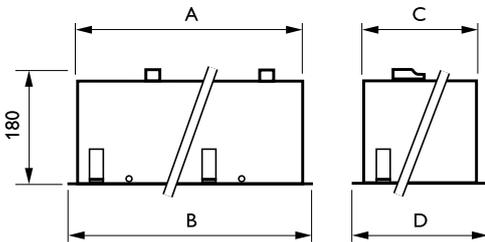
Scrabble gridlights rec. compact

Scrabble	
Type	MBX510/QBX500 (recessed, compact rectangular version) MBX512/QBX502 (recessed, compact square version)
Light source	Halogen: Aluline III / G53 / 100 W HID: MASTERColour CDM-TC / G8.5 / 35, 70 W MASTERColour CDM-R PAR20&30L / E27 / 35, 70 W
Lamp beam angle	10° to 45° (only for MASTERLine III) 10° and 30° (only for MASTERColour CDM-R PAR30 35 W) 10° and 40° (only for MASTERColour CDM-R PAR30 70 W)
Lamp included	Yes (K or lamp color 830 or 840)
Lamp position	Vertical
Optic	Narrow beam (12°) Medium beam (36°)
Orientation	Cardanic swivel system on two axis to adjust 30° in all directions

Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum and steel
Installation	Fixation by means of spring fasteners Maintenance: direct lamp access
Accessory	Electronic transformer; gear box
Remarks	Transformer and gear box to be ordered separately according to lamp type
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MBX/QBX500 QBX502 MBX512

	A	B	C	D
LBX510 1xx, MBX510 1xx, QBX500 1xx	161	182	161	182
LBX510 2xx, MBX510 2xx, QBX500 2xx	323	344	161	182
LBX510 3xx, MBX510 3xx, QBX500 3xx	485	506	161	182
LBX510 4xx, MBX510 4xx, QBX500 4xx	646	668	161	182
MBX512 4xx, QBX502 4xx	323	344	323	344



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamp
respectively and narrow or medium
beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX510 1xCDM-TC35W MB36 GR	1.50	579030 00
MBX510 1xCDM-TC70W MB36 GR	1.50	579146 00
QBX500 1xHAL-R111-45-100W GR	1.15	774572 00
MBX510 1xCDM-R30-40-70W/830 GR	1.50	775784 00
MBX510 1xCDM-TC35W/830 MB36 GR	1.50	776064 00

Please contact your local Philips representative for additional configurations



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamp
respectively and narrow or medium
beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX510 1xCDM-TC35W MB36 WH	1.50	579016 00
MBX510 1xCDM-TC70W MB36 WH	1.50	579122 00
QBX500 1xHAL-R111-45-100W WH	1.15	774558 00
MBX510 1xCDM-R30-40-70W/830 WH	1.50	775760 00
MBX510 1xCDM-TC35W/830 MB36 WH	1.50	776057 00

Please contact your local Philips representative for additional configurations



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics



Scrabble MBX510/QBX500
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBX500 2xHAL-R111-100W GR	1.90	557748 00
MBX510 2xCDM-TC35W NB12 GR	2.50	579078 00
MBX510 2xCDM-TC70W MB36 GR	2.50	579207 00
MBX510 2xCDM-R111-24-35W/830 GR	1.90	770574 00
MBX510 2xCDM-R30-30-35W/830 GR	2.50	775708 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBX500 2xHAL-R111-100W WH	1.90	557731 00
MBX510 2xCDM-TC35W NB12 WH	2.50	579054 00
MBX510 2xCDM-TC70W MB36 WH	2.50	579191 00
MBX510 2xCDM-R111-24-35W/830 WH	1.90	770581 00
MBX510 2xCDM-R30-30-35W/830 WH	2.50	775685 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX510 3xCDM-TC35W MB36 GR	3.50	579009 00
MBX510 3xCDM-TC70W MB36 GR	3.50	579269 00
QBX500 3xHAL-R111-24-100W GR	2.60	774633 00
MBX510 3xCDM-R30-40-70W/830 GR	3.50	775869 00
MBX510 3xCDM-TC35W/830 MB36 GR	3.50	776163 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX510 3xCDM-TC35W MB36 WH	3.50	578989 00
MBX510 3xCDM-TC70W MB36 WH	3.50	579252 00
QBX500 3xHAL-R111-24-100W WH	2.60	774626 00
MBX510 3xCDM-TC35W/830 MB36 WH	3.50	776156 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX510 4xCDM-R111-10-40-35W/830 WH	3.70	770628 00
QBX500 4xHAL-R111-45-100W WH	3.70	775319 00
MBX510 4xCDM-R30-30-35W/830 WH	5.00	775883 00
MBX510 4xCDM-TC35W/830 12-36-36-12 WH	4.50	776170 00
MBX510 4xCDM-TC70W/830 12-36-36-12 WH	4.50	776354 00

Please contact your local Philips representative for additional configurations



Scrabble MBX512/QBX502
cardanic recessed compact gridlight
with discharge and halogen lamps
respectively and narrow or medium
beam optics

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBX512 4xCDM-TC70W NB12-2MB36-NB12 GR	4.50	579306 00
MBX512 4xCDM-R30-30-35W/830 GR	5.00	775944 00
MBX512 4xCDM-TC35W/830 12-36-36-12 GR	4.50	776200 00
MBX512 4xCDM-TC70W/830 12-36-36-12 GR	4.50	776385 00

Please contact your local Philips representative for additional configurations

Accessories



Gear box, electronic (EB for CDM) to
connect to the housing with 3-pole
plug

Product ID	EOC
ZNX500 35 GRB-EB	575018 00
ZNX500 70 GRB-EB	575025 00



Electronic transformer (for HAL-R111)
with 2-pole screw connector:

Product ID	EOC
ZNV920TRF-105 230/12V CLII	559988 00



Gear box with compensated
conventional (IC for SDW-T and
CDM) to connect to the housing with
3-pole plug

Product ID	EOC
ZNX500 35 GRB-IC 240V	558929 00
ZNX500 70 GRB-IC 240V	558943 00



Europa 2



Europa 2 – efficient and easy

Europa 2 is a fixed recessed downlight for compact fluorescent PL-C lamps with highly efficient optics and automatic fixing clips for quick and easy installation. These downlights are available in three formats and can be fitted with either a prismatic light control panel, opal cover, clear front panel or glare-control louver. Available in a ready-to-install kit version.

www.philips.com/lighting

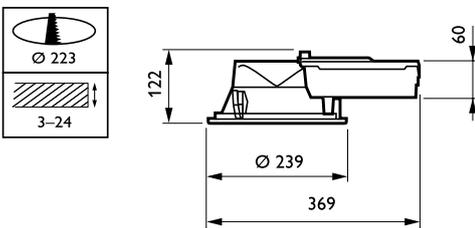
Europa 2

Type	FBS120 (small version) FBS122 (large version)
Light source	Compact fluorescent: 1 x or 2 x MASTER PL-C 2 Pin / G24d-1 / 13 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 1 x MASTER PL-R 4 Pin 14, 17 W / 17 W GRI 4q-1 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W
Lamp included	No Yes (K or lamp color 830 or 840)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF) High Frequency Performer (HFP) High Frequency Regulator (HFR)

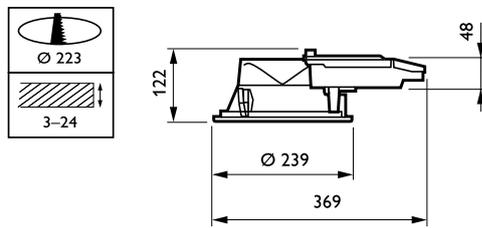
Optic	Lamellae louvers (L)
Optical cover	Opal cover (O) Glass (G) Prismatic cover, clear (P)
Connection	Wieland connector, 2, 3, 4 poles respectively (W2, W3, W4 respectively) Mains cable with CEE 7 plug (CCE), in ready-to-install kit version only
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)
Material	Gearbox: polyester (gear cover of polypropylene) Reflector: high brilliant metallised, faceted
Installation	Fixation by means of spring fasteners Through-wiring possible with conventional types
Maintenance	Lamp access after removing the front cover
Accessory	Protection glass (PG), decorative ring (DR)
Remarks	Dedicated ready to install versions available (KIT)
Main applications	Retail, recreational, industry



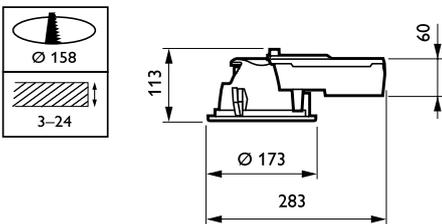
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBS120 I/IC



FBS120 HF/HFR/HFP



FBS122



Europa 2 FBS120/I22 fixed downlight with compact fluorescent lamp(s) and lamellae louver (L)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS120 2xPL-C/2P18W/830 I 230V L W2	1.45	662060 00
FBS120 2xPL-C/2P26W/830 I 230V L W2	1.45	662176 00
FBS120 2xPL-C/4P26W/830 HF L W2	0.80	662237 00
FBS120 2xPL-C/4P18W/830 HF L W2	0.80	662244 00
FBS120 2xPL-C/4P26W/840 HF L W2	0.80	662312 00

Please contact your local Philips representative for additional configurations



Europa 2 FBS120/122 fixed downlight with compact fluorescent lamp(s) and opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS120 2xPL-C/4P18W/830 HF O W2	0.80	660264 00
FBS120 2xPL-C/2P18W/830 I 230V O W2	1.45	662039 00
FBS122 1xPL-C/2P13W/830 I 230V O W2	1.35	662428 00
FBS122 2xPL-C/2P13W/830 I 230V O W2	1.35	662442 00

Please contact your local Philips representative for additional configurations



Europa 2 FBS120/122 fixed downlight with compact fluorescent lamp(s) and glass (G)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS120 2xPL-C/2P18W/830 I 230V G W2	1.60	660226 00
FBS120 2xPL-C/4P18W/830 HF G W2	0.80	660271 00
FBS120 2xPL-C/4P26W/830 HF G W2	0.80	660370 00
FBS120 2xPL-C/4P18W/840 HF G W2	0.80	662220 00
FBS122 1xPL-C/2P13W/830 I 230V G W2	1.35	662459 00

Please contact your local Philips representative for additional configurations



Europa 2 FBS120/122 fixed downlight with compact fluorescent lamp(s) and prismatic refractor (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBS120 2xPL-C/4P18W/830 HF P W2	0.80	660257 00
FBS120 1xPL-C/2P26W/840 I 230V P W2	1.45	660301 00
FBS120 2xPL-C/4P26W/830 HF P W2	0.80	660363 00
FBS122 1xPL-C/2P13W/840 I 230V P W2	1.35	660653 00
FBS122 2xPL-C/2P13W/840 I 230V P W2	1.35	660660 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
GBS122 P	Prismatic refractor for FBS122	662480 00
GBS122 O	Opal diffuser for FBS122	662497 00
GBS122 PG	Protection glass for FBS122	662503 00
GBS120 P	Prismatic refractor for FBS120	662510 00
GBS120 O	Opal diffuser for FBS120	662527 00
GBS120 PG	Protection glass for FBS120	662534 00
GBS120 L	Lamellae louver for FBS120	662541 00
GBS122 RG	Decorative glass for FBS122	664484 00
GBS120 RG	Decorative glass for FBS120	666310 00



Dueta



Dueta – decorative downlight

Dueta is a family of recessed downlights for MASTERColour CDM-T/TD, MHN-TD, White SON SDW-T and Halogen Plusline lamps. The range comprises fixed and adjustable versions, the latter offering 55°/60° orientation from the vertical. Dueta luminaires are available in ready-to-install kits. A high-definition UV filter is available as an accessory.

www.philips.com/lighting

Dueta 100



Dueta 200

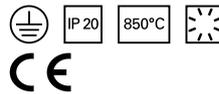


Dueta 201

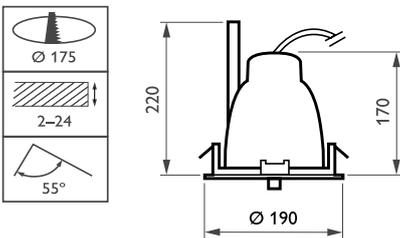


Dueta	
Type	MBS201, SBS201 (adjustable downlight, round version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 70, 150 W 1 x MASTER SDW-T / PG12-I / 100 W
Lamp included	Yes (K or lamp color 830 or 942)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC)

Color	Grey (GR) White (WH)
Material	Body and reflector: aluminum
Installation	Fixation by means of spring fasteners
Maintenance	Direct lamp access after removing the front glass
Accessory	Anti UV filter
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MBS/SBS201



Dueta MBS/SBS201 adjustable downlight with discharge or halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS201 1xCDM-T70W/830 IC 230V GR	3.00	713120 00
MBS201 1xCDM-T70W/942 IC 230V GR	3.00	713137 00
MBS201 1xCDM-T150W/830 IC 230V GR	3.60	713205 00
MBS201 1xCDM-T150W/942 IC 230V GR	3.60	713212 00
SBS201 1xSDW-T100W K IC 230V GR	3.00	713281 00

Please contact your local Philips representative for additional configurations



Dueta MBS/SBS201 adjustable downlight with discharge or halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS201 1xCDM-T70W/830 IC 230V WH	3.00	713144 00
MBS201 1xCDM-T70W/942 IC 230V WH	3.00	713151 00
MBS201 1xCDM-T150W/830 IC 230V WH	3.60	713229 00
MBS201 1xCDM-T150W/942 IC 230V WH	3.60	713236 00
SBS201 1xSDW-T100W K IC 230V WH	3.00	713304 00

Please contact your local Philips representative for additional configurations

Accessories

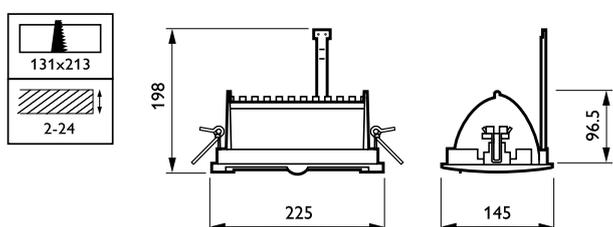
Product ID	Description	EOC
ZZN201 UV	Anti-UV filter	716244 00

Dueta	
Type	MBS200, QBS200, SBS200 (adjustable downlight, rectangular version)
Light source	HID: 1 × MASTERColour CDM-TD / RX7s / 70, 150 W 1 × MASTER SDW-T / PG12-I / 100 W 1 × MHN/W-TD / RX7s / 70, 150 W Halogen: 1 × Plusline Small / R7s / 200 W
Lamp included	Yes (K or lamp color 830 or 942)
Lamp position	Horizontal

Gear	Electro magnetic (low loss), 230 or 240V / 50 Hz: Inductive, parallel compensated (IC)
Color	Grey (GR) White (WH)
Material	Body and reflector: aluminum
Installation	Fixation by means of spring fasteners
Maintenance	Direct lamp access after removing the front glass
Accessory	Anti UV filter
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MBS/QBS/SBS200



Dueta MBS/QBS/SBS200 adjustable downlight with discharge or halogen lamp



Dueta MBS/QBS/SBS200 adjustable downlight with discharge or halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS200 1xHAL-TDS200W GR	0.80	567013 00
MBS200 1xCDM-TD150W IC 230V GR	3.70	567136 00
SBS200 1xSDW-T50W K IC 230V GR	3.00	567297 00
SBS200 1xSDW-T100W K IC 230V GR	3.20	567334 00
MBS200 1xCDM-TD70W/830 IC 230V GR	2.80	571805 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS200 1xHAL-TDS200W WH	0.80	567006 00
MBS200 1xCDM-TD70W/830 IC 230V WH	2.70	567181 00
MBS200 1xCDM-TD150W/830 IC 230V WH	3.70	567228 00
SBS200 1xSDW-T50W K IC 230V WH	3.00	567273 00
SBS200 1xSDW-T100W K IC 230V WH	3.20	567310 00

Please contact your local Philips representative for additional configurations

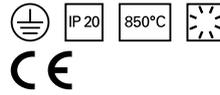
Accessories

Product ID	Description	EOC
ZZN200 UV WH	Anti-UV filter in white	571386 00
ZZN200 UV GR	Anti-UV filter in grey	571379 00

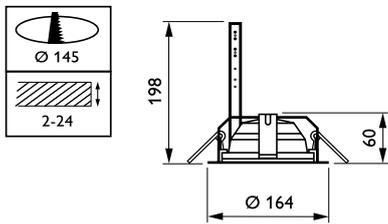
Dueta

Type	Dueta 100: MBS100, QBS100, SBS100 (fixed downlight, round version)
Light source	HID: 1 x MASTERColour CDM-TD / RX7s / 70, 150 W 1 x MASTER SDW-T / PG12-1 / 100 W Halogen: 1 x Plusline Small / R7s / 150 W
Lamp included	Yes (K or lamp color 830 or 942)
Lamp position	Horizontal

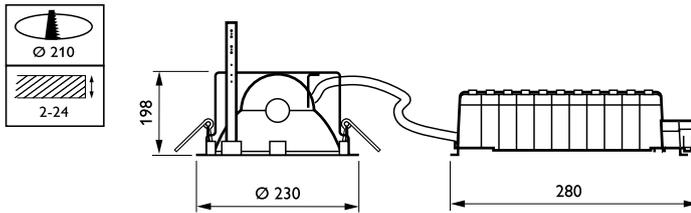
Gear	Electro magnetic (low loss), 230 or 240V / 50 Hz: Inductive, parallel compensated (IC)
Color	Grey (GR) White (WH)
Material	Body and reflector: aluminum
Installation	Fixation by means of spring fasteners
Maintenance	Direct lamp access after removing the front glass
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MBS/QBS100 CDM-TD/HAL-TDC



MBS/QBS/SBS100 CDM-TD/SDW-T



Dueta MBS/QBS/SBS100 fixed downlight with discharge or halogen lamp



Dueta MBS/QBS/SBS100 fixed downlight with discharge or halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
SBS100 1xSDW-T100W IC 230V GR	3.50	570174 00
MBS100 1xCDM-TD150W/942 K IC 230V GR	3.50	571690 00
MBS100 1xCDM-TD150W/830 K IC 230V GR	3.50	571706 00
MBS100 1xCDM-TD70W/830 K IC 230V GR	2.70	571713 00
MBS100 1xCDM-TD70W/942 K IC 230V GR	2.70	571720 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBS100 1xCDM-TD150W/830 K IC 230V WH	3.50	570129 00
MBS100 1xCDM-TD150W/942 K IC 230V WH	3.50	570136 00
SBS100 1xSDW-T100W IC 230V WH	3.50	570167 00
MBS100 1xCDM-TD70W/830 K IC 230V WH	2.40	571775 00
MBS100 1xCDM-TD70W/942 K IC 230V WH	2.30	571782 00

Please contact your local Philips representative for additional configurations



Spot LED Dynamic



Spot LED Dynamic – paint with light

Catch the eye by adding pulse and dynamics to your lighting.

The optical lens provides perfectly mixed color and gives an amazingly uniform beam without any color shadows. In addition to colored effects, the Spot LED Dynamic also creates high-quality white light varying from 2700 to 6500 K.

With a family of surface-mounted, suspended and recessed versions, Spot LED Dynamic enables true visual consistency using the highest quality materials and finishing. Flexible aiming (tilt and rotation) ensures maximum adjustability.

The Spot LED Dynamic features unique multi-die LED technology (RGBW) with an optical system that delivers 100% color mixing into a 20-degree beam. With no UV or heat in the beam, it is possible for objects to be lit from a short distance. This makes the Spot LED Dynamic ideal for application in showcases, displays and for lighting precious architectural details and works of art.

www.philips.com/lighting

Spot LED Dynamic Recessed

The compact size of the Spot LED Dynamic Recessed enables unobtrusive integration into ceilings or cabinets.

The tilt of +/- 15 degrees allows fine-tuning of the beam towards the object. Objects can be lit from a short distance since there is no heat in the light beam.

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Spot LED Dynamic Projector

The Spot LED Dynamic Projector offers a high degree of adjustability. The 350° horizontal and 280° vertical rotation allows accurate focusing of the light beam on the object. The 100% color mixing in the spot device results in a perfect uniform colored spot window. When you look towards the spot a perfect homogeneous beam of one color is visible. The Projector version is available in a mono and a twin version.

Page 6.15



Spot LED Dynamic Pendant, projector

The Spot LED Dynamic Pendant adds a high quality design element to interior architecture. The Pendant features a compact and subtle cylindrical shape that allows easy integration into retail and hospitality applications.

The absence of UV or heat in the beam makes close-up installation possible without any adverse effect on the objects being lit.

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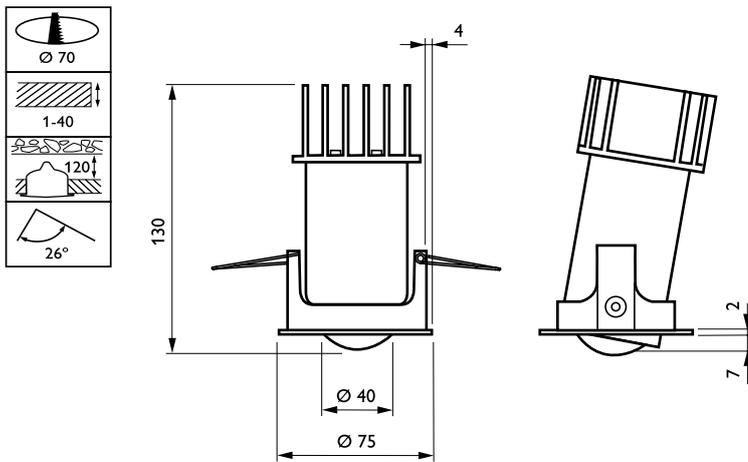
Spot LED Dynamic Recessed

Type	BBG700
Light source	Philips multi-die LED system
Light output	500 cd at 4000 K
Optic	Medium beam (20°)
Light color	RGB
Color temperature	2700-6500 K (tunable white)
Power supply	24V DC
Power consumption	Max 7W
Lifetime	70% of light output at 25 000 hours at Ta ≤ 35°C

Material	Housing: brushed anodized aluminum Lens: glass
Operating temperature	Ta ≤ 35°C, with overheat protection
Controls	ColourChaser DMX, ColourChaser Wheel
Adjustment	Tilt of +/- 15°
Remarks	24V power supply via Control Interface DMX



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BBG700



Spot LED Dynamic Recessed BBG700, a one-LED adjustable recessed luminaire

Product ID	Weight (kg)	European Order Code (EOC)
BBG700 1xLED-MD/RGBW 7W 24V	0.55	8090014 99



Spot LED



Spot LED – small delight

Featuring an innovative light-emitting diode, the Spot LED is a real revolution in accent lighting. With an adjustable projector head of only Ø 31 mm, this is an incredibly small luminaire.

It incorporates the LUXEON® K2 high-power LED, which delivers more light than ever before, and has no UV/IR radiation. Spot LED is available as a complete range – surface-mounted, recessed, track-mounted and wall-mounted.

www.philips.com/lighting



Spot LED recessed, semi-recessed



Spot LED desk-top



Spot LED wall-mounted



Spot LED surface-mounted



Spot LED

Spot LED, recessed

Type	BBG410 (round version) BBG411 (square version)
Light source	1 x LUXEON® K2
Light color	Blue, warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	4 W
Optic	Narrow beam (10°) Medium beam (25°)

Lifetime	50,000 hrs (70% lumen maintenance at $T_a = 25^\circ \text{C}$)
Material	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Ceiling ring: brushed aluminum
Accessory	Adaptor ring ZBG410
Remarks	Including external transformer
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Spot LED, semi-recessed, adjustable

Type	BBG400 (round version) BBG401 (square version) BBG402 (rectangular version)
Light source	BBG400/401: 1 x LUXEON® K2 BBG402: 2 x LUXEON® K2
Light color	Blue, warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	BBG400/401: 4 W BBG402: 8 W
Optic	Narrow beam (10°) Medium beam (25°)

Lifetime	50,000 hrs (70% lumen maintenance at $T_a = 25^\circ \text{C}$)
Adjustment	Horizontal: 345° Vertical: 60°
Material	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Ceiling ring: brushed aluminum
Remarks	Including external transformer
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Spot LED, semi-recessed, adjustable

Type	BBG440 (round version) BBG441 (square) BBG442 (rectangular)
Light source	BBG440: 3 x LUXEON® K2 BBG441: 3 x LUXEON® K2 BBG442: 6 x LUXEON® K2
Light color	Warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	BBG440/441: 12.4 W BBG442: 24.8 W

Optic	Narrow beam (10°) Medium beam (25°)
Adjustment	Horizontal: 340° Vertical: 60°
Lifetime	50,000 hrs (70% lumen maintenance at $T_a = 25^\circ \text{C}$)
Material	Housing: brushed anodized aluminum and polycarbonate Optic: polycarbonate
Remarks	Including integrated transformer
Main applications	Hotels, restaurants, retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Spot LED, recessed

Type	BBG450 (round version) BBG451 (square version)	Optic	Narrow beam (10°) Medium beam (25°)
Light source	3 × LUXEON® K2	Lifetime	50,000 hrs (70% lumen maintenance at $T_a = 25^\circ\text{C}$)
Light color	Warm white, cool white	Material	Housing: brushed anodized aluminum and polycarbonate Optic: polycarbonate
Power supply	220 - 240 V / 50 - 60 Hz	Remarks	Including external transformer
Power consumption	12.4 W	Main applications	Hotels, restaurants, retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

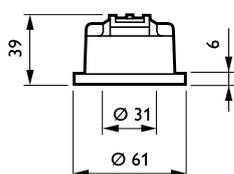
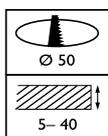


Spot LED BBG410, a one-LED fixed downlight with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG410 1xLED-K2-10-/CW PSU-E 220-240V	0.15	009285 99
BBG410 1xLED-K2-10-/WW PSU-E 220-240V	0.15	803562 99
BBG410 1xLED-K2-25-/WW PSU-E 220-240V	0.15	803579 99

Please contact your local Philips representative for additional configurations



BBG410

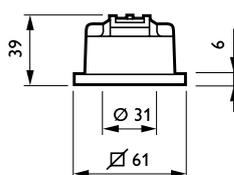
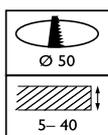


Spot LED BBG41 I, a one-LED fixed downlight with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG41 I 1xLED-K2-10-/CW PSU-E 220-240V	0.20	009308 99
BBG41 I 1xLED-K2-10-/WW PSU-E 220-240V	0.20	803586 99

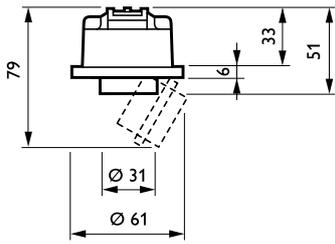
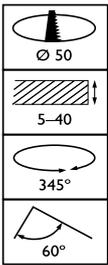
Please contact your local Philips representative for additional configurations



BBG41 I



Spot LED BBG400, a one-LED adjustable, semi-recessed luminaire with 10° or 25° optic



BBG400

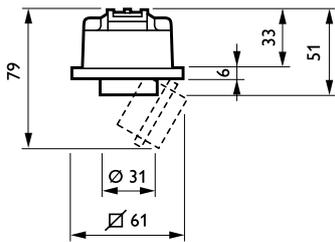
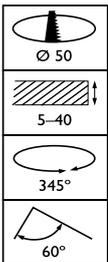
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG400 1xLED-K2-10-/CW PSU-E 220-240V	0.15	009247 99
BBG400 1xLED-K2-10-/BL PSU-E 220-240V	0.15	009254 99
BBG400 1xLED-K2-25-/CW PSU-E 220-240V	0.15	009421 99
BBG400 1xLED-K2-10-/WW PSU-E 220-240V	0.15	803609 99
BBG400 1xLED-K2-25-/WW PSU-E 220-240V	0.15	803616 99

Please contact your local Philips representative for additional configurations



Spot LED BBG401, a one-LED adjustable, semi-recessed luminaire with 10° or 25° optic



BBG401

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG401 1xLED-K2-10-/CW PSU-E 220-240V	0.20	009223 99
BBG401 1xLED-K2-10-/WW PSU-E 220-240V	0.20	803623 99
BBG401 1xLED-K2-25-/WW PSU-E 220-240V	0.20	803647 99

Please contact your local Philips representative for additional configurations

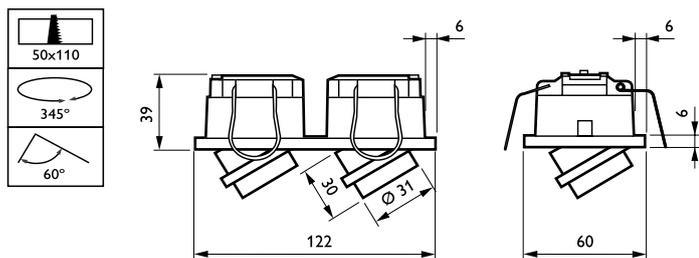


Spot LED BBG402, a two-LED adjustable, semi-recessed luminaire with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG402 2xLED-K2-10-/CW PSU-E 220-240V	0.37	009261 99
BBG402 2xLED-K2-10-/WW PSU-E 220-240V	0.35	803630 99

Please contact your local Philips representative for additional configurations



BBG402

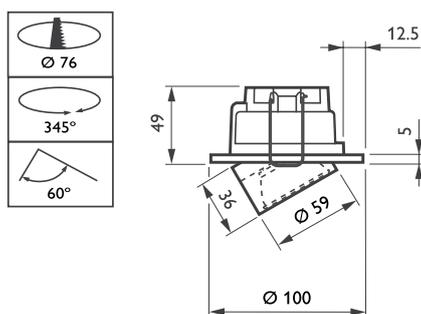


Spot LED BBG440, a 3 x K2 LED adjustable, semi-recessed luminaire with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG440 3xLED-K2-10-/WWW PSU-E 220-240V	0.29	802657 99
BBG440 3xLED-K2-25-/WWW PSU-E 220-240V	0.29	803012 99

Please contact your local Philips representative for additional configurations



BBG440

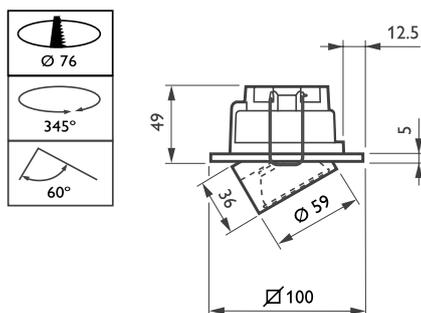


Spot LED BBG441, a 3 x K2 LED adjustable, semi-recessed luminaire with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG441 3xLED-K2-10-/WWW PSU-E 220-240V	0.32	802633 99
BBG441 3xLED-K2-25-/WWW PSU-E 220-240V	0.32	802992 99

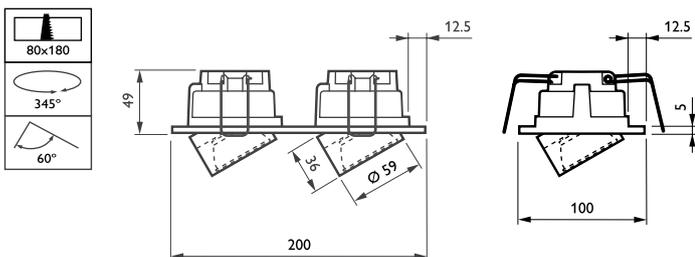
Please contact your local Philips representative for additional configurations



BBG441



Spot LED BBG442, a 6 x K2 LED adjustable, semi-recessed luminaire with 10° or 25° optic



BBG442

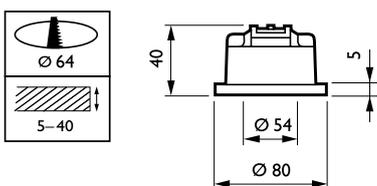
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG442 6xLED-K2-10-/WWW PSU-E 220-240V	0.59	802671 99
BBG442 6xLED-K2-25-/WWW PSU-E 220-240V	0.64	803036 99

Please contact your local Philips representative for additional configurations



Spot LED BBG450, a 3 x K2 LED fixed downlight with 10° or 25° optic



BBG450

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG450 3xLED-K2-10-/CW PSU-E 220-240V	0.21	802688 99
BBG450 3xLED-K2-10-/WWW PSU-E 220-240V	0.21	802695 99
BBG450 3xLED-K2-25-/CW PSU-E 220-240V	0.21	803043 99
BBG450 3xLED-K2-25-/WWW PSU-E 220-240V	0.21	803050 99

Please contact your local Philips representative for additional configurations

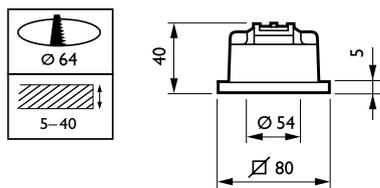


Spot LED BBG451, a 3 x K2 LED fixed downlight with 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG451 3xLED-K2-10-/CW PSU-E 220-240V	0.23	802701 99
BBG451 3xLED-K2-10-/WWW PSU-E 220-240V	0.23	802718 99
BBG451 3xLED-K2-25-/CW PSU-E 220-240V	0.23	803067 99
BBG451 3xLED-K2-25-/WWW PSU-E 220-240V	0.23	803074 99

Please contact your local Philips representative for additional configurations



BBG451

Zadora



Zadora – free to create

Zadora is a range of recessed downlights for MASTERLine 35 and 50 mm dichroic halogen lamps (with beams of 8°, 24°, 36° and 60°) and Twistline Alu lamps. It is available in fixed and adjustable versions, the latter offering 30° orientation from the vertical. Zadora downlights are also available in ready-to-install kit versions. Maintenance is made easy by direct lamp access.

www.philips.com/lighting

Zadora Adjustable recessed



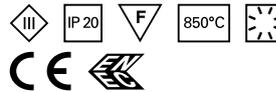
Zadora Fixed recessed



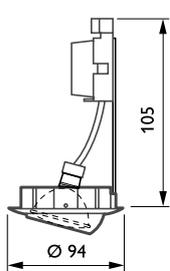
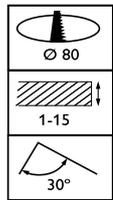
Zadora Adjustable

Type	QBD161, QBD167, QBD570
Light source	Halogen: 1 x MASTERLine ES / GU5.3 / 45 W 1 x Brilliantline Dichroic / GU4 / 20, 35 W 1 x Twistline Dichro / GZ10 / 50 W
Lamp beam angle	MASTERLine 25°, 40°
Lamp included	No (optional)
Lamp position	Vertical
Transformer	Electronic (ET)
Color	Grey (GR) White (WH) Black (BK) Anthracite (ANT) Aluminum (ALU)

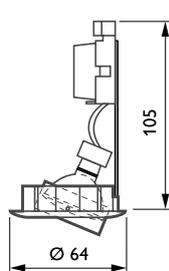
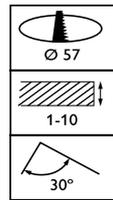
	Matt finishing (MAT) Chrome (CR) Gold (GO)
Material	Die-cast aluminum and steel
Installation	Fixation by means of spring fasteners
Maintenance	Direct lamp access
Remarks	Bracket (BR) installed to ensure a safe distance between luminaire and ceiling Dedicated ready to install versions available (K), downlight, lamp and electronic transformer
Main applications	Office, retail



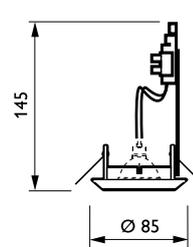
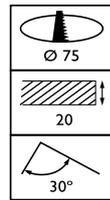
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QBD161



QBD167



QBD570



Zadora QBD161 adjustable downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD161 1xHAL-MR50-45W/12V-GU5.3 WH	0.23	008028 00

Please contact your local Philips representative for additional configurations



Zadora QBD167 adjustable downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD167 1xHAL-PR35-35W/12V-GU4 WH	0.10	008066 00

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight
with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-MR50-45W 12V BR GR	0.17	573342 99

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight
with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-R-40-50W-GZ10 230V CLII WH	0.26	573120 00
QBD570 1xHAL-MR50-45W 12V BR WH	0.17	573281 99
QBD570 1xHAL-FR50-50W K ET WH	0.27	574325 00

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight
with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-MR50-45W 12V BR BK	0.17	573328 99

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight
with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-MR50-45W 12V BR ANT	0.17	573359 99

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight
with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-R-40-50W-GZ10 230V CLII ALU	0.26	573151 00
QBD570 1xHAL-MR50-45W 12V BR ALU	0.17	573311 99
QBD570 1xHAL-FR50-50W K ET ALU	0.27	574356 00

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-MR50-45W 12V BR MAT	0.17	573335 99

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-R-40-50W-GZ10 230V CLII CR	0.26	573137 00
QBD570 1xHAL-MR50-45W 12V BR CR	0.17	573298 99
QBD570 1xHAL-FR50-50W K ET CR	0.27	574332 00

Please contact your local Philips representative for additional configurations



Zadora QBD570 adjustable downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBD570 1xHAL-R-40-50W-GZ10 230V CLII GO	0.26	573144 00
QBD570 1xHAL-MR50-45W 12V BR GO	0.17	573304 99
QBD570 1xHAL-FR50-50W K ET GO	0.27	574349 00

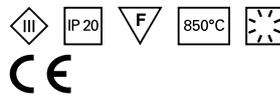
Please contact your local Philips representative for additional configurations



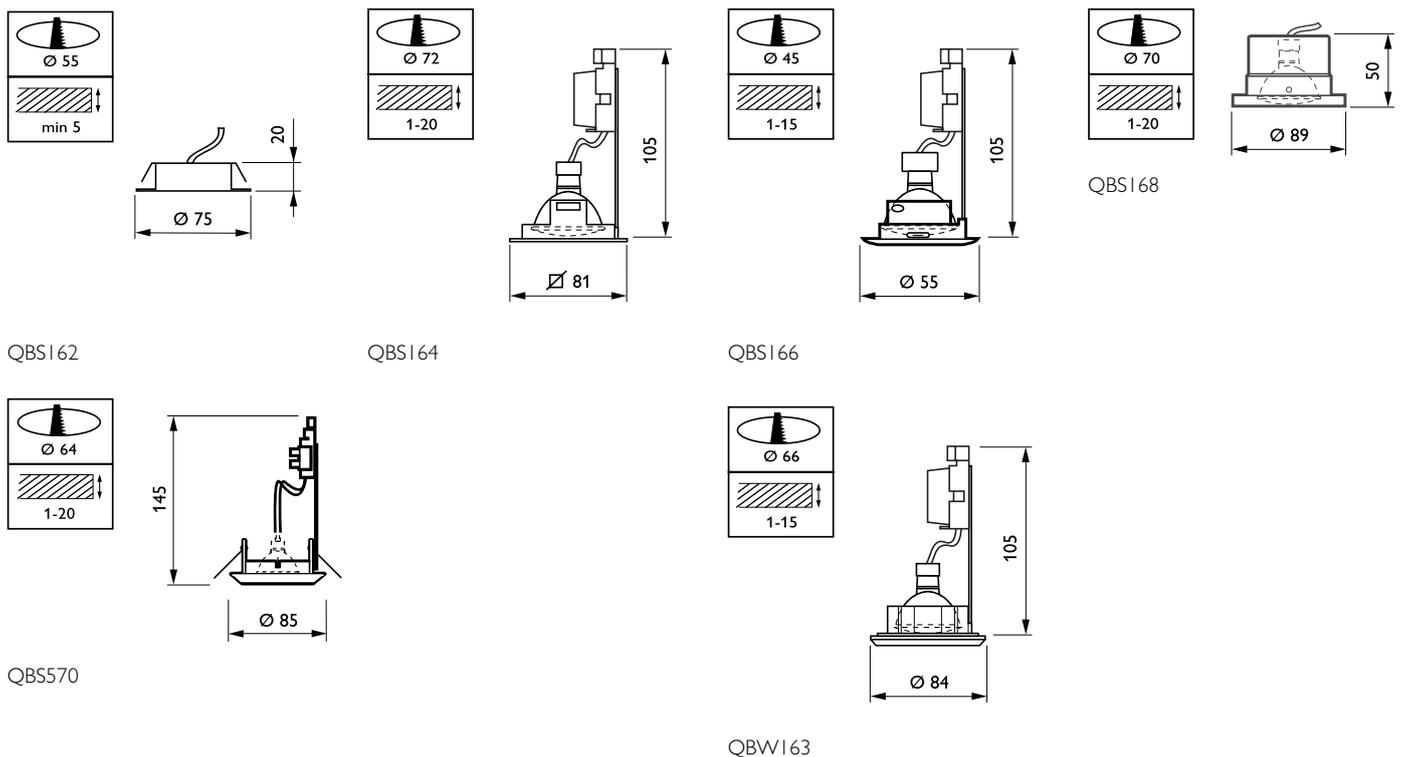
Zadora fixed

Zadora Fixed

Type	QBSI 62, QBSI 64, QBSI 66, QBSI 68, QBS570, QBWI 63	Aluminum (ALU) Matt finishing (MAT) Chrome (CR) Pink (PK) Gold (GO)
Light source	Halogen: 1 x MASTERLine ES / GU5.3 / 45 W 1 x Brilliantline Dichroic / GU4 / 35 W 1 x Capsuleline / G4 / 20 W 1 x Twistline Dichro / GZ10 / 50 W	Material Die-cast aluminum and steel
Lamp beam angle	MASTERLine 25°, 40°	Installation Fixation by means of spring fasteners
Lamp included	No	Maintenance Direct lamp access
Lamp position	Vertical	Remarks Bracket (BR) installed to ensure a safe distance between luminaire and ceiling Dedicated ready to install versions available (K), downlight, lamp and electronic transformer
Transformer	Electronic (ET)	Main applications Office, retail
Suspension / mounting	Bracket (BR)	
Color	Grey (GR) White (WH) Black (BK) Anthracite (ANT)	



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.





Zadora QBSI62 fixed downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBSI62 1xHAL-C20W/12V-G4 WH	0.06	008035 99

Please contact your local Philips representative for additional configurations



Zadora QBSI64 fixed downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBSI64 1xHAL-MR50-45W/12V-GU5.3 WH	0.18	008042 00

Please contact your local Philips representative for additional configurations



Zadora QBSI66 fixed downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBSI66 1xHAL-PR35-35W/12V-GU4 WH	0.08	008059 00

Please contact your local Philips representative for additional configurations



Zadora QBSI68 decorative fixed downlight with halogen lamp, in white (WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBSI68 1xHAL-MR50-45W/12V-GU5.3 WH	0.22	008073 00

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-FR50-45W 12V BR WH	0.14	573205 99
QBS570 1xHAL-FR50-50W K ET WH	0.22	574240 00

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-MR50-45W 12V BR BK	0.14	573243 99

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-MR50-45W 12V BR ANT	0.14	573274 99

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-FR50-45W 12V BR ALU	0.14	573236 99
QBS570 1xHAL-FR50-50W K ET ALU	0.22	574271 00

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-FR50-45W 12V BR CR	0.14	573212 99
QBS570 1xHAL-FR50-50W K ET CR	0.22	574257 00

Please contact your local Philips representative for additional configurations



Zadora QBS570 fixed downlight with halogen lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBS570 1xHAL-FR50-45W 12V BR GO	0.14	573229 99
QBS570 1xHAL-FR50-50W K ET GO	0.22	574264 00

Please contact your local Philips representative for additional configurations



Zadora QBW163 waterproof fixed
downlight with halogen lamp, in white
(WH) only

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBW163 1xHAL-PR35-35W/12V-GU4 WH	0.23	008080 00

Please contact your local Philips representative for additional configurations

eW Downlight Powercore



eW Downlight Powercore – minimal visual impact

Philips eW Downlight is a low-profile, surface-mounted downlight for general lighting. Offering the usual LED benefits of high energy efficiency and long lifetime, it allows incredible energy and maintenance savings versus incandescent and halogen based luminaires.

The eW Downlight is ideally suited for lobbies, corridors, elevators, conference rooms and interiors in retail and hospitality environments. The low profile and basic design of the eW Downlight ensures minimal visual impact in applications where recessed installation is not possible or desirable.

The eW Downlight is available in warm white (2700 and 4000 K) and with 30° and 65° beam angles. eW Downlight Powercore uses DIMand™ technology to enable dimming with commercially available ELV-type dimmers. The eW Downlight incorporates Powercore® digital-processing technology. This accurately controls power output to the system directly from the line voltage, eliminating the need for an external power supply. Powercore® technology increases efficiency, lowers the overall costs and eases installation by integrating power management directly within the product.

With an integrated driver, the eW Downlight is very easy to install. In addition, it makes control very easy by working with commercially available line voltage dimmers (ELV).

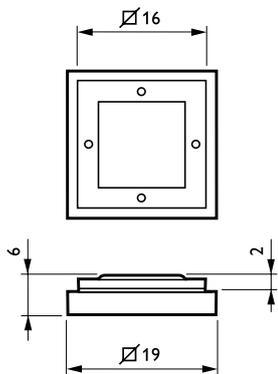
eW stand for EssentialWhite. The EssentialWhite series provides the inherent advantages of LED sources, such as long life, low maintenance and low energy consumption, for common or retrofit applications that do not require advanced control.

www.philips.com/lighting

eW Downlight Powercore	
Type	BCS401
Light source	9 x HB LED
Light color	Warm white: 2700 K Neutral white: 4000 K
Power supply	230 V AC
Power consumption	15 W
Controls (optional)	Line switches and commercially available ELV-type (electronic low voltage) dimmers.
Optic	Medium beam (30°) Wide beam (65°)

Lifetime	50 000 hours (70% lumen maintenance at Ta=25° C)
Adjustment	N.A.
Material	Housing: aluminum and polycarbonate Optic: polycarbonate
Remarks	Dimmable using commercial available ELV dimmers (Electronic Low Voltage)
Main applications	Hospitality

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCS401



BCS401 eW Downlight Powercore

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCS401 9xLED-HB/WW-2700 65	0.68	714111 99
BCS401 9xLED-HB/NW-4000 65	0.68	714128 99
BCS401 9xLED-HB/WW-2700 30	0.68	714135 99
BCS401 9xLED-HB/NW-4000 30	0.68	714142 99

Please contact your local Philips representative for additional information
At the time of going to press, not all data were available



Latina



Latina – simple and effective

Latina is a recessed downlight for compact fluorescent PL-C lamps, with spring fasteners for easy and quick installation. Square and round models are available. Latina comes in ready-to-install kit versions with pre-mounted lamps and pre-connected separate gearbox. Accessories include a frosted glass cover and clear decorative glass cover.

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Latina FBH020



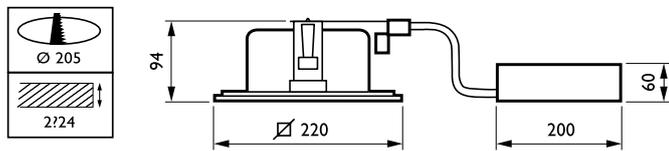
Latina FBH022



Latina	
Type	FBH022
Light source	Compact fluorescent: 2 × MASTER PL-C 2 Pin / G24d-2 / 18 W 2 × MASTER PL-C 2 Pin / G24d-3 / 26 W 2 × MASTER PL-C 4 Pin / G24q-2 / 18 W 2 × MASTER PL-C 4 Pin / G24q-3 / 26 W
Lamp included	Yes (K or lamp color 830 or 840)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC)
	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF)
Material	Body and gear box: metal Reflector: high-gloss anodized metal
Installation	Fixation by means of spring fasteners Through-wiring possible
Maintenance	Lamp access after opening glass cover
Main applications	Retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBH022



Latina FBH022 downlight with compact fluorescent lamps and high-gloss optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBH022 2xPL-C/2P18W/830 K I 230V	3.00	148571 99
FBH022 2xPL-C/2P26W/830 K I 230V	3.00	148595 99
FBH022 2xPL-C/2P26W/840 K IC 230V	3.00	148649 99
FBH022 2xPL-C/4P18W/830 K HF 230-240V	2.25	802480 99
FBH022 2xPL-C/4P26W/830 K HF 230-240V	2.25	802503 99

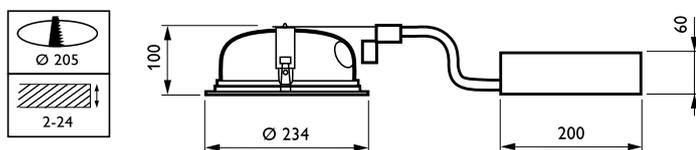
Please contact your local Philips representative for additional configurations

Latina	
Type	FBH020
Light source	Compact fluorescent: 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W
Lamp included	Yes (K or lamp color 830 or 840)
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF)

Material	Body and gear box: metal Reflector: high-gloss anodized metal
Installation	Fixation by means of spring fasteners Through-wiring possible
Maintenance	Direct lamp access or after removing the front glass
Accessory	Frosted glass cover; clear decorative glass cover
Main applications	Retail, recreational, public buildings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FBH020



Latina FBH020 downlight with compact fluorescent lamps and high-gloss optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBH020 2xPL-C/2P18W/840 K I 230V	3.00	147239 99
FBH020 2xPL-C/2P26W/840 K I 230V	3.00	147253 99
FBH020 2xPL-C/2P26W/840 K IC 230V	2.80	800196 99
FBH020 2xPL-C/4P18W/830 K HF 230-240V	1.90	801902 99
FBH020 2xPL-C/4P26W/830 K HF 230-240V	1.90	801926 99

Please contact your local Philips representative for additional configurations

Accessories



Frosted glass

Product ID	EOC
GBH020 FRG	146676 99



Recessed glass, structured

Product ID	EOC
GBH020 RG	146683 99



Wall Marker asymmetric LED



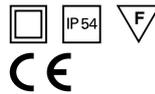
Wall Marker asymmetric LED – a future-proof direction

The new Wall marker asymmetric LED is ideal for wall and step lighting, and illuminating paths and areas or access routes. Thanks to the LUXEON® K2 LEDs, it provides an efficient lighting solution with excellent luminance. Three choices of brightness levels are available. Rugged die-cast aluminum construction, with an enclosed light engine providing IP54 protection.

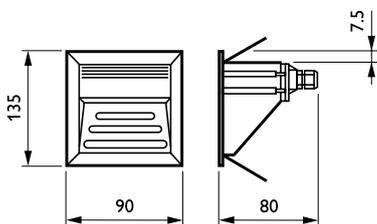
www.philips.com/lighting

Wall Marker asymmetric LED

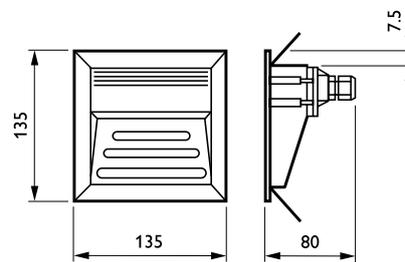
Wall marker asymmetric LED			
Type	BWG331 BWG332 BWG333	Operating temperature	-20°C > T _a > 35°C
Light source	BWG331: 1 × LUXEON® K2 BWG332: 2 × LUXEON® K2 BWG333: 3 × LUXEON® K2	Lifetime	50,000 hrs (70% lumen maintenance)
Light color	Cool white	Option	Lighting controls: switch only, dimming
Power supply	220 - 240 V / 50 - 60 Hz	Material	Housing: aluminum Bracket: stainless steel Recessed box: plastic
Power consumption	1 × LED-K2: max 3 W 2 × LED-K2: max 6 W 3 × LED-K2: max 9 W	Installation	Recessed, vertical via recessed box
Optic / cover	Diffuse window	Accessory	Recessed boxes
		Main applications	Guidance lighting indoor and outdoor



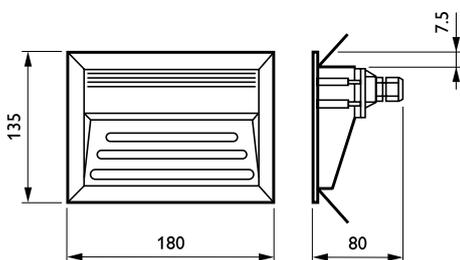
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BWG331



BWG332



BWG333



Wall marker asymmetric LED
BWG331

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWG331 1xLED-LXN/CW PSU 220-240V CLII	0.30	808499 99

Please contact your local Philips representative for additional configurations



Wall marker asymmetric LED
BWG332

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWG332 2xLED-LXN/CW PSU 220-240V CLII	0.42	808505 99

Please contact your local Philips representative for additional configurations



Wall marker asymmetric LED
BWG333

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWG333 3xLED-LXN/CW PSU 220-240V CLII	0.55	808512 99

Please contact your local Philips representative for additional configurations

Odyssey



Odyssey – unobtrusive downlighting

Odyssey is a range of recessed downlights for general indoor lighting. It is designed for use with compact fluorescent, high-intensity discharge and halogen lamps. Suitable for mounting on the wall, floor or ceiling and offering a choice of reflectors, Odyssey delivers an asymmetrical light distribution. A vandal-resistant version with polycarbonate front cover is available. A metal front face in a RAL color is also available to ensure Odyssey matches the surrounding surface and to optimize the performance of the optic. Accessories include an integration frame, a square mesh cover, tinted glass and a concrete mounting box.

www.philips.com/lighting

Odyssey 100



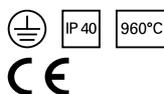
Odyssey 200



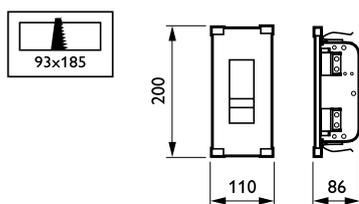
Odyssey 300



Odyssey 100			
Type	QBR600 (width 110 mm)	Material	Housing: extruded profile aluminum, grey (RAL colors available on request) Front face: glass
Light source	Halogen: 1 x MASTERLine ES / GU5.3 / 50 W	Installation	Recessed in wall or ceiling In ceilings of thickness 3 - 24 mm with adjustable clips, or with integration frame or countersunk
Lamp included	No	Maintenance	Lamp access after opening the glass cover
Lamp position	Vertical	Remarks	Transformer to be ordered separately Delivered with male and female electrical connector fitted on the luminaire
Transformer	Transformer 12V	Accessory	Integration frame, square mesh cover, concrete mounting box
Optic	Matt mirror (M) White reflector without lamellae (WR)	Main applications	Retail
Light distribution	Asymmetrical		
Color; glass front face	Grey (GR) White (WH) Anthracite (ANT)		
Option	Metal front face with RAL color choice		



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QBR600 100



Odyssey 100 QBR600 downlight with halogen lamp and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBR600 1xHAL-PR50-50W M L I 10 GR	0.80	390888 00

Please contact your local Philips representative for additional configurations



Odyssey 100 QBR600 downlight with halogen lamp and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBR600 1xHAL-PR50-50W M L I 10 WH	0.80	390895 00

Please contact your local Philips representative for additional configurations



Odyssey 100 QBR600 downlight with halogen lamp and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QBR600 1xHAL-PR50-50W M L I 10 ANT	0.80	390871 00

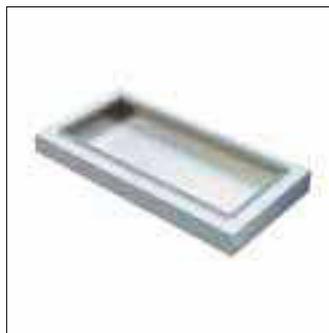
Please contact your local Philips representative for additional configurations

Accessories



Square mesh cover 100. Provides protection and makes it possible to vary the light for different visual guidance needs

Product ID	EOC
ZBR600 MC-100 GR	391830 00



Concrete mounting box 100. Highly resistant metallic box for an easy installation in concrete walls. To be inserted in the wall before the concrete is poured

Product ID	EOC
ZBR600 CMB-100 WH	565699 00



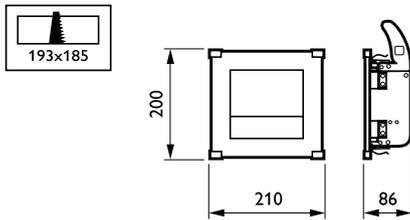
Integration frame 100. Steel integration frame, painted grey, delivered with two sliding squares, for quick and easy installation in any type of supports (irrespective of material, thickness and position). Allows complete integration of the luminaire into the wall

Product ID	EOC
ZBR600 FR-100	559599 00

Odyssey 200			
Type	QBR600 (width 210 mm, halogen lamp version) FBR600 (width 210 mm, compact fluorescent lamp version)	Option	High Frequency (HF) version Metal front face with RAL color choice or with sign lighting
Light source	Halogen: 1 x Plusline Small / R7s / 150 W Compact fluorescent: 1 x MASTER PL-C 2 Pin / G24d-1 / 13 W		Vandal-proof version (VP) with polycarbonate front cover (IK10, 20j)
Lamp included	No	Material	Housing: extruded profile aluminum, grey (RAL colors available on request) Front face: glass
Lamp position	Horizontal	Installation	In wall, floor or ceiling In ceilings of thickness 3 - 24 mm with adjustable clips, or with integration frame or countersunk Maintenance: lamp access after opening the glass cover
Gear (for FBR600)	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I)	Accessory	Integration frame, square mesh cover; tinted glass, concrete mounting box
Optic	Matt mirror (M) Semi-high gloss mirror (D) White reflector without lamellae (WR)	Remarks	Delivered with male and female electrical connector fitted on the luminaire
Light distribution	Asymmetrical	Main applications	Retail
Color, glass front face	Grey (GR) White (WH) Anthracite (ANT)		



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QBR/FBR600 200



Odyssey 200 QBR/FBR600 downlight with compact fluorescent and halogen lamp respectively and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBR600 1xPL-C/2P13W I 230V M L210 GR	1.50	390857 00
FBR600 1xPL-C/2P13W I 230V WR L210 GR	1.50	390970 00
QBR600 1xHAL-TDS150W M L210 GR	1.70	390994 00

Please contact your local Philips representative for additional configurations

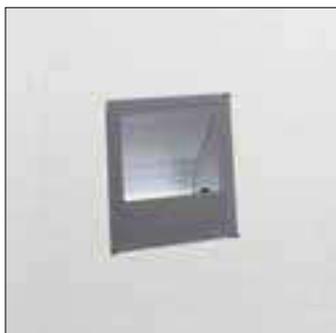


Odyssey 200 QBR/FBR600 downlight with compact fluorescent and halogen lamp respectively and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBR600 1xPL-C/2P13W I 230V VP D L210 WH	1.50	161334 00
FBR600 1xPL-C/2P13W I 230V M L210 WH	1.50	390864 00
FBR600 1xPL-C/2P13W I 230V WR L210 WH	1.50	390918 00
QBR600 1xHAL-TDS150W M L210 WH	1.70	390932 00

Please contact your local Philips representative for additional configurations



Odyssey 200 QBR/FBR600 downlight with compact fluorescent and halogen lamp respectively and matt mirror (M) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBR600 1xPL-C/2P13W I 230V M L210 ANT	1.50	390840 00
QBR600 1xHAL-TDS150W M L210 ANT	1.70	390925 00

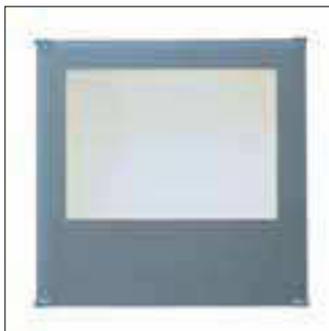
Please contact your local Philips representative for additional configurations

Accessories



Square mesh cover. Provides protection and makes it possible to vary the light for different visual guidance needs

Product ID	EOC
ZBR600 MC-200 GR	391816 00



Tinted glass. Blends smoothly into glass walls or dark wall finishes, producing a mirrored effect

Product ID	EOC
ZBR600 G-T200 ANT	391823 00



Concrete mounting box. Highly resistant metallic box for an easy installation in concrete walls. To be inserted in the wall before the concrete is poured

Product ID	EOC
ZBR600 CMB-200 WH	565682 00

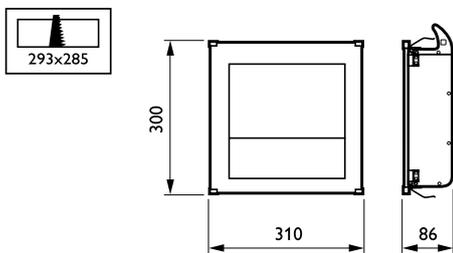


Integration frame. Steel integration frame, painted grey, delivered with two sliding brackets, for quick and easy installation in any type of supports (irrespective of material, thickness and position). Allows complete integration of the luminaire into the wall

Product ID	EOC
ZBR600 FR-200	559582 00

Odyssey 300			
Type	QBR600 (width 310 mm, halogen lamp version) MBR600 (width 310 mm, HID lamp version) FBR600 (width 310 mm, compact fluorescent lamp version)	Option	Metal front face with RAL color choice or with deflector Vandal-proof version (VP) with polycarbonate front cover (IK10, 20))
Light source	Halogen: 1 x Plusline Small / R7s / 200 W HID: 1 x MASTERColour CDM-TD / RX7s / 70, 150 W Compact fluorescent: 1 x MASTER PL-C 2 Pin / G24d-1 / 18, 26 W	Material	Housing: extruded profile aluminum, grey (RAL colors available on request) Front face: glass Maintenance: lamp acces after opening the glass cover
Lamp included	No	Installation	In wall, floor or ceiling In ceilings of thickness 3 - 24 mm with adjustable clips, or with integration frame or countersunk
Lamp position	Vertical	Accessory	Integration frame, square mesh cover, tinted glass, concrete mounting box
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC)	Remarks	Separate gear box with CDM-TD lamp version Delivered with male and female electrical connector fitted on the luminaire
Optic	High-gloss mirror (C) Semi high-gloss mirror (D) White reflector without lamellae (WR)	Main applications	Retail
Light distribution	Asymmetrical	   for FBR/MBR600 only 	
Color, glass front face	Grey (GR) White (WH) Anthracite (ANT)		

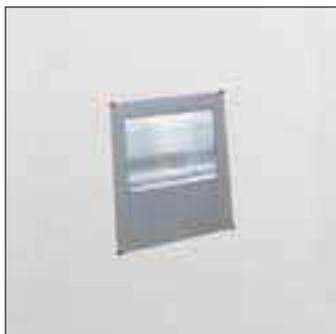
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QBR/MBR/FBR600 300

The vandal-proof version FBR600VP has a white-painted polycarbonate front cover (IK10)





Odyssey 300 QBR/MBR/FBR600 downlight with compact fluorescent, high-intensity discharge or halogen lamp and high-gloss mirror (C), semi-high-gloss mirror (D) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBR600 1xCDM-TD150W IC 230V C L310 GR	6.20	391175 00
MBR600 1xCDM-TD150W IC 230V D L310 GR	6.20	391236 00
FBR600 1xPL-C/2P26W I 230V C L310 GR	3.20	391410 00
FBR600 1xPL-C/2P26W I 230V D L310 GR	3.20	391472 00
QBR600 1xHAL-TDS200W C L310 GR	2.60	391731 00

Please contact your local Philips representative for additional configurations



Odyssey 300 QBR/MBR/FBR600 downlight with compact fluorescent, high-intensity discharge or halogen lamp and high-gloss mirror (C), semi-high-gloss mirror (D) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FBR600 1xPL-C/2P18W I 230V VP D L310 WH	2.40	161358 00
FBR600 1xPL-C/2P26W I 230V VP D L310 WH	2.40	161372 00
MBR600 1xCDM-TD150W IC 230V C L310 WH	6.20	391182 00
FBR600 1xPL-C/2P26W I 230V C L310 WH	3.20	391427 00
QBR600 1xHAL-TDS200W C L310 WH	2.60	391748 00

Please contact your local Philips representative for additional configurations



Odyssey 300 QBR/MBR/FBR600 downlight with compact fluorescent, high-intensity discharge or halogen lamp and high-gloss mirror (C), semi-high-gloss mirror (D) or white reflector (WR) optic for asymmetrical light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MBR600 1xCDM-TD150W IC 230V C L310 ANT	6.20	391168 00
MBR600 1xCDM-TD150W IC 230V D L310 ANT	6.20	391229 00
MBR600 1xCDM-TD70W IC 230V C L310 ANT	5.20	391281 00
MBR600 1xCDM-TD70W IC 230V D L310 ANT	5.20	391342 00
FBR600 1xPL-C/2P26W I 230V C L310 ANT	3.20	391403 00
QBR600 1xHAL-TDS200W C L310 ANT	2.60	391724 00

Please contact your local Philips representative for additional configurations

Accessories



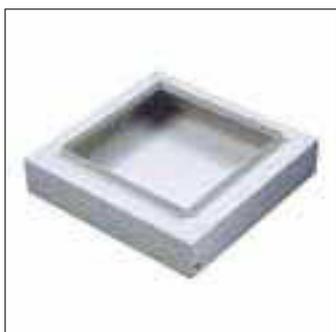
Square mesh cover. Provides protection and makes it possible to vary the light for different visual guidance needs

Product ID	EOC
ZBR600 MC-300 GR	391809 00



Tinted glass. Blends smoothly into glass walls or dark wall finishes, producing a mirrored effect

Product ID	EOC
ZBR600 G-T300 ANT	391793 00



Concrete mounting box. Highly resistant metallic box for an easy installation in concrete walls. To be inserted in the wall before the concrete is poured

Product ID	EOC
ZBR600 CMB-300 WH	565675 00



Integration frame. Steel integration frame, painted grey, delivered with two sliding brackets, for quick and easy installation in any type of supports (irrespective of material, thickness and position). Allows complete integration of the luminaire into the wall

Product ID	EOC
ZBR600 FR-300	559575 00

Amazon

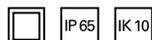


Amazon – a touch of ambience

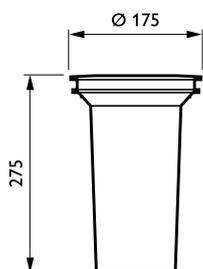
Amazon DBC270/271 is a ground-recessed floodlight for indoor uplighting effects, e.g. for guidance or to create a dramatic indoor ambience. It comes with three color filters (forest green, marine blue and natural white) and a refractor for appealing effects. The vandal-resistant TouchSafe cover means the diffuser can be touched without fear of burning your fingers. Thanks to its shallow recess depth, Amazon DBC270/271 is particularly easy to install.

www.philips.com/lighting

Amazon			
Type	DBC270, DBC271	Material	Housing: technopolymer (PBT) Diffuser: polycarbonate Deco ring: stainless steel
Light source	DBC270: Compact fluorescent: PL-E / E27 / max 15 W Incandescent: R63 / E27 / max 40 W DBC271: Halogen: Twistline Dichroic / GZ10 / max 50 W	Installation	Ground recessed
		Remarks	Vandal-resistant 'TouchSafe' polycarbonate cover Luminaires standard delivered with three color filters and the refractor
		Main applications	Office, retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



DBC270/271



Amazon DBC270/271 architectural flood-lighting luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
DBC270 MAX40W-E27	1.45	140339 00
DBC271 MAX50W-GZ10	1.45	140346 00

Please contact your local Philips representative for additional configurations

Accessories



Very low voltage 50 VA toroidal transformer: 230 V-12 V-50/60 Hz. Protected against overheating, overloads and short-circuits. Ready to use - quick to install. Opening cap. Automatic cable holder. Automatic secondary connection. Self-screwable base. Unlockable baseplate. Minimum charge 20 W

Product ID	EOC
ZKL560 TRF-50 WH	143330 00



Very low voltage 310 VA toroidal transformer: 230 V-12 V-50/60 Hz. Protected against overheating, overloads and short-circuits. Ready to use - quick to install. Single terminal block on the 230 V primary circuit. Triple terminal block on the 12 V secondary circuit. Self-screwable base. Unlockable baseplate. Minimum charge 20 W

Product ID	EOC
ZKL560 TRF-310 WH	143347 00



Very low voltage 60 VA dimmable electronic transformer: 230/240 V-12 V-50/60 Hz. Very compact size. Trailing edge-leading edge dimming. Protected against overheating, overloads and short-circuits. Ready to use - quick to install. Min./Max. charge 10 W/60 W. Maximum distance to the lamp 2 m

Product ID	EOC
ZKL920 ETR-60 WH	143354 99



Very low voltage 105 VA dimmable electronic transformer: 230/240 V-12 V-50/60 Hz. Very compact size. Trailing edge-leading edge dimming. Protected against overheating, overloads and short-circuits. Ready to use - quick to install. Min./Max. charge 35 W/105 W. Maximum distance to the lamp 2 m

Product ID	EOC
ZKL920 ETR-105 WH	143361 99



Very low voltage 150 VA dimmable electronic transformer: 230/240 V-12 V-50/60 Hz. Very compact size. Trailing edge-leading edge dimming. Protected against overheating, overloads and short-circuits. Ready to use - quick to install. Double terminal block on the 230 V primary circuit. Triple terminal block on the 12 V secondary circuit.

Min./Max. charge 30 W/150 W. Maximum distance to the lamp 2 m

Product ID	EOC
ZKL920 ETR-150 WH	143378 99





Projectors and decorative luminaires

Selection guide – Projectors and decorative luminaires

Luminaire family	Page	LED	Lamps									
			Fluorescent		HID MASTERColour							HID LW
			LED	TL5	CDM-Tm	CDM-TC	CDM-T	CDM-TD	CDM-R III	CDM-R	CDM-TP	HPI Plus
												
Spot LED Dynamic BCG700/702 	6.14	•										
Fiorenza 	6.16			•	•	•		•	•			
UnicOne 	6.38			•	•			•				
Soprano 	6.50					•						
Musa 	6.56				•	•		•	•			
Magneos 	6.64			•	•	•			•			
EFix Micro 	6.70			•								
Bolero 	6.76					•						
Monza 	6.80					•	•					
Spot LED 	6.84	•										
Zadora Spotlight 	6.92											

Luminaire family	Lamps								Adjustments	
	HID White SON		Halogen LV				Halogen HV		vertical	horizontal
	SDW-T	SDW-TG	Capsuleline	MASTERLine TC	MASTERLine III	Dichroic	Plusline	Hal-Rxx		
										
Spot LED Dynamic BCG700/702										
Fiorenza		•		•	•			•	90°	355°
UnicOne			•	•	•	•			77°	360°
Soprano	•		•						85°	355°
Musa	•	•	•		•		•	•	90°	355°
Magneos		•		•					90°	350°
EFix Micro						•		•	90°	180°
Bolero	•								85°	355°
Monza	•						•		90°	355°
Spot LED										
Zadora Spotlight						•			90°	315°

Selection guide – Projectors and decorative luminaires

Luminaire family	Page	LED	Lamps								
			Fluorescent	HID MASTERColour				HID LW	HID White SON		Halogen LV
			TL5	CDM-Tm	CDM-TC	CDM-T	CDM-TP	HPI Plus	SDW-T	SDW-TG	Capsuleline
											

Suspended luminaires

Spot LED Dynamic BPG700

	6.108	•									
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UnicOne Pendant Micro

	6.112			•							•
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UnicOne Pendant Compact

	6.114					•				•	
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Garnea

	6.116					•	•		•		
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Pendola

	6.122						•		•		
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Unibay

	6.126						•	•	•		
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Scrabble

	6.130										
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Luminaire family	Lamps										
	Halogen LV			Halogen HV		HalogenA	Mercury	Compact fluorescent			QL
	MASTERLine TC	Aluline I I I	Dichroic	Plusline	Hal-Rxx	HalogenA Tubular	HPI-T/HPL-N	PL-C	PL-T	PL-H	QL
											

Suspended luminaires

Spot LED Dynamic BPG700

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UnicOne Pendant Micro

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UnicOne Pendant Compact

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Garnea

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Pendola

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Unibay

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Scrabble

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Philips MASTERColour – harnessing the power of color and texture

Our eye is automatically drawn to certain colors, shapes and textures. Especially when they are accentuated by light. With MASTERColour, reds appear deep, rich, luxurious. Blues and greens look vibrant. Yellow is more striking, orange is brighter, warmer. There is even a greater level of contrast with black and white. In fact, the sparkling color impression of MASTERColour has led to it being considered by many as the light for retail.

At the same time, the crisp, white light really emphasizes the texture of goods on display. The visual 'feel' of fabrics, especially coarser ones, is greatly accentuated. Special details such as embroidery become more prominent. And accessories like jewelry, belts and bags almost seem to have an extra, dynamic dimension.



Portfolio Philips MASTERColour CDM lamps

Philips MASTERColour CDM-T

Philips has manufactured Philips MASTERColour CDM-T lamps for more than ten years, and now offers the widest range available, in wattages from 35 to 250 W and in a choice of light color appearances.

- 830 = warm white, available in 35, 70, 150 and 250 W
- 942 = cool white, available in 35, 70, 150 and 250 W



Philips MASTERColour CDM-TC

Philips MASTERColour CDM-TC presents the benefits of Philips MASTERColour CDM-T lamps in a compact package with 25% less volume than Philips MASTERColour CDM-T lamps. It is therefore ideal for use in small luminaires with high beam intensities that provide sparkling displays in retail lighting. It is perfect for shop windows as passers-by see the displays, not the luminaires.

- 830 = warm white, available in 35 and 70 W
- 942 = cool white, available in 35 and 70 W



**Philips MASTERColour CDM-T Elite and
Philips MASTERColour CDM-TC Elite***

MASTERColour CDM Elite lamps naturally have all the characteristics which have made MASTERColour CDM-T and-TC so popular, such as stable color temperature, crisp, white light and reduced heat generation. But MASTERColour CDM Elite goes further. Both Elite CDM-T and Elite CDM-TC versions offer an unbeatable combination of merchandising enhancement and lower operational cost.

- 930 = warm white, CDM-T available in 35, 70 and 150 W
- 930 = warm white, CDM-TC available in 35 and 70 W

* see next page for more detailed information



Philips MASTERColour CDM-Tm Mini*

Philips MASTERColour CDM-Tm Mini is a capsule lamp with a difference!

It replaces a halogen capsule to give the same lighting effect for just over a quarter of the energy and three times the lifetime. It therefore brings the outstanding benefits of CDM technology to very compact capsule luminaires with high beam intensities, mounted close to the goods on display.

- 830 = warm white, available in 20 W
- 930 = warm white, available in 35 W

* see next page for more detailed information



Philips MASTERColour CDM-RI I I

Philips MASTERColour CDM-RI I I directly replaces popular and trendy I I I mm diameter halogen lamps in existing luminaires (change of gear and lamp holder necessary) with outstanding benefits: energy and heat generation are cut by no less than 66% and CDM technology gives up to four times the life of halogen, drastically reducing lighting ownership costs. These lamps are ideal for window displays, as beam angles can be changed from spot to flood simply by changing the lamp.

- 830 = warm white, available in 20 W (10 and 24D)
- 830 = warm white, available in 35 W (10, 24 and 40D)
- 830 = warm white, available in 70 W (10, 24 and 40D)
- 942 = cool white, available in 35 and 70 W (10, 24 and 40D)



Philips MASTERColour CDM-TP

Philips MASTERColour CDM-TP extends low-cost upgrading possibilities to virtually every installation. CDM-TP lamps fit into the same luminaires (open without front glass) as Philips MASTER SDW-T, CDM-TP only requires a different gear:

- 830 available in 70 and 150 W
- 942 available in 70 and 150 W



Philips MASTERColour CDM-R PAR20 and PAR30

Philips MASTERColour CDM-R PAR20 and PAR30 are ideal for window displays, as beam angles and color code can be changed from spot to flood simply by changing the lamp. Physically a direct replacement for PAR20 and PAR30 halogen reflector lamps, Philips MASTERColour CDM-R lamps generate sparkling displays for one-third the energy and heat, and up to four times the life.

PAR 20

- 830 available in 35 W (10 and 30D)
- 942 available in 35 W (10 and 30D)



PAR 30

- 830 available in 35 W (10 and 30D)
- 830 available in 70 W (10, 30 and 40D)
- 942 available in 70 W (10, 30 and 40D)



Philips MASTERColour CDM-TD

Philips MASTERColour CDM-TD lamps have a light color that remains stable throughout a longer life, improved color rendering and the cost of lighting ownership is significantly reduced. The benefits of the upgrade - lower operating costs and improved light quality - are easy to experience.

They directly replace MHN-TD lamps.

- 830 available in 70 and 150 W
- 942 available in 70 and 150 W



Philips HID-PrimaVision
Mini gear 20W

Philips HID-PrimaVision electronic gear

The Philips HID-PrimaVision electronic gear range was invented for total compatibility with Philips MASTERColour CDM lamps.

They have significant benefits over copper-iron ballasts:

- Flicker-free light
- Stable light output
- Faster, fuss-free starting
- Up to 30% longer lifetime in combination with less energy usage
- Reduced color spread between lamps
- Automatic compensation for mains voltage variations (198 – 254 V) to extend lamp life
- Available for all Philips MASTERColour CDM lamps



Philips HID-PrimaVision gear 35W



Philips HID-PrimaVision gear 70W





Philips MASTERColour CDM Elite lamps – superior light quality from start to finish

The Philips MASTERColour CDM Elite family gives a unique combination of unbeatable light quality and consistent performance over lifetime, while keeping running costs low.

The Elite lamps' crisp, white light, high lumen output and superior color rendering bring sparkle to retail outlets. It's as if the volume is turned up on the colors; Elite simply brings out the best in whatever is on display.

In addition, excellent lumen maintenance levels – combined with exceptional color stability – mean these characteristics remain undiminished throughout the long lifespan of the lamp. Elite makes a store irresistible and keeps it that way.

MASTERColour CDM Elite is used with electronic gear and produces no visible 50 Hz flicker or end-of-life 'cycling'.

What you get is consistent, excellent quality light and visual comfort – from beginning to end.

Reduced overall cost of ownership

MASTERColour CDM Elite's extremely high efficiency means less power is required for each lumen of light produced.

And the consistent lumen levels significantly cut the need for maintenance and replacement, which also translates into savings.

A sustainable choice

Being a ceramic discharge metal-halide lamp, MASTERColour CDM Elite consumes much less energy than, for instance, incandescent. This equates to lower CO₂ emissions. It is also a Philips Green Flagship product, outperforming its predecessor or closest market competitors in two key environmental areas: hazardous substances and lifetime reliability.



Philips MASTERColour CDM-T Elite



Philips MASTERColour CDM-TC Elite





Philips MASTERColour CDM-Tm Mini – sparkling, convenient and unobtrusive

Philips MASTERColour CDM-Tm Mini – together with HID-PrimaVision Mini gear – offers a unique combination of miniature size, excellent light quality, low power consumption, long lifespan and reduced cost of ownership. Available in 20 and 35 W versions, its outstanding color rendering and constant color point make it an ideal solution for *the* demanding retail environment.

The Philips MASTERColour CDM-Tm Mini lamp is an excellent choice for accent and display lighting where sparkling effects are required. Its miniature size offers greater scope for creative, high-quality solutions in tight spaces. It is perfect for display, spot and track lighting solutions and is even suitable for certain outdoor lighting applications.

Exceptional light quality

Being part of the Philips MASTERColour CDM family, the Mini range offers exceptional light quality. Its crisp, white light is generated at levels up to three times higher than alternatives such as halogen, giving goods – especially clothing, footwear and fashion accessories – an added vibrancy. Color rendering is exceptional as well, truly bringing displays of merchandise and produce to life. The texture of materials is also enhanced and accentuated.

The Mini range provides excellent color stability throughout the lamp's long lifespan. A constant color temperature means there is no deterioration in light quality as the lamp ages. This eliminates unwanted and irritating variations in color between lamps over time.

Energy-efficient solution

The MASTERColour CDM-Tm Mini lamp saves up to 70% energy compared with traditional halogen lighting solutions with similar light output. This corresponds to up to 60 W energy saving per light point, enabling massive energy savings in retail outlets!

MASTERColour CDM-Tm Mini 20 and 35 W lamps are also Philips Green Flagship products, outperforming their predecessor or closest market competitors in two key environmental areas: energy efficiency and lifetime reliability.



MASTERColour CDM-Tm Mini 20W



MASTERColour CDM-Tm Mini 35W



Spot LED Dynamic



Spot LED Dynamic – paint with light

Catch the eye by adding pulse and dynamics to your lighting.

The optical lens provides perfectly mixed color and gives an amazingly uniform beam without any color shadows. In addition to colored effects, the Spot LED Dynamic also creates high-quality white light varying from 2700 to 6500 K.

With a family of surface-mounted, suspended and recessed versions, Spot LED Dynamic enables true visual consistency using the highest quality materials and finishing. Flexible aiming (tilt and rotation) ensures maximum adjustability.

The Spot LED Dynamic features unique multi-die LED technology (RGBW) with an optical system that delivers 100% color mixing into a 20-degree beam. With no UV or heat in the beam, it is possible for objects to be lit from a short distance. This makes the Spot LED Dynamic ideal for application in showcases, displays and for lighting precious architectural details and works of art.

www.philips.com/lighting

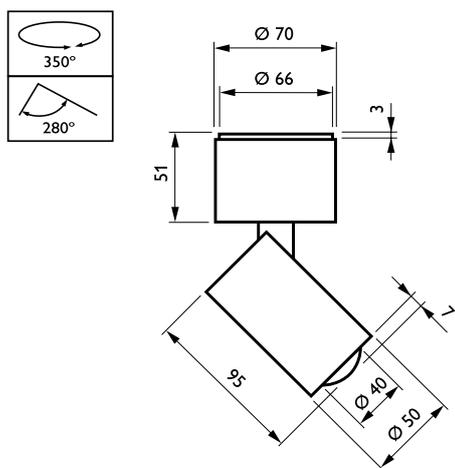
Spot LED Dynamic Projector

Type	BCG700 / BCG702 (twin version)
Light source	Philips multi-die LED system
Light output	500 cd at 4000 K
Optic	Medium beam (20°)
Light color	RGB
Color temperature	2700-6500 K (tunable white)
Power supply	ECG700 PSU 100-240V/24V-60W DMX
Power consumption	Max 7 W
Lifetime	70% of light output at 25 000 hours at Ta ≤ 35°C

Material	Housing: brushed anodized aluminum Lens: glass
Operating temperature	Ta ≤ 35°C, with overheat protection
Controls	ColourChaser DMX, ColourChaser Wheel
Adjustment	Horizontal: 350°, vertical: 280°
Remarks	Also available in twin version 24V power supply via Control Interface DMX



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG700



Spot LED Dynamic Projector BCG700, a one-LED surface-mounted luminaire



Spot LED Dynamic Projector BCG702, a two-LED surface-mounted luminaire

Product ID	Weight (kg)	European Order Code (EOC)
BCG700 1xLED-MD/RGBW 7W 24V	0.45	808994 99

Product ID	Weight (kg)	European Order Code (EOC)
BCG702 2xLED-MD/RGBW 14W 24V	0.95	809007 99

Spot LED Dynamic Recessed



Spot LED Dynamic Projector



Spot LED Dynamic Pendant



Fiorenza



Fiorenza – making the stars shine

Fiorenza is a range of stylish, adjustable projectors with electronic gear and a choice of aluminum reflectors (12°, 24° and 36°). The Fiorenza spotlights have been designed for use with MASTERColour CDM-TM, MASTERColour CDM-TC, MASTERColour CDM-T, MASTERColour CDM-RI I I, MASTERColour CDM-R30, MASTER SDW-TG, MASTERLine TC, MASTERLine HAL-RI I I and MASTERLine HAL-R halogen lamps, helping to create an attractive ambience for instance in retail outlets or lobbies. Now also: Fiorenza with Elite CDM-TC Mini.

The Fiorenza family comprises several different models, including Micro and Twin versions. A range of accessories is available, enabling architects and lighting designers to add that special final touch to their creative solutions.

www.philips.com/lighting

Fiorenza projector Micro



Fiorenza projector Mini



Fiorenza projector Medio



Fiorenza projector Circolo



Fiorenza projector Intero



Fiorenza projector Piccolo



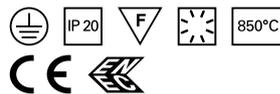
Fiorenza projector Twin



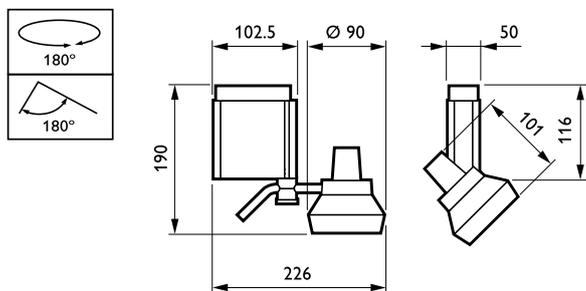
Fiorenza Micro

Type	MRS705 (3-circuit track version) MCS705 (baseplate version)
Light source	HID: 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20 W
Lamp included	Yes (K lamp color 830)
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)
Installation	Direct on ceiling; baseplate with connection point (BA) On 3-circuit track (3C)

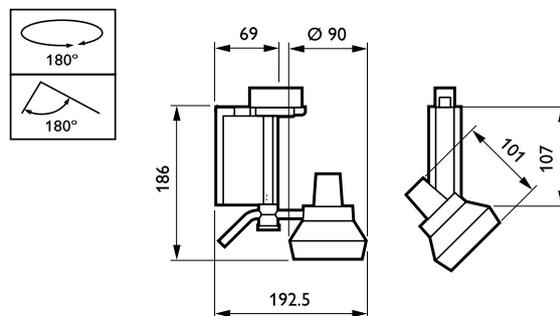
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum
Maintenance	Lamp access after removing the front ring
Accessory	Dichroic color filter; glare control glass
Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MCS705



MRS705



Fiorenza Micro MRS/MCS705 projector for track and baseplate mounting, with MASTERColour lamp and medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS705 1xCDM-Tm20W/830 K EB 24 BA GR	1.10	148687 00
MCS705 1xCDM-Tm20W/830 K EB 36 BA GR	1.10	148700 00
MRS705 1xCDM-Tm20W/830 K EB 24 3C GR	0.90	148748 00
MRS705 1xCDM-Tm20W/830 K EB 36 3C GR	0.90	148762 00

Please contact your local Philips representative for additional configurations



Fiorenza Micro MRS/MCS705 projector for track and baseplate mounting, with MASTERColour lamp and medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS705 1xCDM-Tm20W/830 K EB 24 BA WH	1.10	148694 00
MCS705 1xCDM-Tm20W/830 K EB 36 BA WH	1.10	148717 00
MRS705 1xCDM-Tm20W/830 K EB 24 3C WH	0.90	148755 00
MRS705 1xCDM-Tm20W/830 K EB 36 3C WH	0.90	148779 00

Please contact your local Philips representative for additional configurations



Fiorenza Micro MRS/MCS705 projector for track and baseplate mounting, with MASTERColour lamp and narrow-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS705 1xCDM-Tm20W/830 K EB 12 BA GR	1.10	148663 00
MRS705 1xCDM-Tm20W/830 K EB 12 3C GR	0.90	148724 00

Please contact your local Philips representative for additional configurations



Fiorenza Micro MRS/MCS705 projector for track and baseplate mounting, with MASTERColour lamp and narrow-beam optic

Preferred selection

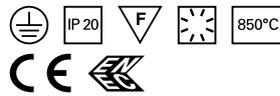
Product ID	Weight (kg)	European Order Code (EOC)
MCS705 1xCDM-Tm20W/830 K EB 12 BA WH	1.10	148670 00
MRS705 1xCDM-Tm20W/830 K EB 12 3C WH	0.90	148731 00

Please contact your local Philips representative for additional configurations

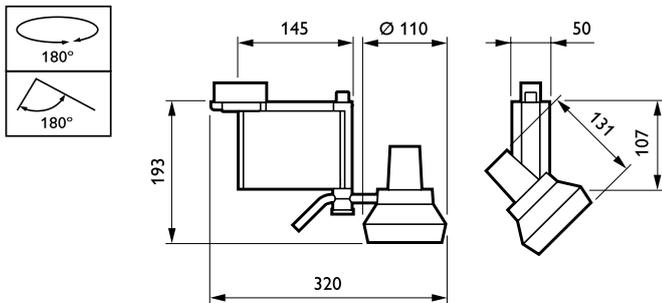
Fiorenza Mini

Type	MRS700 (3-circuit track, HID lamp version) LRS700 (3-circuit track, halogen lamp version) MCS700 (baseplate, HID lamp version) LCS700 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W Halogen: 1 x MASTERLine TC / G8.5 / 60 W
Lamp included	Yes (K or lamp color 830, 930 or 942)
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

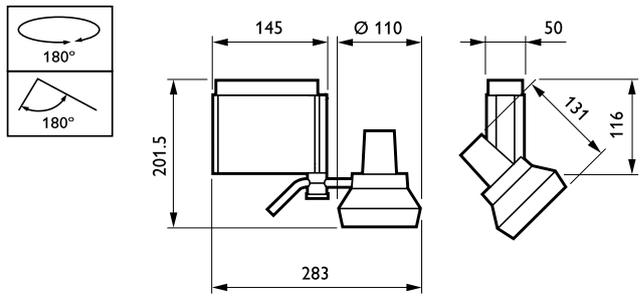
Transformer	Electronic (ET)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access or after removing the front ring
Accessory	Barn door, honeycomb, dichroic color-, anti-glare- and UV-filters, protection glass
Main applications	Retail, museums



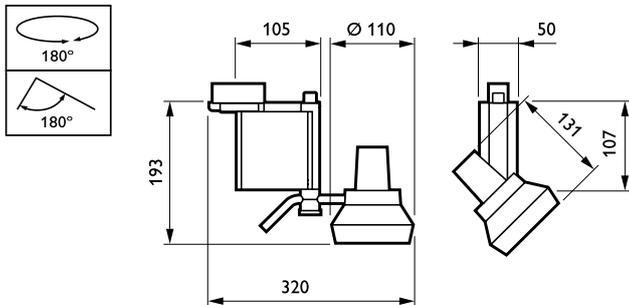
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



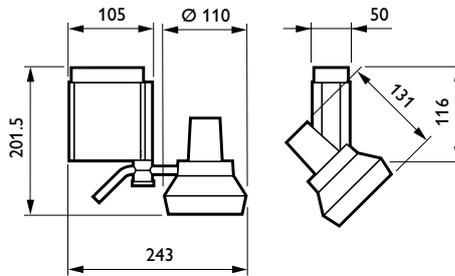
MRS700



MCS700



LRS700



LCS700



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-TC35W K EB 12 3C GR	1.20	144092 00

Please contact your local Philips representative for additional configurations



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS700 1xCDM-TC70W K EB 12 BA WH	1.30	144603 00

Please contact your local Philips representative for additional configurations



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-TC35W K EB 36 3C WH	1.20	144085 00
MRS700 1xCDM-TC70W K EB 24 3C WH	1.20	144139 00
MRS700 1xCDM-TC70W K EB 36 3C WH	1.20	144146 00
MCS700 1xCDM-TC70W/930 K EB 36 BA WH	1.30	148908 00

Please contact your local Philips representative for additional configurations



Fiorenza LRS/LCS700 projector for track and baseplate mounting, with MASTERLine lamp and narrow-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS700 1xHAL-TC60W K ET 12 3C GR	0.90	144214 00

Please contact your local Philips representative for additional configurations



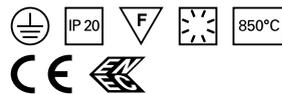
Fiorenza LRS/LCS700 projector for track and baseplate mounting, with MASTERLine lamp and medium-beam optic

Preferred selection

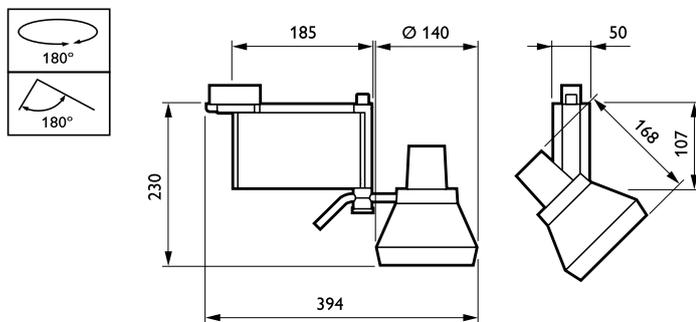
Product ID	Weight (kg)	European Order Code (EOC)
LRS700 1xHAL-TC60W K ET 24 3C WH	0.90	144191 00

Please contact your local Philips representative for additional configurations

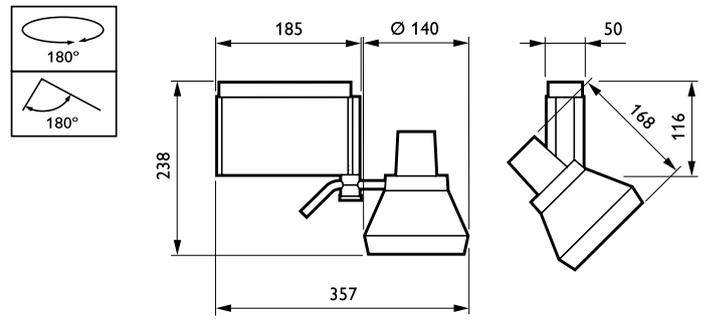
Fiorenza Medio			
Type	MRS702 (3-circuit track) MCS702 (baseplate)	Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 70 W 1 x MASTER SDW-TG Mini / GX12-I / 100 W	Color	Grey (GR) White (WH) RAL colors available on request
Lamp included	Yes (K or lamp color 830, 930 or 942)	Material	Aluminum
Optic	Narrow beam (12°) Medium beam (24° and 36°)	Maintenance	Direct lamp access or after removing the front ring
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)	Accessory	UV-filters, protection glass
		Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS702



MCS702



Fiorenza MRS/MCS702 projector for track and baseplate mounting, with MASTERColour or MASTER lamp and medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS702 1xCDM-T70W/830 EB 36 3C GR	2.10	008004 00
MRS702 1xSDW-TG100W K EB 36 3C GR	2.00	144054 00
MCS702 1xSDW-TG100W K EB 24 BA GR	2.10	144528 00
MRS702 1xCDM-T70W/942 K EB 36 3C GR	2.10	149332 00

Please contact your local Philips representative for additional configurations



Fiorenza MRS/MCS702 projector for track and baseplate mounting, with MASTERColour or MASTER lamp and medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS702 1xSDW-TG100W K EB 24 3C WH	2.00	144016 00
MCS702 1xSDW-TG100W K EB 36 BA WH	2.10	144504 00
MRS702 1xCDM-T70W/830 K EB 24 3C WH	2.30	147895 00

Please contact your local Philips representative for additional configurations



Fiorenza MRS/MCS702 projector for track and baseplate mounting, with MASTERColour or MASTER lamp and narrow-beam optic

Preferred selection

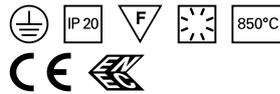
Product ID	Weight (kg)	European Order Code (EOC)
MRS702 1xSDW-TG100W K EB 12 3C WH	2.00	144009 00

Please contact your local Philips representative for additional configurations

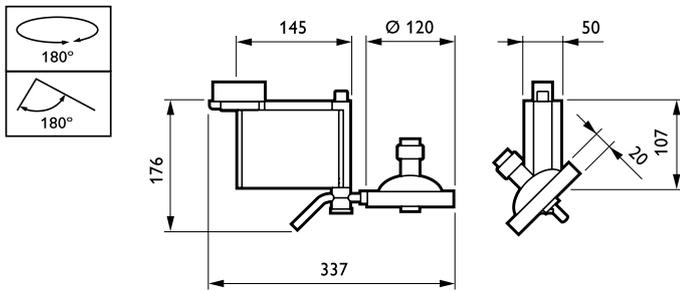
Fiorenza Circolo

Type	MRS700 (3-circuit track, HID lamp version) LRS700 (3-circuit track, halogen lamp version) MCS700 (baseplate, HID lamp version) LCS700 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-R111 / GX8.5 / 35, 70 W Halogen: 1 x MASTERLine 111 / G53 / 60 W
Lamp included	Yes (K or lamp color 830 or 942)
Lamp beam angle	HID 10°, 24°, 40° Halogen 8°, 24°, 45°
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

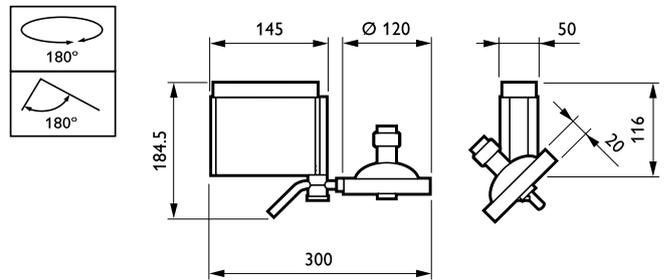
Transformer	Electronic (ET)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access
Main applications	Retail, museums



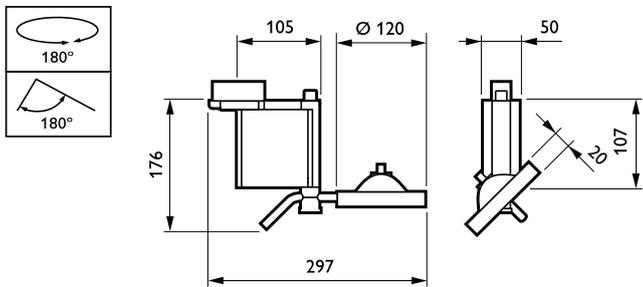
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



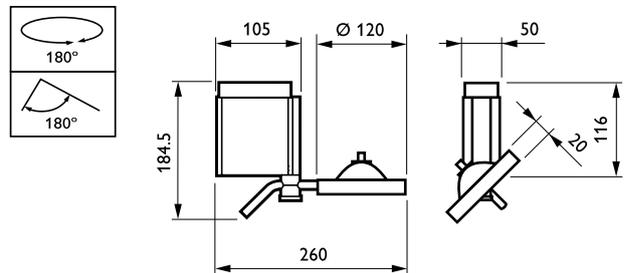
MRS700



MCS700



LRS700



LCS700



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-R111-24-35W K EB 3C GR	1.00	144467 00
MRS700 1xCDM-R111-40-35W/830 EB 3C GR	1.00	144474 00
MCS700 1xCDM-R111-10-35W K EB BA GR	1.10	144931 00
MRS700 1xCDM-R111-10-70W/830 EB 3C GR	1.00	149417 00
MRS700 1xCDM-R111-40-70W/830 EB 3C GR	1.00	149431 00
MCS700 1xCDM-R111-24-70W/830 EB BA GR	1.10	149486 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-R111-24-35W K EB 3C WH	1.00	144436 00
MCS700 1xCDM-R111-10-35W K EB BA WH	1.10	144900 00
MCS700 1xCDM-R111-40-35W/830 EB BA WH	1.10	144924 00
MRS700 1xCDM-R111-24-70W/830 EB 3C WH	1.00	149394 00
MCS700 1xCDM-R111-10-70W/830 EB BA WH	1.10	149448 00
MCS700 1xCDM-R111-40-70W/830 EB BA WH	1.10	149462 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS700 1xHAL-R111-8-60W K ET 3C GR	0.70	144399 00
LRS700 1xHAL-R111-45-60W ET 3C GR	0.70	144412 00
LCS700 1xHAL-R111-24-60W K ET BA GR	0.80	144887 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS700 1xHAL-R111-8-60W K ET 3C WH	0.70	144368 00
LRS700 1xHAL-R111-45-60W K ET 3C WH	0.70	144382 00
LCS700 1xHAL-R111-24-60W K ET BA WH	0.80	144856 00

Please contact your local Philips representative for additional configurations



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic



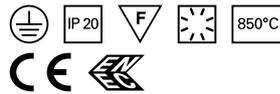
Fiorenza LRS/LCS700 projector for track and baseplate mounting, with MASTERLine lamp and narrow or medium-beam optic



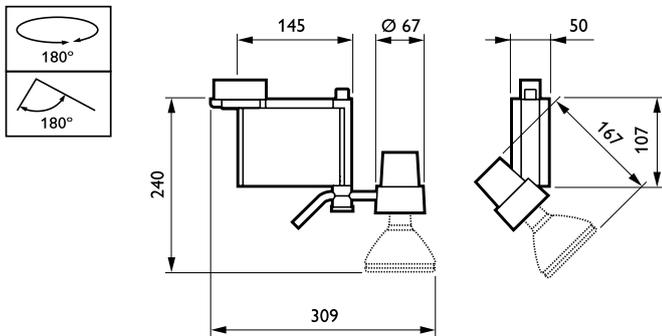
Fiorenza LRS/LCS700 projector for track and baseplate mounting, with MASTERLine lamp and narrow or medium-beam optic

Fiorenza Intero	
Type	MRS700 (3-circuit track) MCS700 (baseplate)
Light source	HID: 1 x MASTERColour CDM-R30 / E27 / 35, 70 W
Lamp included	Yes (830)
Lamp beam angle	10°, 30°, 40°
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

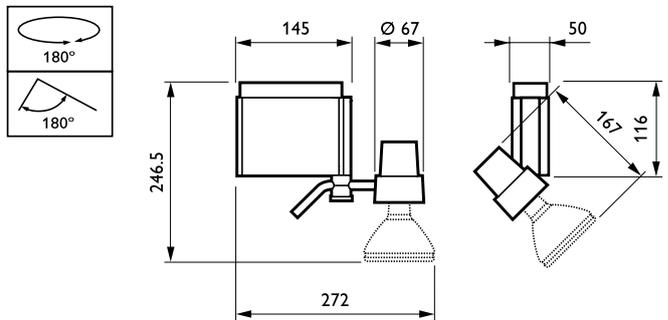
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access
Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS700



MCS700



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic



Fiorenza MRS/MCS700 projector for track and baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-R30-10-35W/830 K EB 3C GR	1.30	144269 00
MRS700 1xCDM-R30-30-35W/830 K EB 3C GR	1.30	144276 00
MRS700 1xCDM-R30-40-70W/830 K EB 3C GR	1.30	144313 00
MCS700 1xCDM-R30-30-35W/830 K EB BA GR	1.40	144757 00
MCS700 1xCDM-R30-40-70W/830 K EB BA GR	1.40	144795 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS700 1xCDM-R30-10-35W/830 K EB 3C WH	1.30	144245 00
MRS700 1xCDM-R30-30-35W/830 K EB 3C WH	1.30	144252 00
MRS700 1xCDM-R30-40-70W/830 K EB 3C WH	1.30	144290 00
MCS700 1xCDM-R30-30-35W/830 K EB BA WH	1.40	144733 00
MCS700 1xCDM-R30-40-70W/830 K EB BA WH	1.40	144771 00

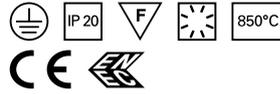
Please contact your local Philips representative for additional configurations



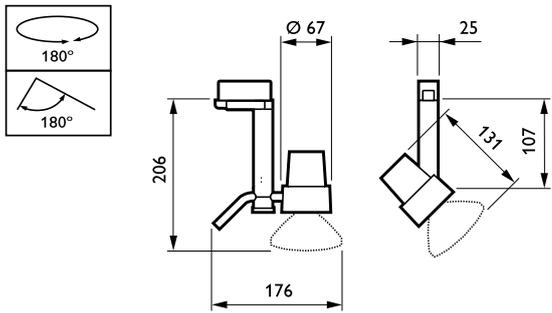
Fiorenza Piccolo

Type	QRS701 (3-circuit track) QCS701 (baseplate)
Light source	Halogen: 1 x HalogenA PAR30S / E27 / 75 W
Lamp included	Yes (K)
Lamp beam angle	10°, 30°
Installation	Direct on ceiling; baseplate with connection point (BA) On 3-circuit track (3C)

Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access
Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



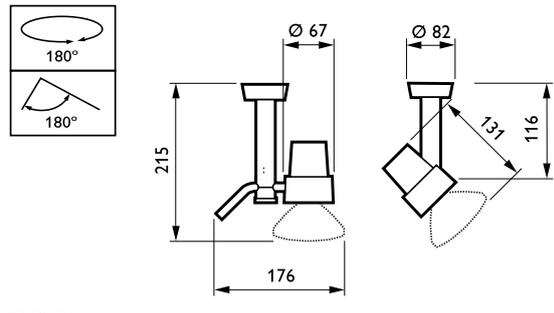
QRS701



Fiorenza QRS/QCS701 projector for track and baseplate mounting, with HalogenA lamp and narrow or medium-beam optic



Fiorenza QRS/QCS701 projector for track and baseplate mounting, with HalogenA lamp and narrow or medium-beam optic



QCS701

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS701 1xHAL-P30S-10-75W K 3C GR	0.60	144344 00
QRS701 1xHAL-P30S-30-75W K 3C GR	0.60	144351 00
QCS701 1xHAL-P30S-10-75W K BA GR	0.60	144825 00

Please contact your local Philips representative for additional configurations

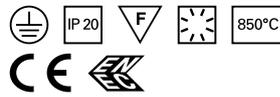
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS701 1xHAL-P30S-10-75W K 3C WH	0.60	144320 00
QRS701 1xHAL-P30S-30-75W K 3C WH	0.60	144337 00
QCS701 1xHAL-P30S-30-75W K BA WH	0.60	144818 00

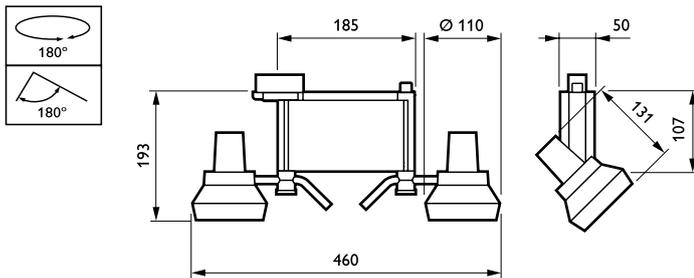
Please contact your local Philips representative for additional configurations



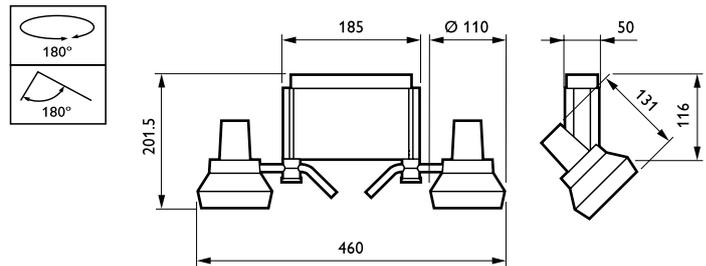
Fiorenza Twin			
Type	MRS703 (3-circuit track, HID lamp version) LRS703 (3-circuit track, halogen lamp version) MCS703 (baseplate, HID lamp version) LCS703 (baseplate, halogen lamp version)	Transformer	Electronic (ET)
Light source	HID: 2 x MASTERColour CDM-TC / G8.5 / 35 W 2 x MASTERColour CDM-R111 / GX8.5 / 35 W Halogen: 2 x MASTERLine TC / G8.5 / 60 W 2 x MASTERLine 111 / G53 / 60 W	Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Lamp included	Yes (K or lamp color 830, 930 or 942)	Color	Grey (GR) White (WH) RAL colors available on request
Lamp beam angle	HID 10°, 24°, 40° Halogen 8°, 24°, 45°	Material	Aluminum
Optic	Narrow beam (12°) Medium beam (24° and 36°)	Maintenance	Direct lamp access or after removing the front ring
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)	Accessory	Barndoor, honey comb, dichroic color-, anti-glare- and UV-filters, protection glass Note: only for MASTERColour CDM-TC and MASTERLine TC luminaire version
		Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS703 CDM-TC



MCS703 CDM-TC

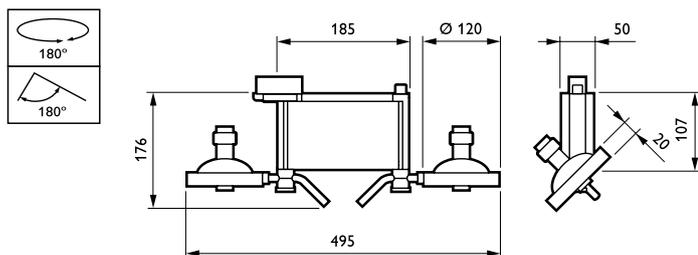


Fiorenza Twin MRS/MCS703 projector for track and baseplate mounting, with MASTERColour lamps and narrow-beam optic

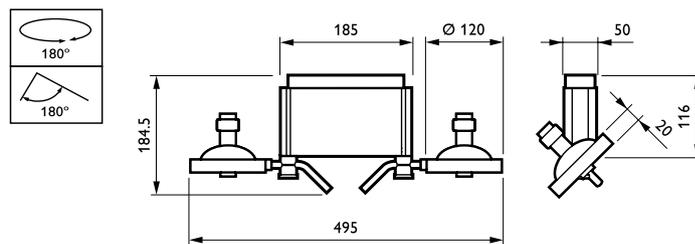
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS703 2xCDM-TC35W K EB 12 BA GR	2.00	145341 00

Please contact your local Philips representative for additional configurations



MRS703 CDM-R111



MCS703 CDM-R111



Fiorenza Twin MRS/MCS703 projector for track and baseplate mounting, with MASTERColour lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS703 2xCDM-TC35W K EB 24 3C GR	1.90	145020 00
MRS703 2xCDM-TC35W K EB 36 3C GR	2.25	145037 00

Please contact your local Philips representative for additional configurations



Fiorenza Twin MRS/MCS703 projector for track and baseplate mounting, with MASTERColour lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS703 2xCDM-TC35W K EB 12-36 3C WH	1.90	144979 00
MRS703 2xCDM-TC35W K EB 24 3C WH	1.90	144986 00
MRS703 2xCDM-TC35W K EB 36 3C WH	1.90	144993 00
MCS703 2xCDM-TC35W K EB 24 BA WH	2.00	145327 00

Please contact your local Philips representative for additional configurations

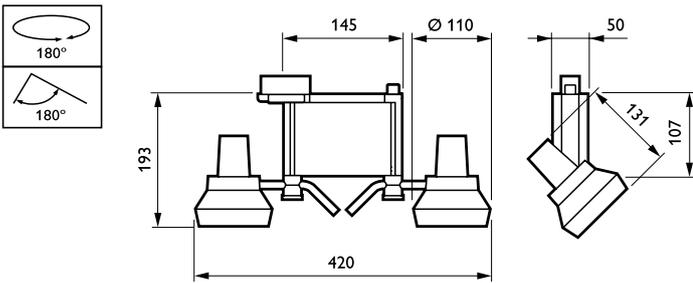


Fiorenza Twin MRS/MCS703 projector for track and baseplate mounting, with MASTERColour lamps and narrow or medium-beam optic

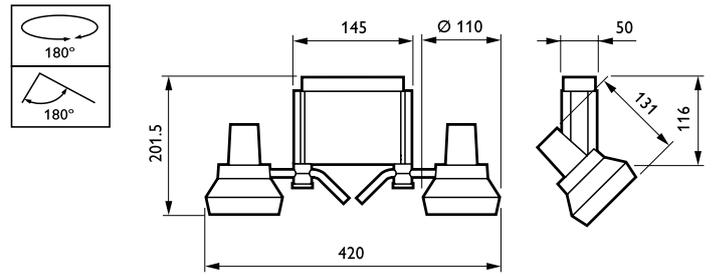
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS703 2xCDM-R111-10-35W K EB 3C GR	1.60	145105 00
MRS703 2xCDM-R111-24-35W K EB 3C GR	1.60	145136 00
MRS703 2xCDM-R111-24/40-35W/830 EB 3C GR	1.60	145143 00
MRS703 2xCDM-R111-40-35W/830 EB 3C GR	1.60	145150 00
MCS703 2xCDM-R111-24-35W K EB BA GR	1.70	145471 00
MCS703 2xCDM-R111-40-35W/830 EB BA GR	1.70	145495 00

Please contact your local Philips representative for additional configurations



LRS703 HAL-TC



LCS703 HAL-TC



Fiorenza Twin MRS/MCS703 projector for track and baseplate mounting, with MASTERColour lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS703 2xCDM-R1 I I-10-35W K EB 3C WH	1.60	145044 00
MRS703 2xCDM-R1 I I-10/40-35W/830 EB 3C WH	1.90	145068 00
MRS703 2xCDM-R1 I I-24-35W K EB 3C WH	1.60	145075 00
MRS703 2xCDM-R1 I I-40-35W/830 EB 3C WH	2.00	145099 00
MCS703 2xCDM-R1 I I-24-35W K EB BA WH	1.70	145419 00
MCS703 2xCDM-R1 I I-40-35W/830 EB BA WH	1.70	145433 00

Please contact your local Philips representative for additional configurations

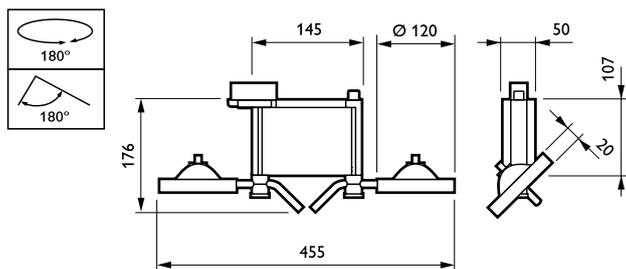


Fiorenza Twin LRS/LCS703 projector for track and baseplate mounting, with MASTERLine lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS703 2xHAL-TC60W K ET 12-36 3C GR	1.50	145211 00
LRS703 2xHAL-TC60W K ET 24 3C GR	1.50	145228 00
LCS703 2xHAL-TC60W K ET 24 BA GR	1.60	145563 00

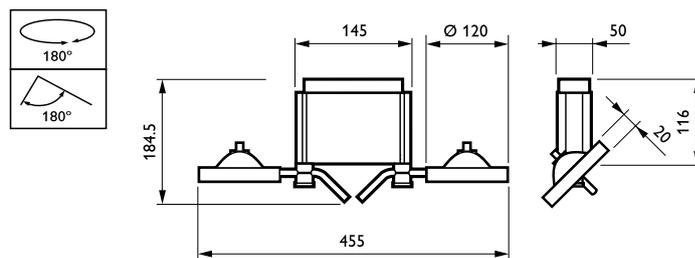
Please contact your local Philips representative for additional configurations



LRS703 HAL-RI II



Fiorenza Twin LRS/LCS703 projector for track and baseplate mounting, with MASTERLine lamps and narrow or medium-beam optic



LCS703 HAL-RI II

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS703 2xHAL-TC60W K ET 24 3C WH	1.50	145181 00

Please contact your local Philips representative for additional configurations



Fiorenza Twin LRS/LCS703 projector for track and baseplate mounting, with MASTERLine lamps and narrow-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LCS703 2xHAL-TC60W K ET 12 BA WH	1.60	145501 00

Please contact your local Philips representative for additional configurations



Fiorenza Twin LRS/LCS703 projector for track and baseplate mounting, with MASTERLine lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS703 2xHAL-RI II 11-8-60W K ET 3C GR	1.10	145273 00
LRS703 2xHAL-RI II 11-8/24-60W K ET 3C GR	1.10	145280 00
LRS703 2xHAL-RI II 11-24-60W K ET 3C GR	1.10	145297 00
LCS703 2xHAL-RI II 11-8-60W K ET BA GR	1.20	145617 00
LCS703 2xHAL-RI II 11-24-60W K ET BA GR	1.50	145631 00

Please contact your local Philips representative for additional configurations



Fiorenza Twin LRS/LCS703 projector for track and baseplate mounting, with MASTERLine lamps and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS703 2xHAL-RI II 11-8-60W K ET 3C WH	1.10	145242 00
LRS703 2xHAL-RI II 11-8/24-60W K ET 3C WH	1.10	145259 00
LRS703 2xHAL-RI II 11-24-60W K ET 3C WH	1.10	145266 00
LCS703 2xHAL-RI II 11-8-60W K ET BA WH	1.20	145587 00
LCS703 2xHAL-RI II 11-24-60W K ET BA WH	1.20	145600 00

Please contact your local Philips representative for additional configurations

Accessories



Dichroic filters to color the beam blue

Product ID	EOC
ZRS704 DF115-BL DICHROIC FILTER	145655 00
ZRS705 DF69-BL DICHROIC FILTER	149967 00



Dichroic filters to color the beam green

Product ID	EOC
ZRS704 DF115-GN DICHROIC FILTER	145679 00
ZRS705 DF69-GN DICHROIC FILTER	149981 00



Dichroic filters to color the beam red

Product ID	EOC
ZRS704 DF115-RD DICHROIC FILTER	145648 00
ZRS705 DF69-RD DICHROIC FILTER	149950 00



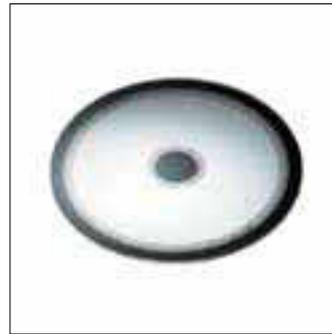
Dichroic filters to color the beam yellow

Product ID	EOC
ZRS704 DF115-YE DICHROIC FILTER	145662 00
ZRS705 DF69-YE DICHROIC FILTER	149974 00



Glare shield for accent lighting with extra low luminance: <math>< 200 \text{ cd/m}^2</math> for 60°

Product ID	EOC
ZRS704 HC BK HONEY COMB LOUVRE	145778 00



Anti-glare filter

Product ID	EOC
ZRS704 GCG GLARE CONTROL GLASS	143064 00



Protective glass and UV filter

Product ID	EOC
ZRS704 PG PROTECTION GLASS	145686 00
ZRS704 UV FILTER	145693 00
ZRS702 PG PROTECTION GLASS	143927 00
ZRS702 UV FILTER	143934 00



Innovative conical barndoors to reduce direct glare and to focus the beam

Product ID	EOC
ZRS704 BD BK BARNDOORS	145761 00



UnicOne



UnicOne – your personal choice

With the new Philips UnicOne collection you can truly blend your luminaires into your interior architecture. Projectors, pendants and uplights all share the same simple, geometrical design, with refined chamfers and details, ensuring maximum visual harmony. Play with the different versions and sizes to create your very own design for general, accent and effect lighting.

All UnicOne luminaires are fully electronic. State-of-the art lamps and gear save energy costs and offer the very best light for retail and hospitality applications.

www.philips.com/lighting

Collection, design, concept

Many realize that the quality of our surroundings can lift the quality of our lives, and recognize the considerable benefits that well-designed luminaires can offer in this.

“Born out of insights that we generated during a workshop about indoor lighting with a handful of architects from world-class offices such as Mecanoo, Fosters+Partners, Raiser Lopes designers (BOSS), Architectural Lighting Solutions... we conceived UnicOne. It is a collection of luminaires that acts as a perfect ‘decorum’ within contemporary interior design concepts for a wide range of applications such as retail and hospitality,” says Dany Snokx, Global design account manager at Philips Design.

This family of luminaires is more than just skin deep.

A robust base forms the interface between space and luminaire, and a sophisticated transition connects the base with the optic housing. The optic housing can cater for additional light effects. Similar detailing you find on the front, including a ‘precision glare rim’ to prevent looking directly into the light beam.

All UnicOne products are well balanced and consistent in material use and shape. Whether executed in powder coated aluminum, or decorative materials, they all match and have a genuine look and feel.



UnicOne Projector
Page 6.38



UnicOne Pendant
Page 6.110



UnicOne Uplight
Page 6.136

UnicOne Projector



UnicOne Projector – small size, big impact

The UnicOne Projector range offers powerful lighting accents in a small, appealing package, making it ideal for retail and hospitality areas.

The Projector adds a sophisticated adjustment rod and hinge to the unique UnicOne design concept.

The UnicOne Projector range is designed around the most efficient and compact HID and MASTER halogen lamps. The Micro version incorporates MASTERColour CDM-Tm Mini 20 W / 35 W, while the Mini version – featuring MASTERColour CDM-TC Mini 35 W / 70 W lamps – offers higher lumen packages in a compact housing.

www.philips.com/lighting



UnicOne Projector Micro



UnicOne Projector Mini



UnicOne Pendant Micro



UnicOne Pendant Compact



UnicOne Uplight Micro



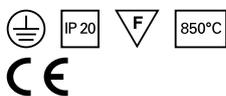
UnicOne Uplight Compact



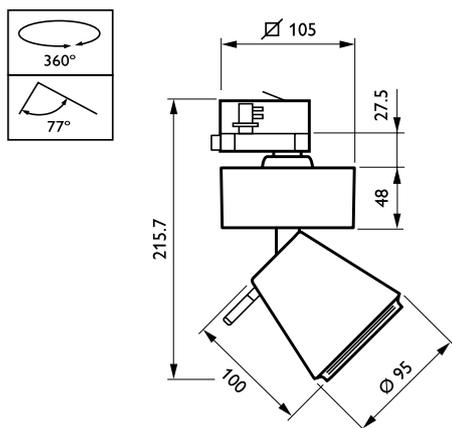
UnicOne Micro

Type	MRS541 (3-circuit track, HID lamp version) LRS541 (3-circuit track, halogen lamp version) MCS541 (baseplate, HID lamp version) LCS541 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W Halogen: 1 x MASTERLine ES / GU5.3 / 45 W 1 x MASTERCapsule / GY6.35 / 45 W
Lamp beam angle	MASTERLine 8°, 24°, 36°
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Lamp included	Yes (K or lamp color 830, 930 or 942)
Lamp position	Vertical
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

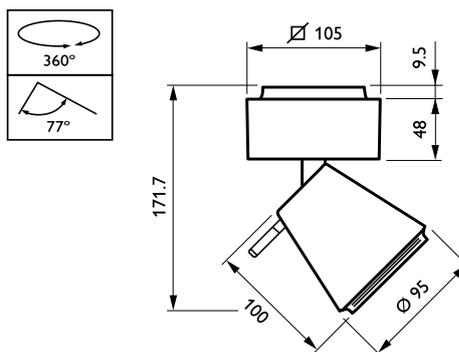
Transformer	Electronic (ET) (for halogen lamp version)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	White (WH) Grey (GR) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access or after removing the front ring
Accessory	Protection glass, sculptural lens, dichroic color filter, glare control glass
Remarks	Also available with 600 mm extension rod (adjustment of 90°)
Main applications	Retail, museums, public spaces, offices



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/LRS541



MCS/LCS541



UnicOne Projector Micro MRS54I for track mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS54I CDM-Tm20W/830 EB 24 3C GR	0.89	513172 00
MRS54I CDM-Tm35W/930 EB 36 3C GR	1.03	513240 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro MRS54I for track mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS54I CDM-Tm20W/830 EB 24 3C WH	0.89	513196 00
MRS54I CDM-Tm35W/930 EB 36 3C WH	1.03	513264 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro LRS54I for track mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS54I HAL-MR50-24-45W K.ET 3C GR	0.85	513370 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro LRS54I for track mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS54I HAL-MR50-24-45W K.ET 3C WH	0.85	513387 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro MCS54I for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS54I CDM-Tm20W/830 EB 12 BA GR	0.86	513202 00
MCS54I CDM-Tm20W/830 EB 24 BA GR	0.86	513219 00
MCS54I CDM-Tm35W/930 EB 24 BA GR	0.99	513271 00
MCS54I CDM-Tm35W/930 EB 36 BA GR	0.99	670059 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro MCS54I for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS54I CDM-Tm20W/830 EB 24 BA WH	0.86	513226 00
MCS54I CDM-Tm35W/930 EB 24 BA WH	0.99	513288 00
MCS54I CDM-Tm35W/930 EB 36 BA WH	0.99	670066 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro LCS54I for baseplate mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LCS54I HAL-MR50-24-45W K ET BA GR	0.80	513394 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Micro LCS54I for baseplate mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LCS54I HAL-C50W K ET 24 BA WH	0.82	513363 00

Please contact your local Philips representative for additional configurations

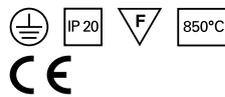


UnicOne Projector Mini

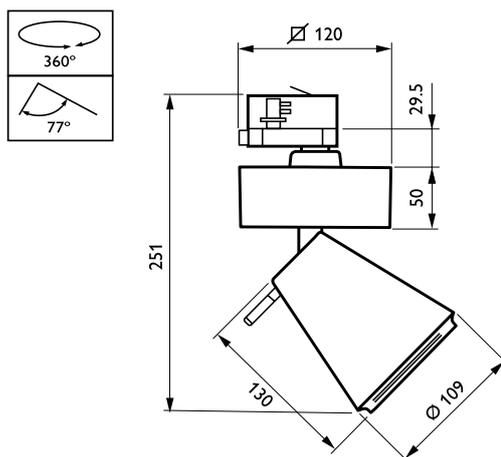
UnicOne Projector Mini

Type	MRS551 (3-circuit track, HID lamp version) LRS551 (3-circuit track, halogen lamp version) MCS551 (baseplate, HID lamp version) LCS551 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W Halogen: 1 x MASTERLine TC / G8.5 / 45, 60 W
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Lamp included	Yes (K or lamp color 830, 930 or 942)
Lamp position	Vertical
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

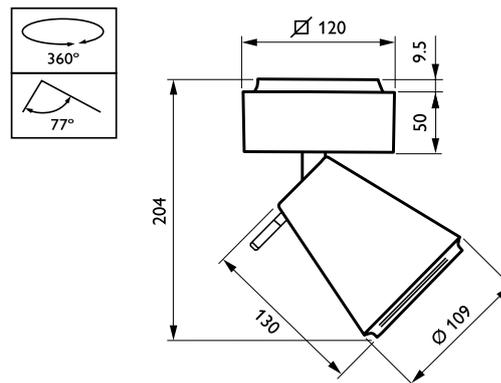
Transformer	Electronic (ET) (for halogen lamp version)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	White (WH) Grey (GR) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access or after removing the front glass
Accessory	Barndoor, protection glass, sculptural lens, dichroic color filters, glare control glass, champagne optics
Main applications	Retail, museums, public spaces



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/LRS551



MCS/LCS551



UnicOne Projector Mini MRS/
LRS55 I for track mounting, with
MASTERColour or MASTERLine lamp
and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS55 I CDM-TC35W/830 EB 36 3C GR	1.14	513479 00
MRS55 I CDM-TC35W/942 EB 24 3C GR	1.14	513523 00
MRS55 I CDM-TC70W/830 EB 24 3C GR	1.14	513592 00
MRS55 I CDM-TC70W/830 EB 36 3C GR	1.14	513608 00
MRS55 I CDM-TC70W/942 EB 36 3C GR	1.14	513684 00
LRS55 I HAL-TC60W K ET 12 3C GR	1.04	513820 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS55 I CDM-TC35W/830 EB 24 3C WH	1.14	513486 00
MRS55 I CDM-TC70W/830 EB 12 3C WH	1.14	513615 00
MRS55 I CDM-TC70W/942 EB 24 3C WH	1.14	513707 00
MRS55 I CDM-TC70W/942 EB 36 3C WH	1.14	513714 00
LRS55 I HAL-TC60W K ET 24 3C WH	1.04	513868 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Mini MRS/
LRS55 I for track mounting, with
MASTERColour or MASTERLine lamp
and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS55 I CDM-TC35W/830 EB 24 BA GR	1.14	513509 00
MCS55 I CDM-TC70W/830 EB 24 BA GR	1.14	513646 00
MCS55 I CDM-TC70W/942 EB 24 BA GR	1.14	513721 00
LCS55 I HAL-TC60W K ET 24 BA GR	1.00	513882 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Mini MCS/
LCS55 I for baseplate mounting, with
MASTERColour or MASTERLine lamp
and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS55 I CDM-TC35W/830 EB 24 BA WH	1.14	513516 00
MCS55 I CDM-TC35W/942 EB 24 BA WH	1.14	513578 00
MCS55 I CDM-TC70W/830 EB 24 BA WH	1.14	513653 00
MCS55 I CDM-TC70W/942 EB 24 BA WH	1.14	513738 00
LCS55 I HAL-TC60W K ET 24 BA WH	1.00	513899 00

Please contact your local Philips representative for additional configurations

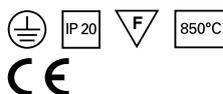


UnicOne Projector Mini MCS/
LCS55 I for baseplate mounting, with
MASTERColour or MASTERLine lamp
and narrow or medium-beam optic

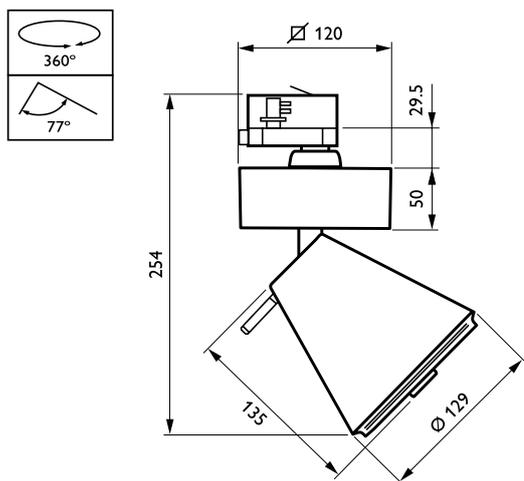
UnicOne Projector Mini R III

Type	MRS553 (3-circuit track, HID lamp version) LRS553 (3-circuit track, halogen lamp version) MCS553 (baseplate, HID lamp version) LCS553 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-R111 / GX8.5 / 20, 35, 70 W Halogen: 1 x MASTERLine 111 / G53 / 45, 60 W
Lamp beam angle	MASTERColour 10°, 24°, 40° MASTERLine 8°, 24°, 45°
Lamp included	Yes (K or lamp color 830, 930 or 942)
Lamp position	Vertical
Gear	Electronic, 220 - 240V / 50 - 60 Hz: Electronic Ballast (EB)

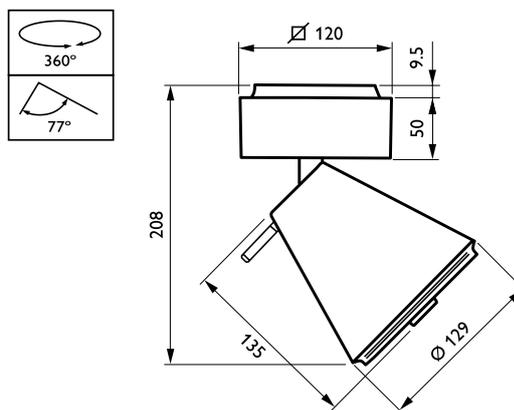
Transformer	Electronic (ET) (for halogen lamp version)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	White (WH) Grey (GR) RAL colors available on request
Material	Aluminum
Maintenance	Direct lamp access or after removing the front glass
Main applications	Retail, museums, public spaces



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/LRS553



MCS/LCS553



UnicOne Projector Mini R111 MCS/LCS553 for baseplate mounting, with MASTERColour or MASTERLine lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS553 CDM-R111-24-35W/830 EB BA GR	1.20	513936 00
MCS553 CDM-R111-24-70W/830 EB BA GR	1.20	513981 00
LCS553 HAL-MR111-24-45W K ET BA GR	0.99	514032 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Mini R111 MCS/LCS553 for baseplate mounting, with MASTERColour or MASTERLine lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS553 CDM-R111-24-35W/830 EB BA WH	1.20	513929 00
MCS553 CDM-R111-24-70W/830 EB BA WH	1.20	513974 00
LCS553 HAL-MR111-24-45W K ET BA WH	0.99	514025 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Mini R111 MRS/LRS553 for track mounting, with MASTERColour or MASTERLine lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS553 CDM-R111-24-35W/830 EB 3C GR	1.20	513912 00
MRS553 CDM-R111-24-70W/830 EB 3C GR	1.20	513967 00
LRS553 HAL-MR111-24-60W K ET 3C GR	1.04	514056 00

Please contact your local Philips representative for additional configurations



UnicOne Projector Mini R111 MRS/LRS553 for track mounting, with MASTERColour or MASTERLine lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS553 CDM-R111-24-35W/830 EB 3C WH	1.20	513905 00
MRS553 CDM-R111-24-70W/830 EB 3C WH	1.20	513950 00
LRS553 HAL-MR111-24-45W K ET 3C WH	1.04	514001 00

Please contact your local Philips representative for additional configurations

Accessories



Protection glass

Product ID	EOC
ZZS54I PG D73 PROTECTION GLASS	515664 00
ZZS55I PG D89 PROTECTION GLASS	515749 00



Barndoor shutters, in white (WH), grey (GR) or black (BK) to match with the luminaire

Product ID	EOC
ZZS55I BD GR BARNDOORS	516586 00
ZZS55I BD WH BARNDOORS	516593 00
ZZS55I BD BK BARNDOORS	516609 00



Dichroic color filters to color the beam yellow (YE), blue (BL), green (GN) or red (RD)

Product ID	EOC
ZZS54I DF-BL D73 DICHOIC FILTER	515688 00
ZZS54I DF-GN D73 DICHOIC FILTER	515701 00
ZZS54I DF-RD D73 DICHOIC FILTER	515671 00
ZZS54I DF-YE D73 DICHOIC FILTER	516555 00
ZZS55I DF-BL D89 DICHOIC FILTER	515763 00
ZZS55I DF-GN D89 DICHOIC FILTER	515787 00
ZZS55I DF-RD D89 DICHOIC FILTER	515756 00
ZZS55I DF-YE D89 DICHOIC FILTER	515770 00



Sculptural lens to elongate the beam

Product ID	EOC
ZZS54I LS D73 SCULPTURAL LENS	515725 00
ZZS55I LS D89 SCULPTURAL LENS	516562 00



Glare control glass

Product ID	EOC
ZZS55I GCG D89 GLARE CONTROL GLASS	516579 00



Protective glass and UV filter

Preferred selection

Product ID	EOC
ZZS541 UV D73 FILTER	515718 00
ZZS551 UV D89 FILTER	515794 00



Soprano projectors



Soprano – hitting the highs

Soprano is a range of track/surface-mounted adjustable projectors for halogen and compact discharge lamps. It allows beam configurations from a very accented 6° to flooded 60°. Soprano features a unique concept consisting of a metal rod onto which one can slide different rings with various functions in order to color, shape and control the beam. The optics include a glare limitation device. With this projector it is possible to combine color filters, lens and visual comfort accessories such as honeycomb and innovative barndoors. Orientation is 355° horizontal and 85° vertical, with a locking device.

www.philips.com/lighting

Soprano discharge projectors

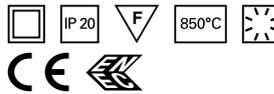


Soprano halogen projectors

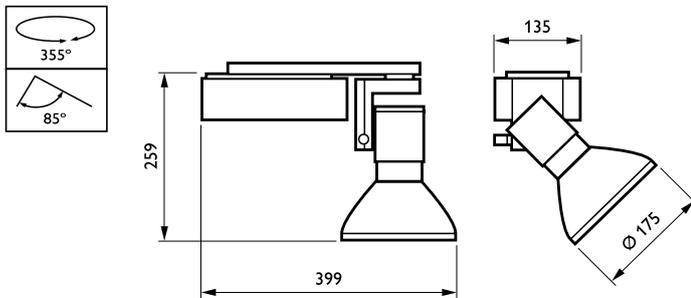


Soprano Discharge	
Type	MRN/SRN690 (3-circuit track version) MCN/SCN690 (baseplate version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 35, 70, 150 W 1 x MASTER SDW-T / PG12-I / 50, 100 W
Lamp included	Yes (K or lamp color 830) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC)
Optic	Narrow to medium beam (12 to 24°) Medium beam (24 to 36°) Medium to wide beam (36 to 60°)

Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum and steel
Maintenance	Direct lamp access by unlocking optical block
Accessory	Back-bone rod, dichroic filters, sculptural lense, barndoors, tulip barndoors, honey comb
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRN/SRN/MCN/SCN690



Soprano MRN/SRN/MCN/SCN690 projector for track and baseplate mounting, with MASTERColour or MASTER lamp and narrow, medium or wide-beam optic



Soprano MRN/SRN/MCN/SCN690 projector for track and baseplate mounting, with MASTERColour or MASTER lamp and narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
SCN690 1xSDW-T50W K IC 230V 24-36 BA GR	4.10	771946 00
SRN690 1xSDW-T100W K IC 230V 36-60 3C GR	4.10	772011 00
MCN690 CDM-T35W/830 IC 230V 12-24 BA GR	3.90	772097 00
MCN690 CDM-T70W/830 IC 230V 24-36 BA GR	3.90	772233 00
MRN690 CDM-T70W/830 IC 230V 36-60 3C GR	3.90	772264 00
MRN690 CDM-T70W/830 IC 230V 24-36 3C GR	3.90	772301 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
SCN690 1xSDW-T100W K IC 230V 36-60 BA WH	4.10	771984 00
SRN690 1xSDW-T100W K IC 230V 24-36 3C WH	4.10	772042 00
MCN690 CDM-T35W/830 IC 230V 24-36 BA WH	3.90	772103 00
MRN690 CDM-T70W/830 IC 230V 36-60 3C WH	3.90	772257 00
MRN690 CDM-T70W/830 IC 230V 12-24 3C WH	3.90	772271 00
MRN690 CDM-T150W/830 IC 230V 36-60 3C WH	4.80	772387 00

Please contact your local Philips representative for additional configurations

Accessories



Back-bone rod used to pile accessories, up to 3, with black clamp in order to fix onto projector

Product ID	EOC
ZZN690 ACS151 BK	157276 00



Dichroic filter to color the beam, green (ZZN690 DF151-GN)

Product ID	EOC
ZZN690 DF151-BL	157160 00
ZZN690 DF151-RD	157153 00
ZZN690 DF151-GN	157177 00
ZZN690 DF151-YE	157184 00



Sculptural lens to elongate the beam, rotate to position the beam axis

Product ID	EOC
ZZN690 LS151 BK	157245 00



Traditional theatrical shutters with innovative rotating adjustability

Product ID	EOC
ZZN690 BD151 BK	157191 00



Honey comb creating an accent with extra low luminance

Product ID	EOC
ZZN690 HC151 BK	157221 00



Grey stainless steel blades for this innovative comfort shutter on a black ring

Product ID	EOC
ZZN690 BD-T151 BK	157214 00

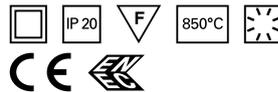
Accessories are piled onto the back-bone rod



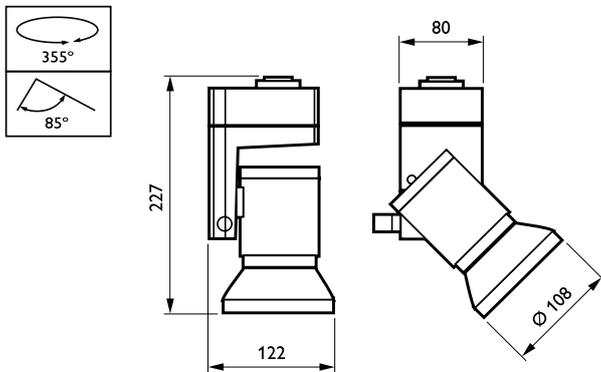
Soprano halogen projectors

Soprano Halogen	
Type	QRN690 (3-circuit track version) QCN690 (baseplate version)
Light source	Halogen: 1 x Capsuleline / GY6.35 / 100 W
Lamp included	Yes (K) No
Transformer	Electronic (ET)
Optic	Very narrow beam (6°) Medium beam (24° and 36°)
Installation	Direct on ceiling; baseplate with connection point (BA) On 3-circuit power track (3C)

Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum and steel Base plate: polycarbonate
Maintenance	Direct lamp access
Accessory	Back-bone rod, dichroic filters, sculptural lense, barndoors, honey comb
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QRN/QCN690



Soprano QRN/QCN690 projector for track and baseplate mounting, with Capsuleline lamp and very narrow or medium-beam optic



Soprano QRN/QCN690 projector for track and baseplate mounting, with Capsuleline lamp and very narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCN690 1xHAL-C100W K ET 230/12V 24 BA GR	1.30	772479 00
QCN690 1xHAL-C100W K ET 230/12V 36 BA GR	1.30	772493 00
QRN690 1xHAL-C100W K ET 230/12V 6 3C GR	1.30	772530 00
QRN690 1xHAL-C100W K ET 230/12V 24 3C GR	1.30	772554 00
QRN690 1xHAL-C100W K ET 230/12V 36 3C GR	1.30	772578 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCN690 1xHAL-C100W K ET 230/12V 24 BA WH	1.30	772462 00
QCN690 1xHAL-C100W K ET 230/12V 36 BA WH	1.30	772486 00
QRN690 1xHAL-C100W K ET 230/12V 6 3C WH	1.30	772523 00
QRN690 1xHAL-C100W K ET 230/12V 24 3C WH	1.30	772547 00
QRN690 1xHAL-C100W K ET 230/12V 36 3C WH	1.30	772561 00

Please contact your local Philips representative for additional configurations

Accessories



Back-bone rod used to pile accessories, up to 3, with a black clamp in order to fix onto projector

Product ID	EOC
ZZN690 ACS85 BK	157252 00



Dichroic filter to color the beam, green (ZZN690 DF85-GN)

Product ID	EOC
ZZN690 DF85-BL	395494 00
ZZN690 DF85-RD	395487 00
ZZN690 DF85-YE	157146 00
ZZN690 DF85-GN	157139 00



Sculptural lens to elongate the beam, rotate to position the beam axis

Product ID	EOC
ZZN690 LS85 BK	157269 00



Traditional theatrical shutters with innovative rotating adjustability

Product ID	EOC
ZZN690 BD85 BK	157207 00



Honey comb. Creating an accent with extra low luminance (< 200 cd for 60°)

Product ID	EOC
ZZN690 HC85 BK	157238 00

Accessories are piled onto the back-bone rod



Musa



Musa – a touch of elegance

Musa is a family of adjustable track/surface-mounted projectors for compact discharge and halogen lamps, with beams ranging from 6° to 60°. Accessories include barndoors, UV and dichroic color filters, and protective glass. Orientation is 350° horizontal and 90° vertical, with a locking system on the vertical axis. The Musa family comes in three sizes: Musa, Midi Musa and Mini Musa.

www.philips.com/lighting

Musa Mini



Musa Midi



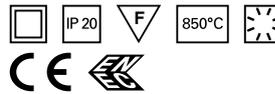
Musa



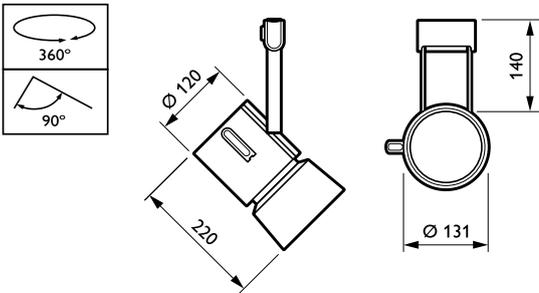
Musa Mini

Type	QRS614 (3-circuit track version) QCS614 (baseplate version)
Light source	Halogen: 1 × HalogenA PAR30S / E27 / 75 W 1 × Plusline Small / R7s / 150 W (HAL-TDS)
Lamp beam angle	HalogenA PAR30S 10°, 30°
Optic	Very narrow beam (6°) Narrow beam (12°) Medium beam (24° and 36°) Wide beam (60° or WB) (only for HAL-TDS)
Lamp included	No
Transformer	Electronic

Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum and polycarbonate
Maintenance	Direct lamp access by unlocking the front ring
Accessory	Barndoor shutters, UV- and dichroic color filters, protection glass, glare control glass
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QRS/QCS614



Musa Mini QRS614 projector for track mounting, with HalogenA or Plusline Small lamp and wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS614 HAL-P30S75W 3C GR	1.50	575926 00
QRS614 HAL-TDC150W WB 3C GR	1.50	575940 00

Please contact your local Philips representative for additional configurations



Musa Mini QRS614 projector for track mounting, with HalogenA or Plusline Small lamp and wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS614 HAL-P30S75W 3C WH	1.50	575919 00
QRS614 HAL-TDC150W WB 3C WH	1.50	575933 00

Please contact your local Philips representative for additional configurations



Musa Mini QCS614 projector for baseplate mounting, with HalogenA or Plusline Small lamp and wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCS614 HAL-TDC150W WB BA GR	1.50	038193 00
QCS614 HAL-P30S75W BA GR	1.50	038209 00

Please contact your local Philips representative for additional configurations



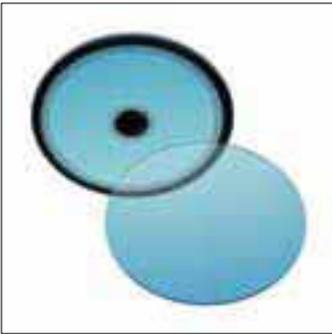
Musa Mini QCS614 projector for baseplate mounting, with HalogenA or Plusline Small lamp and wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCS614 HAL-TDC150W WB BA WH	1.50	038285 00
QCS614 HAL-P30S75W BA WH	1.50	663142 00

Please contact your local Philips representative for additional configurations

Accessories

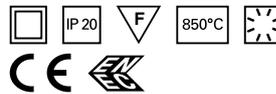


Protection glass and glare control filter

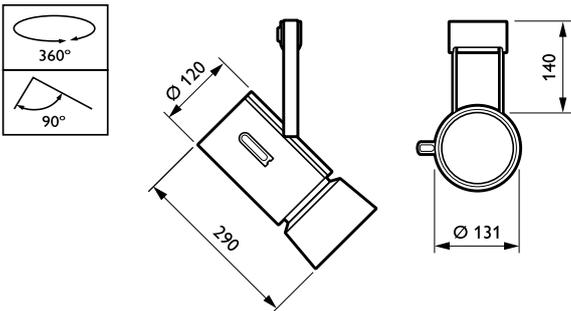
Product ID	EOC
ZZG185 GF	568287 00

Musa Midi	
Type	MRS612 (3-circuit track, HID lamp version) LRS612 (3-circuit track, halogen lamp version) MCS612 (baseplate, HID lamp version) LCS612 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W 1 x MASTERColour CDM-R111 Halogen: 1 x Aluline 111 / G53 / 100 W (HAL-R111) 1 x Capsuline / GY6.35 / 100 W (HAL-C)
Lamp beam angle	Aluline 111 8°, 24°, 45° MASTERColour CDM-R111: 10°, 24°, 40°
Optic	Narrow beam (12°) Medium beam (24° and 36°) Wide beam (60°)
Lamp included	Yes (K or lamp color 830, 930 or 942)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic ballast (EB)

Transformer	Electronic (ET) (for halogen lamp version)
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum and polycarbonate
Maintenance	Direct lamp access by unlocking the front head or ring
Accessory	Barndoor shutters, UV- and dichroic color filters, protection glass, glare control glass Note: not for HAL-R111 lamp
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/LRS/MCS/LCS612



Musa Midi MRS612 projector for track mounting, with MASTERColour lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS612 CDM-TC70W/830 EB 36 3C GR	1.50	575889 00
MRS612 CDM-TC35W/830 EB 36 3C GR	1.50	663081 00

Please contact your local Philips representative for additional configurations



Musa Midi MRS612 projector for track mounting, with MASTERColour lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS612 CDM-TC35W/830 EB 24 3C WH	1.50	575810 00
MRS612 CDM-TC70W/830 EB 36 3C WH	1.50	575872 00
MRS612 CDM-TC35W/830 EB 36 3C WH	1.50	663067 00

Please contact your local Philips representative for additional configurations



Musa Midi LRS612 projector for track mounting, with Alkuline or Capsuleline lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS612 HAL-C100W ET 24 3C GR	2.00	038261 00

Please contact your local Philips representative for additional configurations



Musa Midi MCS612 projector for track mounting, with MASTERColour lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS612 CDM-TC35W/830 EB 24 BA GR	1.50	038216 00
MCS612 CDM-TC70W/830 EB 12 BA GR	1.50	935867 00
MCS612 CDM-TC70W/830 EB 36 BA GR	1.50	935874 00

Please contact your local Philips representative for additional configurations



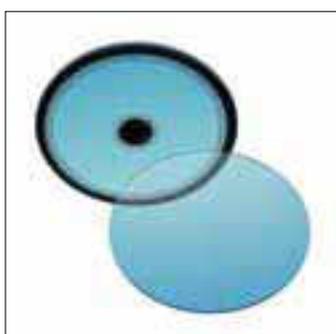
Musa Midi MCS612 projector for track mounting, with MASTERColour lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS612 CDM-R111-24-35W/830 EB BA WH	2.10	770895 00

Please contact your local Philips representative for additional configurations

Accessories



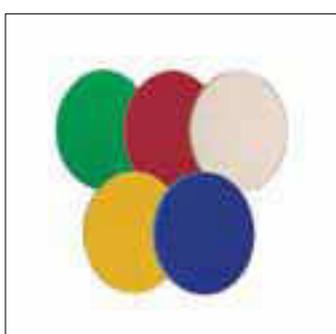
Protection glass and glare control filter

Product ID	EOC
ZZG185 GF	568287 00
ZZN612 PG	576053 00



Barndoor shutters, in white (WH), grey (GR) or black (BK) to match with the luminaire

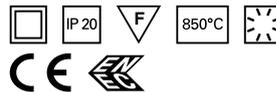
Product ID	EOC
ZZN612 BD WH	575988 00
ZZN612 BD GR	575995 00
ZZN612 BD BK	576008 00



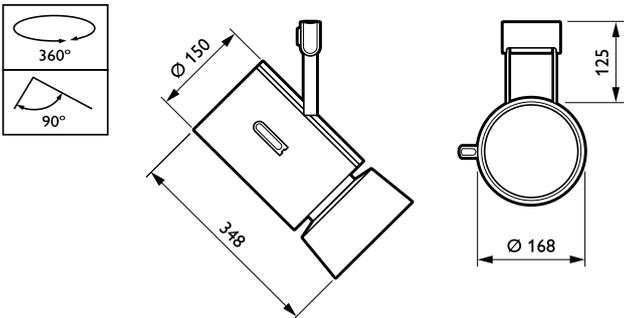
Dichroic color filters to color the beam blue (BL), green (GN), red (RD) or yellow (YE) and UV filter

Product ID	EOC
ZZN612 DF115-RD	576015 00
ZZN612 DF115-BL	576022 00
ZZN612 DF115-YE	576039 00
ZZN612 DF115-GN	576046 00
ZZN612 UV	576060 00

Musa			
Type	MRS610 (3-circuit track version) MCS610 (baseplate version)	Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 35, 70, 150 W 1 x MASTERColour CDM-R / E27 / 35, 70 W 1 x MASTER SDW-TG Mini / GX12-1 / 50, 100 W 1 x MASTER SDW-T / PG12-1 / 35, 50, 100 W	Color	Grey (GR) White (WH) RAL colors available on request
Lamp included	Yes (K or lamp color 830, 930 or 942)	Options	Semi-parallel self-stopping ignitor (ST), standard with semi-parallel ignitor (SP) 24° and 36° optics available in gold and pink color
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: Electronic ballast (EB)	Material	Aluminum and polycarbonate
Optic	Very narrow beam (6°) Narrow beam (12°) Medium beam (24° and 36°) Wide beam (60°)	Maintenance	Direct lamp access by unlocking the front face head or unlocking the front ring (depending the lamp type)
		Accessory	Barndoor shutters, UV- and dichroic color filters, protection glass, glare control glass, meat filters, champagne optics
		Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/MCS610



Musa MRS610 projector for track mounting, with MASTERColour or MASTER lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS610 CDM-T70W/830 IC ST 230V 36 GR	4.00	038780 00
MRS610 CDM-T150W/830 IC ST 230V 60 3C GR	4.90	038865 00
MRS610 SDW-T100W K IC 230V 60 3C GR	4.20	038964 00
MRS610 CDM-T70W/830 EB 24 3C GR	3.10	575681 00
MRS610 CDM-T70W/830 EB 36 3C GR	3.10	575728 00
MRS610 SDW-TG100W K EB 36 3C GR	3.30	575803 00

Please contact your local Philips representative for additional configurations



Musa MRS610 projector for track mounting, with MASTERColour or MASTER lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS610 CDM-R30-40-70W K IC SP 230V 3C WH	3.90	038407 00
MRS610 CDM-T150W/830 IC ST 230V 60 3C WH	4.90	038858 00
MRS610 SDW-T50W K IC 230V 36 3C WH	4.00	038896 00
MRS610 SDW-T100W K IC 230V 60 3C WH	4.20	038957 00
MRS610 CDM-T70W/830 EB 36 3C WH	3.10	575711 00
MRS610 SDW-TG100W K EB 36 3C WH	3.30	575797 00

Please contact your local Philips representative for additional configurations



Musa MCS610 projector for baseplate mounting, with MASTERColour or MASTER lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS610 CDM-T70W/830 EB 24 BA GR	3.10	038025 00
MCS610 CDM-T70W/830 EB 36 BA GR	3.10	038032 00
MCS610 SDW-T100W K IC 230V 36 BA GR	4.20	038056 00
MCS610 SDW-TG100W K EB 24 BA GR	3.30	038063 00
MCS610 SDW-TG100W K EB 36 BA GR	3.30	038070 00

Please contact your local Philips representative for additional configurations



Musa MCS610 projector for baseplate mounting, with MASTERColour or MASTER lamp and very narrow, narrow, medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS610 CDM-T70W/830 IC SP 230V 36 BA WH	4.00	038353 00
MCS610 SDW-T100W K IC 230V 36 BA WH	4.20	038438 00
MCS610 CDM-T70W/830 EB 24 3C WH	3.10	575674 00

Please contact your local Philips representative for additional configurations

Accessories



Barndoor shutters, in white (WH), grey (GR) or black (BK) to match with luminaire, diameter 151 mm

Product ID	EOC
ZZN610 BD WH	575957 00
ZZN610 BD GR	575964 00
ZZN610 BD BK	575971 00



Dichroic color filters to color the beam blue (BL), green (GN), red (RD) or yellow (YE)

Product ID	EOC
ZZN861 DF151-RD	388564 00
ZZN862 DF151-BL	388571 00
ZZN863 DF151-GN	388588 00
ZZN864 DF151-YE	388595 00

Magneos



Magneos – contemporary and configurable

This family of projectors represents an outstanding lighting tool for shops, packing advanced Philips technology into a compact, contemporary design.

The Magneos projector family offers a choice of lamps, including the latest Elite lamps, as well as a variety of optics (e.g. champagne reflector), accessories and color finishes. Magneos enables retailers to configure their own solution. All HID versions include Philips' energy-saving electronic gear to optimize lamp life and lower energy consumption.

The extensive range offers subtle, Mini versions for applications with low ceiling heights, and Compact versions offering a strong presence for powerful spotlighting from higher ceilings.

www.philips.com/lighting

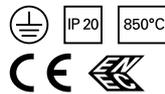
The Magneos Compact MRSS01 projector features a robust adjustment system, with a gradient indicator for precise beam angle definition.



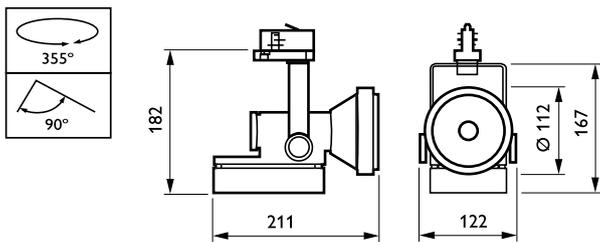
Magneos Mini

Type	MRS502 (3-circuit track, HID lamp version) LRS502 (3-circuit track, halogen lamp version) MCS502 (baseplate, HID lamp version) LCS502 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-TC / G8.5 / 35, 70 W 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W Halogen: 1 x MASTERLine TC / G8.5 / 45, 60 W
Lamp included	Yes (K or lamp color 830, 930 or 942)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic ballast (EB)
Transformer	Electronic (ET) (for halogen lamp version)
Optic	Narrow beam (12°) Medium beam (24° and 36°)

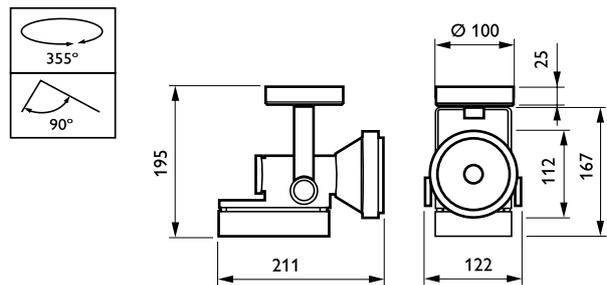
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Housing: aluminum Optic: aluminum Rim: PC
Maintenance	Direct lamp access or after removing the front ring
Accessory	Protection glass, sculptural lens, dichroic color filters, barndoors, glare control glass
Remarks	CDM-TC lamp versions are delivered with protection glass
Main applications	Retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS/LRS502



MCS/LCS502



Magneos Mini MRS/LRS502 projector for track mounting, with MASTERLine and MASTERColour lamp and narrow or medium-beam optic



Magneos Mini MRS/LRS502 projector for track mounting, with MASTERLine and MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS502 CDM-Tm20W/830 EB 36 3C GR	1.18	482583 00
MRS502 CDM-TC35W/830 EB 24 3C GR	1.26	482637 00
MRS502 CDM-TC35W/830 EB 36 3C GR	1.26	482644 00
MRS502 CDM-TC70W/830 EB 12 3C GR	1.26	482743 00
MRS502 CDM-TC70W/830 EB 36 3C GR	1.26	482767 00
LRS502 HAL-TC60W K 24 3C GR	1.28	482873 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS502 CDM-Tm20W/830 EB 24 3C WH	1.18	482606 00
MRS502 CDM-TC35W/830 EB 12 3C WH	1.26	482651 00
MRS502 CDM-TC35W/830 EB 36 3C WH	1.26	482675 00
MRS502 CDM-TC70W/830 EB 24 3C WH	1.26	482781 00
MRS502 CDM-TC70W/830 EB 36 3C WH	1.26	482798 00
LRS502 HAL-TC60W K 12 3C WH	1.28	482897 00

Please contact your local Philips representative for additional configurations



Magneos Mini MCS/LCS502 projector for baseplate mounting, with MASTERLine and MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS502 CDM-Tm20W/830 EB 24 BA GR	1.27	482934 00
MCS502 CDM-Tm20W/830 EB 36 BA GR	1.27	482941 00
MCS502 CDM-TC35W/830 EB 36 BA GR	1.35	483009 00
MCS502 CDM-TC70W/830 EB 12 BA GR	1.35	483108 00
MCS502 CDM-TC70W/830 EB 36 BA GR	1.35	483122 00
LCS502 HAL-TC60W K ET 24 BA GR	1.36	483238 00

Please contact your local Philips representative for additional configurations



Magneos Mini MCS/LCS502 projector for baseplate mounting, with MASTERLine and MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS502 CDM-Tm20W/830 EB 24 BA WH	1.27	482965 00
MCS502 CDM-Tm20W/830 EB 36 BA WH	1.27	482972 00
MCS502 CDM-TC35W/830 EB 24 BA WH	1.35	483023 00
MCS502 CDM-TC70W/830 EB 12 BA WH	1.35	483139 00
MCS502 CDM-TC70W/830 EB 36 BA WH	1.35	483153 00
LCS502 HAL-TC60W K ET 12 BA WH	1.36	483252 00

Please contact your local Philips representative for additional configurations

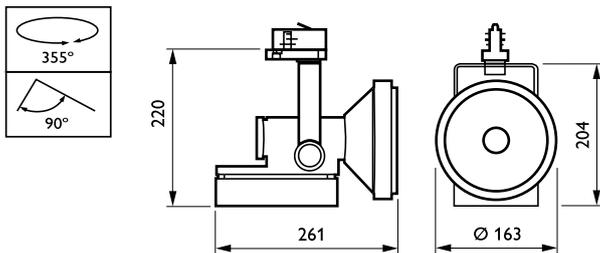
Magneos Compact

Type	MRS501 (3-circuit track version) MCS501 (baseplate version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 35, 70, 150 W 1 x MASTERColour CDM-R30 / E27 / 35, 70 W 1 x MASTER SDW-TG Mini / GX12-I / 50, 100 W
Lamp included	Yes (K or lamp color 830, 930 or 942) (only for CDM-T)
Lamp beam angle	10° and 30° for CDM-R30 35W 10° and 40° for CDM-R30 70W
Optic	Narrow beam (12°) Medium beam (24° and 36°, silver and champagne) Wide beam (60°) Focusable (24-36°)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic ballast (EB)

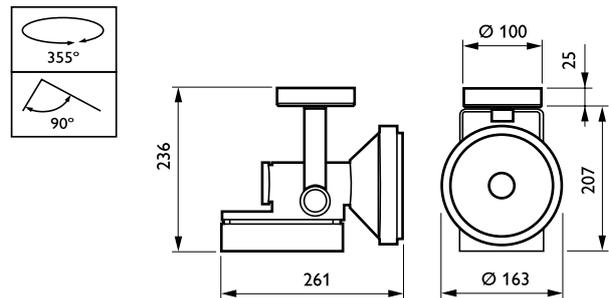
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Housing: aluminum Optic: aluminum Rim: PC
Maintenance	Direct lamp access or after removing the front glass
Accessory	Protection glass, sculptural lens, color filters, barndoors, meat filters, glare control glass, champagne optics
Remarks	CDM-T versions are delivered with protection glass
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS501



MCS501



Magneos Compact MRS501 projector for track mounting, with MASTERColour or MASTER lamp and medium or wide-beam optic



Magneos Compact MRS501 projector for track mounting, with MASTERColour or MASTER lamp and medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS501 CDM-T70W/830 EB 24 3C GR	1.85	481203 00
MRS501 CDM-T70W/830 EB 36 3C GR	1.85	481210 00
MRS501 CDM-T70W/830 EB 60 3C GR	1.85	481227 00
MRS501 CDM-T150W/830 EB 60 3C GR	2.53	481401 00
MRS501 SDW-TG50W K EB 36 3C GR	1.97	481586 00
MRS501 SDW-TG100W K EB 36 3C GR	1.97	481746 00
MRS501 CDM-T70W/830 EB 12 3C WH	1.85	481234 00
MRS501 CDM-T70W/930 EB 24 3C WH	1.85	481326 00
MRS501 CDM-T150W/830 EB 60 3C WH	2.53	481449 00
MRS501 SDW-TG50W K EB 36 3C WH	1.97	481623 00
MRS501 SDW-TG100W K EB 60-CH 3C WH	1.97	481838 00
MRS501 CDM-T70W/830 EB 24-36 3C WH	1.85	675047 00

Please contact your local Philips representative for additional configurations



Magneos Compact MCS501 projector for baseplate mounting, with MASTERColour or MASTER lamp and medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS501 CDM-T70W/942 EB 24 BA GR	1.92	482064 00
MCS501 CDM-T150W/830 EB 36 BA GR	2.59	482101 00
MCS501 SDW-TG50W K EB 24 BA GR	1.93	482255 00
MCS501 SDW-TG100W K EB 36 BA GR	1.93	482422 00

Please contact your local Philips representative for additional configurations



Magneos Compact MCS501 projector for baseplate mounting, with MASTERColour or MASTER lamp and medium or wide-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS501 CDM-T35W/830 EB 36 BA WH	1.92	481890 00
MCS501 CDM-T70W/830 EB 24 BA WH	1.92	481951 00
MCS501 CDM-T150W/830 EB 60 BA WH	2.59	482156 00
MCS501 SDW-TG50W K EB 60 BA WH	1.93	482316 00
MCS501 SDW-TG100W K EB 60 BA WH	1.93	482477 00
MCS501 SDW-TG100W K EB 36-CH BA WH	1.93	482507 00

Please contact your local Philips representative for additional configurations

Accessories



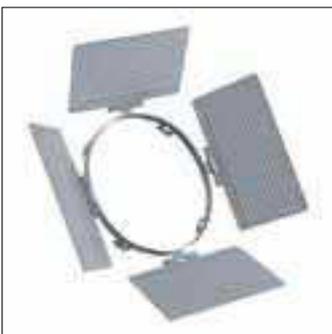
Dichroic color filters to color the beam blue (BL), green (GN), red (RD) or yellow (YE)

Product ID	EOC
ZRS501 DF-BL DICHROIC FILTER	483290 00
ZRS502 DF-BL DICHROIC FILTER	483382 00
ZRS501 DF-GN DICHROIC FILTER	483313 00
ZRS502 DF-GN DICHROIC FILTER	483405 00
ZRS501 DF-RD DICHROIC FILTER	483283 00
ZRS502 DF-RD DICHROIC FILTER	483375 00
ZRS501 DF-YE DICHROIC FILTER	483306 00
ZRS502 DF-YE DICHROIC FILTER	483399 00



Glare control glass

Product ID	EOC
ZRS501 GCG GLARE CONTROL GLASS	483337 00
ZRS502 GCG GLARE CONTROL GLASS	483429 00



Barndoor shutters, in grey (GR), white (WH) or black (BK), to match with the luminaire

Product ID	EOC
ZRS501 BD GR BARNDOORS	483351 00
ZRS502 BD GR BARNDOORS	483443 00
ZRS501 BD WH BARNDOORS	483368 00
ZRS502 BD WH BARNDOORS	483450 00
ZRS501 BD BK BARNDOORS	483344 00
ZRS502 BD BK BARNDOORS	483436 00

EFix Projector Micro



EFix Projector Micro – small but powerful

The EFix Projector Micro range is a collection of powerful spots for accent lighting in shops. They are miniaturized spots with a clean, simple look that blends in almost completely with the store interior.

The sparkling MASTERColour lamp and efficient electronic gear system provide high beam intensities combined with an extremely energy-efficient performance. The EFix Projector Micro MRS241 is available with innovative MASTERColour Mini technology (CDM-Tm 20 W and 35 W) and in halogen versions, for both baseplate and track mounting. EFix luminaires are easy to order, easy to install and easy to maintain.

www.philips.com/lighting

Direct access to the lamp



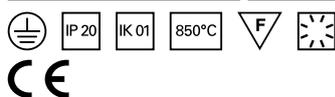
Easy remove cover glas



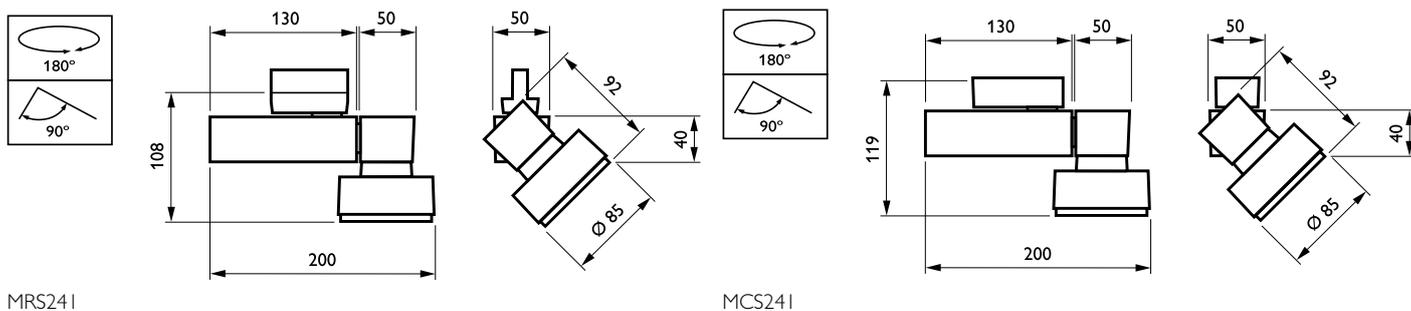
EFix Projector Micro

EFix Projector Micro (CDM-Tm)

Type	MRS241 (3-circuit track version) MCS241 (baseplate version)	Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Light source	HID: 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W	Color	White, RAL9010 (WH) Grey (GR)
Lamp included	Yes (K or lamp color 830 or 930)	Material	Housing: aluminum Rim: polycarbonate Optic: aluminum
Lamp position	Vertical	Maintenance	Lamp access after removing the front glass
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)	Main applications	Retail
Optic	Narrow beam (12°) Medium beam (36°)		



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS241

MCS241



EFix Projector Micro MRS241 for track mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS241 1xCDM-Tm20W/830 EB 12 3C GR	0.58	804859 99
MRS241 1xCDM-Tm20W/830 EB 36 3C GR	0.58	804873 99
MRS241 1xCDM-Tm35W/930 EB 12 3C GR	0.58	804897 99
MRS241 1xCDM-Tm35W/930 EB 36 3C GR	0.58	804910 99

Please contact your local Philips representative for additional configurations



EFix Projector Micro MRS241 for track mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS241 1xCDM-Tm20W/830 EB 12 3C WH	0.58	804866 99
MRS241 1xCDM-Tm20W/830 EB 36 3C WH	0.58	804880 99
MRS241 1xCDM-Tm35W/930 EB 12 3C WH	0.58	804903 99
MRS241 1xCDM-Tm35W/930 EB 36 3C WH	0.58	804927 99

Please contact your local Philips representative for additional configurations



EFix Projector Micro MCS241 for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS241 1xCDM-Tm20W/830 EB 12 BA GR	0.57	804774 99
MCS241 1xCDM-Tm20W/830 EB 36 BA GR	0.57	804798 99
MCS241 1xCDM-Tm35W/930 EB 12 BA GR	0.57	804811 99
MCS241 1xCDM-Tm35W/930 EB 36 BA GR	0.57	804835 99

Please contact your local Philips representative for additional configurations



EFix Projector Micro MCS241 for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic

Preferred selection

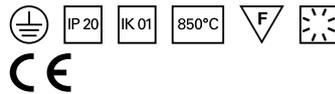
Product ID	Weight (kg)	European Order Code (EOC)
MCS241 1xCDM-Tm20W/830 EB 12 BA WH	0.57	804781 99
MCS241 1xCDM-Tm20W/830 EB 36 BA WH	0.57	804804 99
MCS241 1xCDM-Tm35W/930 EB 12 BA WH	0.57	804828 99
MCS241 1xCDM-Tm35W/930 EB 36 BA WH	0.57	804842 99

Please contact your local Philips representative for additional configurations

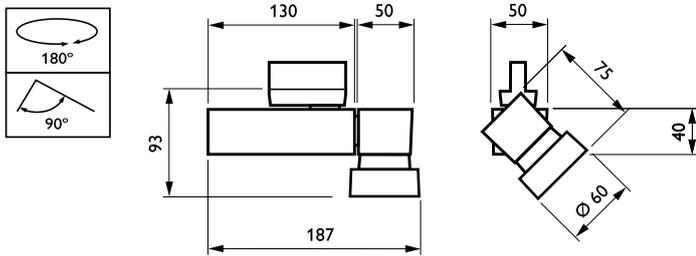
EFix Projector Micro (Dichroic Halogen)

Type	LRS242 (3-circuit track version) LCS242 (baseplate version)
Light source	Suitable for lamps that fit a GU5.3 lamp socket Preferred lamp type: Halogen MASTERLine ES, max 50 W
Lamp included	No
Lamp position	Vertical
Transformer	Electronic (ET)

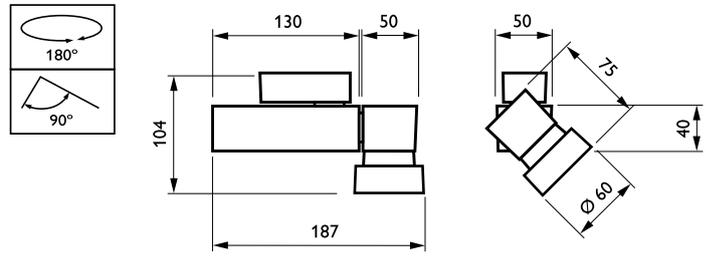
Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	White, RAL9010 (WH) Grey (GR)
Material	Aluminum
Maintenance	Lamp replacement by simply pulling off the lamp housing
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



LRS242



LCS242



EFix Projector Micro LRS242 for track mounting, suitable for halogen MR16 lamps



EFix Projector Micro LCS242 for baseplate mounting, suitable for halogen MR16 lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRS242 1xHAL-MR50-50W ET 3C WH	0.46	804729 99
LRS242 1xHAL-MR50-50W ET 3C GR	0.46	804712 99

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LCS242 1xHAL-MR50-50W ET BA WH	0.45	804705 99
LCS242 1xHAL-MR50-50W ET BA GR	0.45	804699 99

Please contact your local Philips representative for additional configurations

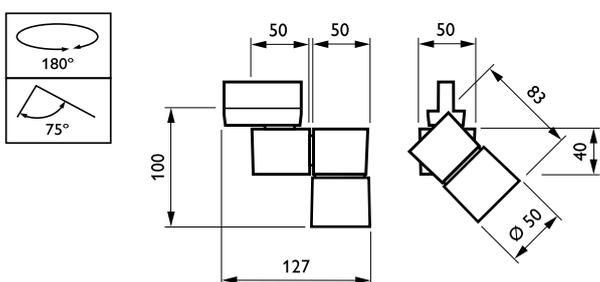
EFix Projector Micro (PAR Halogen)

Type	QRS243 (3-circuit track version) QCS243 (baseplate version)
Light source	Suitable for lamps that fit an E27 lamp socket Preferred lamp type: HalogenA PAR30S, max 100 W
Lamp included	No
Lamp position	Vertical
Installation	Direct on ceiling; baseplate with connection point (BA) On 3-circuit track (3C)

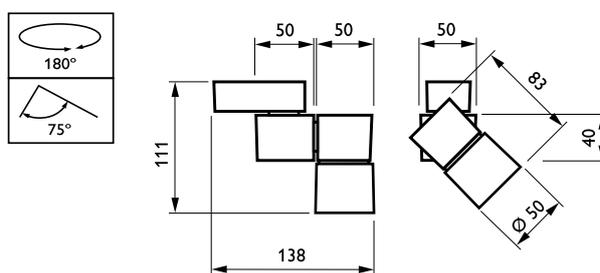
Color	White, RAL9010 (WH) Grey (GR)
Material	Aluminum
Maintenance	Direct lamp access
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QRS243



QCS243



EFix Projector Micro QRS243 for track mounting; suitable for lamps that fit an E27 socket.

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS243 1x MAX100W-E27 3C WH	0.36	804767 99
QRS243 1x MAX100W-E27 3C GR	0.36	804750 99

Please contact your local Philips representative for additional configurations



EFix Projector Micro QCS243 for baseplate mounting; suitable for lamps that fit an E27 socket.

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCS243 1x MAX100W-E27 BA WH	0.35	804743 99
QCS243 1x MAX100W-E27 BA GR	0.35	804736 99

Please contact your local Philips representative for additional configurations

Bolero



Bolero – the versatile option

Bolero is a range of adjustable track/surface-mounted projectors with integrated control gear and an aluminum reflector (12°, 24°, 36° and, on request, very accented 6° or flooded 60°). It is suitable for use with White SON SDW-T or MASTERColour CDM-T lamps. Orientation is 350° horizontal and 85° vertical. Accessories include barndoor shutters, dichroic color filters and a UV filter.

Track-mounting versions fit universal 3-circuit Euro-DIN track. Surface-mounting versions can be surface-mounted via a base plate.

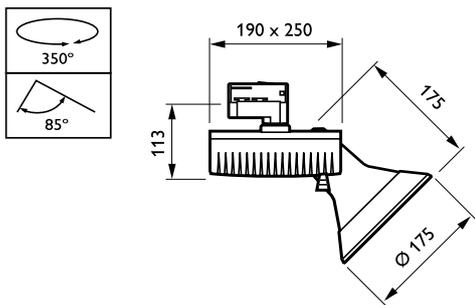
www.philips.com/lighting

Bolero	
Type	SRN600, SRN601, MRN602, MRN603, MRN604 (3-circuit track version) SCN600, SCN601, MCN602, MCN603, MCN604 (baseplate version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 35, 70, 150 W 1 x MASTER SDW-T / PG12-1 / 50, 100 W
Lamp included	Yes (K) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC)
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Installation	Direct on ceiling; baseplate with connection point (BA) On 3-circuit track (3C)

Color	Grey (GR) White (WH) RAL colors available on request
Option	Light sources: MASTERColour CDM-TP / PG12-2 / 70 W MASTERColour CDM-TP / PGX12-2 / 150 W Optics: Very narrow (6°), very wide (60°)
Material	Housing: die-cast aluminum and steel
Maintenance	Direct lamp access or after removing front glass
Accessory	Barndoor; dichroic- and UV filters
Remarks	CDM-T versions are delivered with protection glass
Main applications	Retail



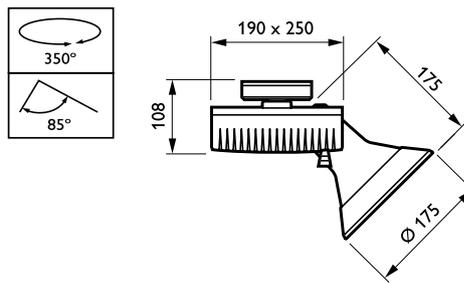
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



SRN600/601/MRN602/603/604



Bolero SRN600/601/MRN602/603/604 projector for track mounting, with MASTERColour or MASTER lamp and narrow or medium-beam optic



SCN600/601/MCN602/603/604



Bolero SCN600/601/MCN602/603/604 projector for baseplate mounting, with MASTERColour or MASTER lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRN602 1xCDM-T35W IC 230V 24 3C WH	2.70	385259 00
MRN604 1xCDM-T150W IC 230V 36 3C GR	3.90	385334 00
SRN601 1xSDW-T100W K IC 230V 36 3C GR	3.30	771151 00
MRN602 1xCDM-T35W IC 230V 24 3C WH	2.70	771236 00
MRN603 1xCDM-T70W IC 230V 36 3C GR	3.00	771410 00
MRN604 1xCDM-T150W IC 230V 36 3C WH	3.90	771526 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
SCN600 1xSDW-T50W K IC 230V 36 BA GR	3.30	771038 00
SCN601 1xSDW-T100W K IC 230V 36 BA WH	3.30	771175 00
MCN602 1xCDM-T35W IC 230V 12 BA WH	2.70	771212 00
MCN603 1xCDM-T70W IC 230V 24 BA WH	3.00	771380 00
MCN603 1xCDM-T70W IC 230V 36 BA GR	3.00	771434 00
MCN604 1xCDM-T150W IC 230V 36 BA WH	3.90	771540 00

Please contact your local Philips representative for additional configurations

Accessories



Barn door shutters, in white (WH), grey (GR) or black (BK) to match with luminaire, diameter 151 mm

Product ID	EOC
ZZN860 BD151 WH	388601 00
ZZN860 BD151 GR	388618 00
ZZN860 BD151 BK	388625 00



Dichroic color filters to color the beam blue (BL), green (GN), red (RD) or yellow (YE)

Product ID	EOC
ZZN861 DF151-RD	388564 00
ZZN862 DF151-BL	388571 00
ZZN863 DF151-GN	388588 00
ZZN864 DF151-YE	388595 00



UV filter

Product ID	EOC
ZZN145 UV	368993 99

Monza



Monza – to the point

Monza is a range of adjustable track/surface-mounted projectors with an aluminum reflector for compact discharge and halogen lamps with optics ranging from wide beam to about 36°. Accessories include a UV filter and barndoors. Orientation is 350° horizontal and 150° vertical, with a locking device.

www.philips.com/lighting

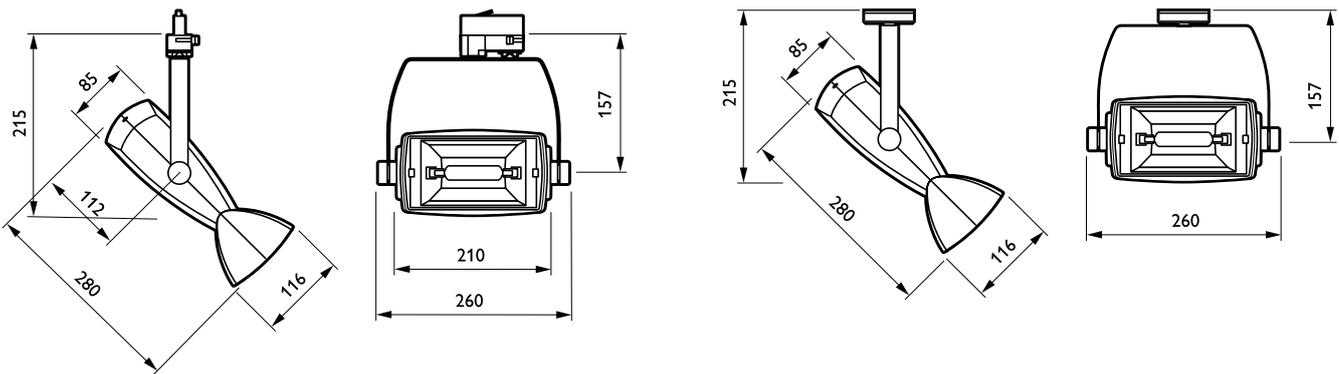
Monza

Type	MRS410, MRS420, MRS430, MRS440, MRS450 (3-circuit track, HID lamp version) QRS400 (3-circuit track, halogen lamp version) MCS410, MCS420, MCS430, MCS440, MCS450 (baseplate, HID lamp version) QCS400 (baseplate, halogen lamp version)
Light source	HID: 1 x MASTER SDW-T / PG12-I / 100 W 1 x MASTERColour CDM-T / G12 / 70, 150 W 1 x MASTERColour CDM-TD / RX7s / 70, 150 W Halogen: 1 x Plusline Small / R7s / 300 W
Lamp included	No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I)

Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH)
Material	Die-cast aluminum
Maintenance	Lamp access after removing front glass
Accessory	Barndoors and UV filters
Remarks	MASTERColour lamp versions are delivered with protection glass
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MRS420/430



Monza MRS420/430 projector for track mounting, with MASTERColour or MASTER lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS420 1xCDM-TD70W IC 230V 3C GR	3.50	822617 00
MRS430 1xCDM-TD150W IC 230V 3C GR	4.50	822679 00

Please contact your local Philips representative for additional configurations

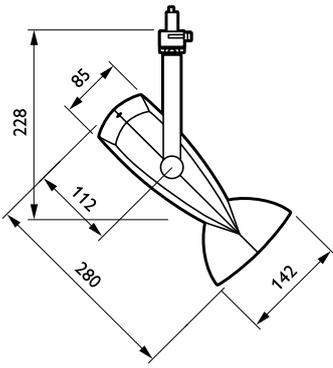


Monza MCS420/430 projector for baseplate mounting, with MASTERColour or MASTER lamp

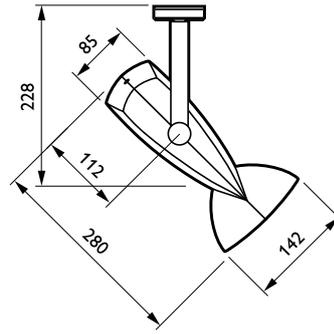
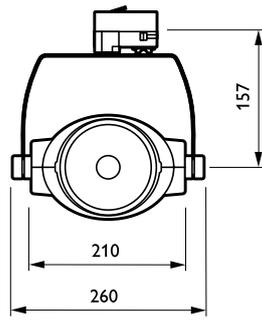
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS420 1xCDM-TD70W IC 230V BA GR	3.60	822570 00
MCS430 1xCDM-TD150W IC 230V BA GR	4.50	822631 00

Please contact your local Philips representative for additional configurations



MRS410/440/450



MCS410/440/450

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS410 1xSDW-T100W IC 230V 3C WH	3.75	822846 00

Please contact your local Philips representative for additional configurations



Monza MRS410 projector for track mounting, with MASTERColour or MASTER lamp



Monza MRS440/450 projector for track mounting, with MASTERColour or MASTER lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MRS440 1xCDM-T70W IC 230V 3C GR	3.55	822730 00
MRS450 1xCDM-T150W IC 230V 3C GR	4.50	822792 00

Please contact your local Philips representative for additional configurations

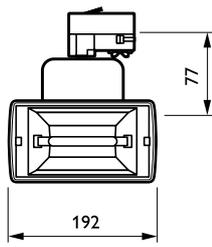
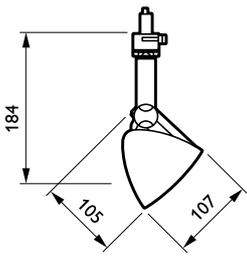


Monza MCS440/450 projector for baseplate mounting, with MASTERColour or MASTER lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MCS450 1xCDM-T150W IC 230V BA GR	4.55	822754 00
MCS450 1xCDM-T150W IC 240V BA GR	4.55	822976 00

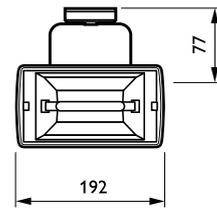
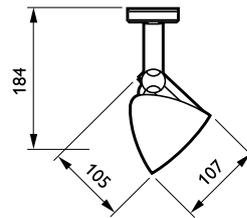
Please contact your local Philips representative for additional configurations



QRS400



Monza QRS400 projector for track mounting, with Plusline Small lamp



QCS400

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QRS400 1xHAL-TDS300W 2C GR	0.95	822532 00
QRS400 1xHAL-TDS300W 3C GR	0.95	822556 00

Please contact your local Philips representative for additional configurations



Monza QCS400 projector for baseplate mounting, with Plusline Small lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCS400 1xHAL-TDS300W BA GR	1.00	822518 00

Please contact your local Philips representative for additional configurations

Accessories



Barndoor for MCS/MRS410/440/450

Product ID	EOC
ZCS400 BD-GR	822877 00
ZCS440 BD-WH	822884 00
ZCS440 BD-GR	822891 00



Barndoor for MCS/MRS420/430 and QCS/QRS400

Product ID	EOC
ZCS400 BD-WH	822860 00



UV filter for MCS/MRS420/430 and QCS/QRS400

Product ID	EOC
ZCS400 UV	822907 00



UV filter for MCS/MRS410/440/450

Product ID	EOC
ZCS440 UV	822914 00

Spot LED



Spot LED – sparkling and sustainable

Spot LED is an innovative and stylish family of projectors, track and downlights featuring the latest LED technology, which emit no UV IR radiation. With an adjustable projector head of only Ø 31 mm, this is an incredibly small luminaire. It incorporates the LUXEON® K2 high-power LED, which delivers more light than ever before. It offers incredible energy and maintenance savings in hospitality applications and adds sparkle to retail environments. Spot LED is available as a complete range – surface-mounted, recessed, track-mounted, wall-mounted and desktop.

www.philips.com/lighting



Spot LED surface-mounted



Spot LED recessed, semi-recessed



Spot LED desk-top



Spot LED wall-mounted



Spot LED

Spot LED, surface mounted

Type	BCG400 (round version) BCG401 (square version) BCG402 (square version)
Light source	BCG400/401: 1 x LUXEON® K2 BCG402: 2 x LUXEON® K2
Light color	Blue, warm white, cool white
Power supply	220 - 240V / 50 - 60 Hz
Power consumption	BCG400/401: 4 W BCG402: 8 W
Optic	Narrow beam (10°) Medium beam (25°)

Lifetime	50,000 hours (70% lumen maintenance at $T_a=25^\circ\text{C}$)
Adjustment	Horizontal: 345° Vertical: 90°
Material	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Base plate: brushed aluminum and polycarbonate
Remarks	Including internal transformer
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

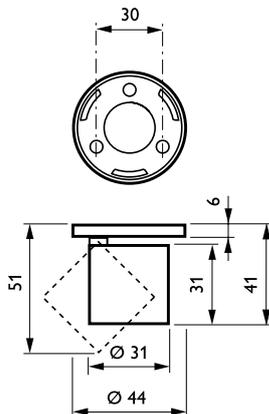
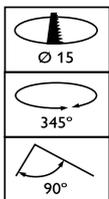


Spot LED BCG400 projector; a one-LED surface-mounted luminaire with remote transformer and 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG400 1xLED-K2-10-/CW PSU-E 220-240V	0.15	009209 99
BCG400 1xLED-K2-10-/BL PSU-E 220-240V	0.15	009216 99
BCG400 1xLED-K2-25-/CW PSU-E 220-240V	0.15	009384 99
BCG400 1xLED-K2-10-/WW PSU-E 220-240V	0.15	803708 99
BCG400 1xLED-K2-25-/WW PSU-E 220-240V	0.15	803715 99

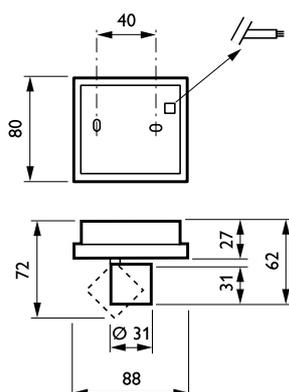
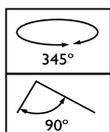
Please contact your local Philips representative for additional configurations



BCG400



Spot LED BCG401 projector; a one-LED surface-mounted luminaire with integrated transformer and 10° or 25° optic



BCG401

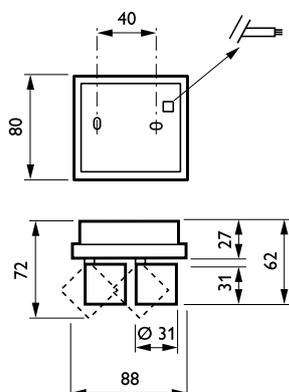
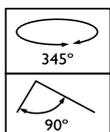
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG401 1xLED-K2-10-/CW PSU 220-240V CLII	0.20	009162 99
BCG401 1xLED-K2-10-/BL PSU 220-240V CLII	0.20	009179 99
BCG401 1xLED-K2-25-/CW PSU 220-240V CLII	0.20	009346 99
BCG401 1xLED-K2-10-/WW PSU 220-240V CLII	0.20	803661 99
BCG401 1xLED-K2-25-/WW PSU 220-240V CLII	0.20	803685 99

Please contact your local Philips representative for additional configurations



Spot LED BCG402 projector; a two-LED surface-mounted luminaire with integrated transformer and 10° or 25° optic



BCG402

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG402 2xLED-K2-10-/CW PSU 220-240V CLII	0.39	009186 99
BCG402 2xLED-K2-10-/BL PSU 220-240V CLII	0.37	009193 99
BCG402 2xLED-K2-25-/CW PSU 220-240V CLII	0.37	009360 99
BCG402 2xLED-K2-10-/WW PSU 220-240V CLII	0.30	803678 99
BCG402 2xLED-K2-25-/WW PSU 220-240V CLII	0.30	803692 99

Please contact your local Philips representative for additional configurations

Spot LED

Spot LED, surface mounted

Type	BCG440 (round version) BCG441 (square version) BCG442 (rectangular version)
Light source	BCG440: 3 x LUXEON® K2 BCG441: 3 x LUXEON® K2 BCG442: 6 x LUXEON® K2
Light color	Warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	BCG440/441: 12 W BCG442: 24.8 W

Optic	Narrow beam (10°) Medium beam (25°)
Adjustment	Horizontal: 340° Vertical: 90°
Lifetime	50,000 hrs (70% lumen maintenance at $T_a=25^\circ\text{C}$)
Material	Housing: brushed anodized aluminum and polycarbonate Optic: polycarbonate
Remarks	Including external transformer
Main applications	Hotels, restaurants, retail, museums



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

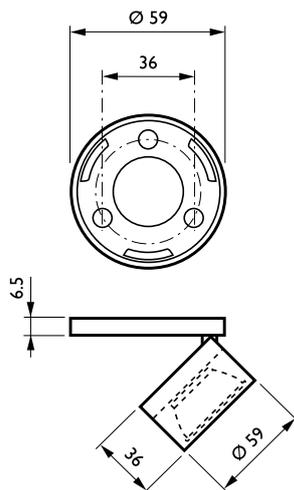
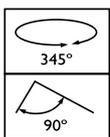


Spot LED BCG440 Round surface-mounted projector with narrow (10°) or medium (25°) beam

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG440 3xLED-K2-10-WWW PSU-E 220-240V	0.18	802619 99
BCG440 3xLED-K2-25-WWW PSU-E 220-240V	0.18	802978 99

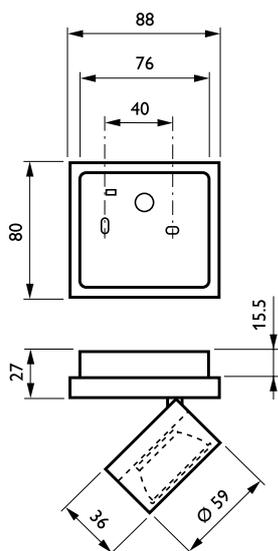
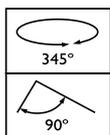
Please contact your local Philips representative for additional configurations



BCG440



Spot LED BCG441 Square surface-mounted projector with narrow (10°) or medium (25°) beam



BCG441

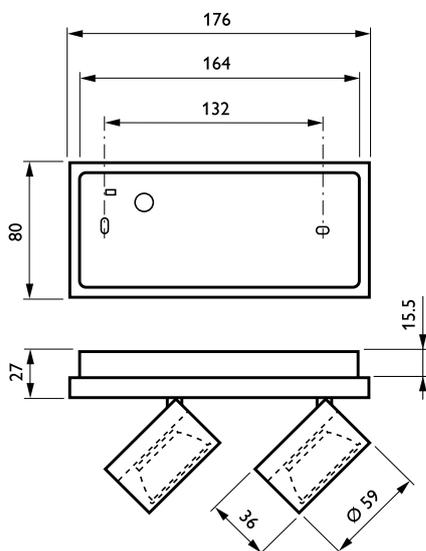
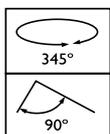
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG441 3xLED-K2-10-/CW PSU 220-240V CLII	0.30	802565 99
BCG441 3xLED-K2-10-/WW PSU 220-240V CLII	0.30	802572 99
BCG441 3xLED-K2-25-/WW PSU 220-240V CLII	0.30	802930 99

Please contact your local Philips representative for additional configurations



Spot LED BCG442 Twin surface-mounted projector with narrow (10°) or medium (25°) beam



BCG442

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG442 6xLED-K2-10-/WW PSU 220-240V CLII	0.59	802596 99
BCG442 6xLED-K2-25-/WW PSU 220-240V CLII	0.59	802954 99

Please contact your local Philips representative for additional configurations

Spot LED, desktop

Type	BDG400
Light source	1 x LUXEON®K2
Light color	Blue, warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	4 W
Optic	Narrow beam (10°) Medium beam (25°)
Lifetime	50,000 hours (70% lumen maintenance at T _a = 25° C)

Adjustment	Horizontal: 345° Vertical: 60°
Material	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Base plate: brushed aluminum and polycarbonate
Remarks	Including integrated transformer
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

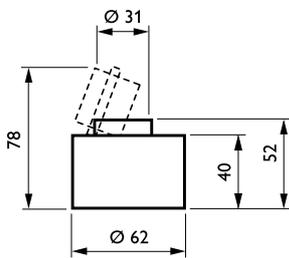
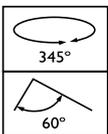


Spot LED BDG400, a one-LED desk-top luminaire with integrated transformer and 10° or 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BDG400 1xLED-K2-10-/CW PSU 220-240V CLII	0.30	009322 99
BDG400 1xLED-K2-10-/BL PSU 220-240V CLII	0.30	009339 99
BDG400 1xLED-K2-25-/CW PSU 220-240V CLII	0.30	009889 99
BDG400 1xLED-K2-10-/WWW PSU 220-240V CLII	0.30	803548 99
BDG400 1xLED-K2-25-/WWW PSU 220-240V CLII	0.30	803555 99

Please contact your local Philips representative for additional configurations



BDG400

Spot LED, wall mounted

Type	BWG401
Light source	1 x LUXEON®K2
Light color	Warm white, cool white
Power supply	220 - 240 V / 50 - 60 Hz
Power consumption	4 W
Optic	Medium beam (25°)
Lifetime	50,000 hours (70% lumen maintenance at $T_a = 25^\circ \text{C}$)

Material	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Base plate: brushed aluminum and polycarbonate
Remarks	Including integrated transformer
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

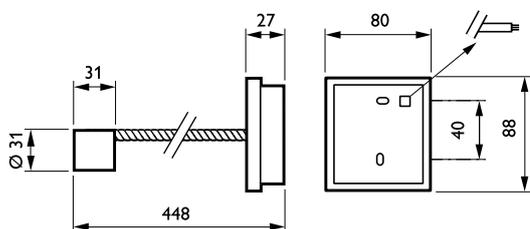


Spot LED BWG401 projector; a one-LED wall-mounted luminaire with integrated transformer and 25° optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWG401 1xLED-K2/CW PSU 220-240V CLII BK	0.35	009506 99
BWG401 1xLED-K2/CW PSU 220-240V CLII GR	0.35	009513 99
BWG401 1xLED-K2/WW PSU 220-240V CLII BK	0.35	800004 99
BWG401 1xLED-K2/WW PSU 220-240V CLII GR	0.35	800516 99

Please contact your local Philips representative for additional configurations



BWG401

Zadora spotlight



Zadora – attractive light, on the spot

The Zadora Spotlight is a miniaturized, highly decorative projector range for low-voltage reflector halogen lamps. The straightforward modular designs suit a wide range of applications. Fit to light your small merchandise the most natural way. And by using MASTERLine halogen lamps also in a very efficient way. The Zadora Spotlight is an addition to the Zadora downlight range.

www.philips.com/lighting

Zadora Spotlight decorative



Zadora Adjustable recessed



Zadora Fixed recessed

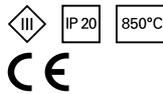


Zadora spotlight

Zadora Spotlight

Type	LRG201 (with metal ring) LRG202 (with frosted glass ring)
Light source	Halogen: 1 × MASTERLine ES / GU5.3 / 50 W 1 × Accentline / GU5.3 / 50 W
Lamp included	No
Transformer	Electronic (ET)
Connection	EXPRESS' connector (EXPRESS)
Color	Grey (GR) White (WH) Aluminum (ALU)

Material	Housing: zamac Front ring LRG201: zamac Front ring LRG202: glass
Installation	Minorail track adapter Direct on ceiling: baseplate with 'EXPRESS' connection point
Maintenance	Direct lamp access by removing the front ring
Remarks	Integrated 100, 200 or 600 mm extension rod with 'EXPRESS' connector (L100, L200, L600)
Accessory	Minorail track adapter Recessed or surface-mounted baseplate
Main applications	Retail

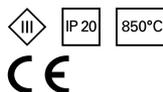


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

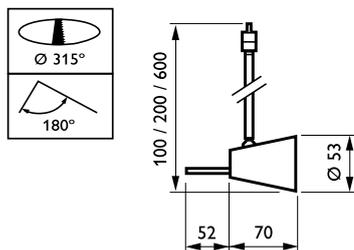
Zadora Spotlight

Type	LRX201 3 spotlights in one ready-to-install package
Light source	Halogen: 3 × Accentline / GU5.3 / 50 W
Lamp beam angle	36°
Lamp included	Yes
Transformer	Electronic (ET)
Connection	EXPRESS' connector (EXPRESS)
Color	White (WH)
Material	Housing: zamac Front ring: zamac

Installation	Direct on ceiling
Maintenance	Direct lamp access after removing the front ring
Remarks	Lamps and Minorail track installation material delivered with luminaire (KIT), consisting of: Minorail track (length 1000 mm), 3 × Minorail adapters, 3 × LRG201 spotlight rod (length 100 mm), 1 × end cap, 1 × RCS800 TCS transformer; all in white color 3 × Accentline / GU5.3 / 50 W lamps
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



LRG201/202 LRX201



Zadora LRG/LRX201 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG201 1xHAL-MR50-50W EXPRESS L100 GR	0.17	797939 99
LRG201 1xHAL-MR50-50W EXPRESS L600 GR	0.44	797991 99

Please contact your local Philips representative for additional configurations



Zadora LRG/LRX201 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG201 1xHAL-MR50-50W EXPRESS L100 WH	0.17	797922 99
LRX201 3xHAL-MR50-36-50W ET KIT TK1000	1.62	799988 99

Please contact your local Philips representative for additional configurations



Zadora LRG/LRX201 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG201 1xHAL-MR50-50W EXPRESS L100 ALU	0.17	797946 99
LRG201 1xHAL-MR50-50W EXPRESS L200 ALU	0.30	797977 99
LRG201 1xHAL-MR50-50W EXPRESS L600 ALU	0.44	798004 99

Please contact your local Philips representative for additional configurations



Zadora LRG202 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG202 1xHAL-MR50-50W EXPRESS L100 GR	0.14	798028 99

Please contact your local Philips representative for additional configurations



Zadora LRG202 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG202 1xHAL-MR50-50W EXPRESS L100 WH	0.14	798011 99
LRG202 1xHAL-MR50-50W EXPRESS L600 WH	0.41	798073 99

Please contact your local Philips representative for additional configurations



Zadora LRG202 projector for track mounting, with MASTERLine or Accentline lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
LRG202 1xHAL-MR50-50W EXPRESS L100 ALU	0.14	798035 99
LRG202 1xHAL-MR50-50W EXPRESS L200 ALU	0.27	798066 99

Please contact your local Philips representative for additional configurations

Accessories



ZZX200 baseplate with Express connector; in aluminum ALU), grey (GR), white (WH) and black (BK)

Product ID	EOC
ZZX200 BAJ ALU	008608 99
ZZX200 BAJ GR	008585 99
ZZX200 BAJ WH	008578 99
ZZX200 BAJ BK	008592 99



ZZX200 baseplate for recessed mounting with Express connector; in aluminum (ALU), grey (GR), white (WH) and black (BK)

Product ID	EOC
ZZX200 RBAJ ALU	008646 99
ZZX200 RBAJ GR	008622 99
ZZX200 RBAJ WH	008615 99
ZZX200 RBAJ BK	008639 99

Zadora LRX201: kit version with 3 spotlights, extension rod and Express connector



ZZX200 baseplate for recessed mounting with Express connector (RBAJ)



ZZX200 baseplate with Express connector (BAJ)







3-circuit square RCS750

The Philips 3-circuit track system is a flexible system for the professional user. It offers a wide range of different possibilities for the optimal lighting of each situation. Any required configuration can be created relatively easily: horizontal or vertical, mounted on or in the ceiling, on the wall or on freestanding panels, depending on the luminaires in question.

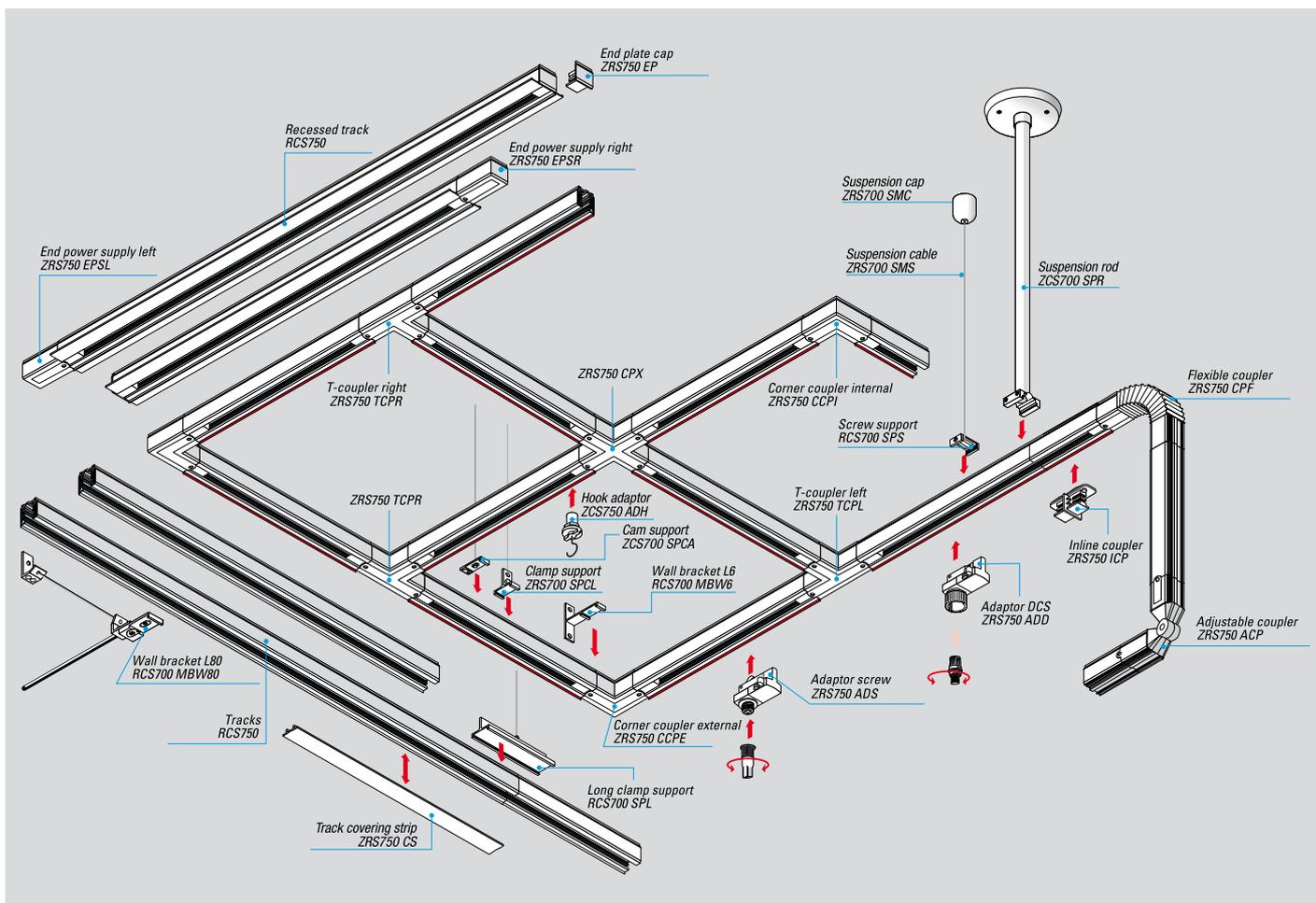
It is also possible to apply the system as a floating structure by using the suspension tubes and clamps provided. The standard parts offer architects and installers numerous options to position the track system and luminaires at any required distance from the object to be lit.

All the luminaires used with this system have separate power switching and so can easily be moved. This makes it simple to make changes to the lighting and presentations, e.g. to create changing atmospheres in shop windows or interiors

The basis of this 3-circuit track system is the solid aluminum track containing four mains-voltage electrical lines and a ground loop.

The accessories guarantee a good electrical and mechanical connection.

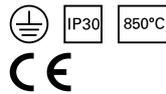
This allows the construction of a multifunctional track system, from which not only accent lighting but also – using the appropriate suspension hooks – advertising and decorative material can be suspended.



3-circuit Square RCS750

3-circuit track, square	
Type	RCS750
Circuit	3-circuit power track (3C)
Length version	1000 in mm (L1000)
	2000 in mm (L2000)
	3000 in mm (L3000)
	4000 in mm (L4000)
Color	White (WH)
	Black (BK)
	Aluminum (ALU)

Installation	Three circuits 250V AC, 16 A, 3 x 3,7 kVA (total power supply) Also possible to connect a 3-phase supply (230 - 400V 16 A) when there will be a threefold increase in power rating i.e. 11.1 kW Integrated fastening holes (distance 1000 mm, load 5 x 5 kg max, torque 2.5 Nm)
Accessory	Range of adapters, power supply connections and mounting accessories
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Accessories



3-circuit square RCS750 track system

Product ID	EOC
RCS750 3C L1000 ALU	381060 00
RCS750 3C L2000 ALU	381077 00
RCS750 3C L3000 ALU	381084 00
RCS750 3C L4000 ALU	381091 00



3-circuit square RCS750 track system

Product ID	EOC
RCS750 3C L1000 BK	798516 00
RCS750 3C L2000 BK	798523 00
RCS750 3C L3000 BK	798530 00
RCS750 3C L4000 BK	798547 00



3-circuit square RCS750 track system

Product ID	EOC
RCS750 3C L1000 WH	381107 00
RCS750 3C L2000 WH	381114 00
RCS750 3C L3000 WH	381121 00
RCS750 3C L4000 WH	381138 00



Rigid 1 m suspension rod which can be cut to any desired length

Product ID	EOC
ZCS700 2C/3C SPR L1000 GR SUSPENSION ROD	329475 00



Reinforcing suspension clamp to be used for suspending the track by flexible wire. Particularly intended to reinforce the joint between two lengths of track

Product ID	EOC
ZRS700 2C/3C SPCL ALU SUSP CLAMP LONG	325309 99



Suspension clamp to be used for suspending the track by flexible wire

Product ID	EOC
ZRS700 2C/3C SPC ALU SUSPENSION CLAMP	325279 99



Suspension cable with a length of 1.5 m. Can be cut to length

Product ID	EOC
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ZRS700 2C/3C SMS SUSPENSION SET	149882 99
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Cover to hide the wire clamp. Includes cable clamp

Product ID	EOC
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ZRS700 2C/3C SMC.WH SUSPENSION CAP	149875 99
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Screw fixing plate to allow direct fixing of the track to the ceiling or fixing the system by flexible suspension

Product ID	EOC
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ZRS700 2C/3C SCP ALU SUSPENSION CLAMP	149851 99
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ZRS700 2C/3C SCP WH SUSPENSION CLAMP	149868 99
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Power supply connector end left

Product ID	EOC
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ZRS750 3C EPSR 250V 16A BK SUPPLY RIGHT	141480 99
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ZRS750 3C EPSR 250V 16A WH SUPPLY RIGHT	381169 99
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ZRS750 3C EPSL 250V 16A BK SUPPLY LEFT	141497 99
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ZRS750 3C EPSL 250V 16A WH SUPPLY LEFT	381145 99
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Central supply connector to join and supply power to two pieces of track

Product ID	EOC
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ZRS750 3C CPS 250V 16A BK SUPPLY CENTRAL	141558 99
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ZRS750 3C CPS 250V 16A WH SUPPLY CENTRAL	381220 99
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External earth coupling / corner piece outer 90°

Product ID	EOC
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ZRS750 3C CCPE BK L-COUPLER EXTERNAL	141527 99
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ZRS750 3C CCPE WH L-COUPLER EXTERNAL	381282 99
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ZRS750 3C CCPI BK L-COUPLER INTERNAL	141534 99
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ZRS750 3C CCPI WH L-COUPLER INTERNAL	381268 99
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Adjustable corner which can be used between 60° and 300°. Allows 3-dimensional structures by turning the connecting parts 90°, 180° and 270° after removing cap

Product ID	EOC
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ZRS750 3C ACP WH ADJUSTABLE COUPLER	381367 99
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Flexible coupling / corner piece

Product ID	EOC
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ZRS750 3C CPF WH FLEXIBLE COUPLER	381206 99
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ZRS750 3C CPF BK FLEXIBLE COUPLER	798554 99
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T-coupler left. May be used as supply box

Product ID	EOC
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ZRS750 3CTCPL WHT-COUPLER LEFT	381329 99
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T-coupler right. May be used as supply box

Product ID	EOC
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ZRS750 3CTCPR BKT-COUPLER RIGHT	141541 99
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ZRS750 3CTCPR WHT-COUPLER RIGHT	381305 99
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Cross coupler used to create "X" shaped figures in the same plane. May be used as supply box

Product ID	EOC
ZRS750 3C CPX WH X-COUPLER	381343 99



End piece / plate

Product ID	EOC
ZRS750 3C EP BK END PLATE	141503 99
ZRS750 3C EP WH END PLATE	381244 99



Fish plate connection

Product ID	EOC
ZRS750 3C ICP 250V 16A BK IN-LINE COUPLER	141510 99
ZRS750 3C ICP WH IN-LINE COUPLER	381183 99



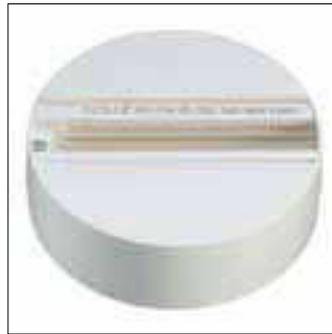
Closing profile for closing centre opening of the track (length 3 m)

Product ID	EOC
ZRS750 3C CS WH COVER STRIP	149844 99



3-circuit track adaptor equipped with a 50 VA electronic 12V converter and a jack express connector. Suitable to mount projectors equipped with Minorail Express connector

Product ID	EOC
ZCS750 3C ADJ WH ADAPTER EXPRESS	570273 00
ZCS750 3C ADJ BK ADAPTER EXPRESS	570280 00



Baseplate

Product ID	EOC
ZRS750 3C BA WH BASEPLATE	147154 99



Baseplate for recessed mounting

Product ID	EOC
ZRS750 3C RBA WH BASEPLATE RECESSED	381404 99





Minorail Express RCS800

The trend towards miniaturization, which has made such a success of small extra-low-voltage projectors with dichroic lamps, also applies to the technical infrastructure for these lighting products.

These fixtures are mainly used to highlight objects in show cases (jewelry, leather goods, museum or exhibition items).

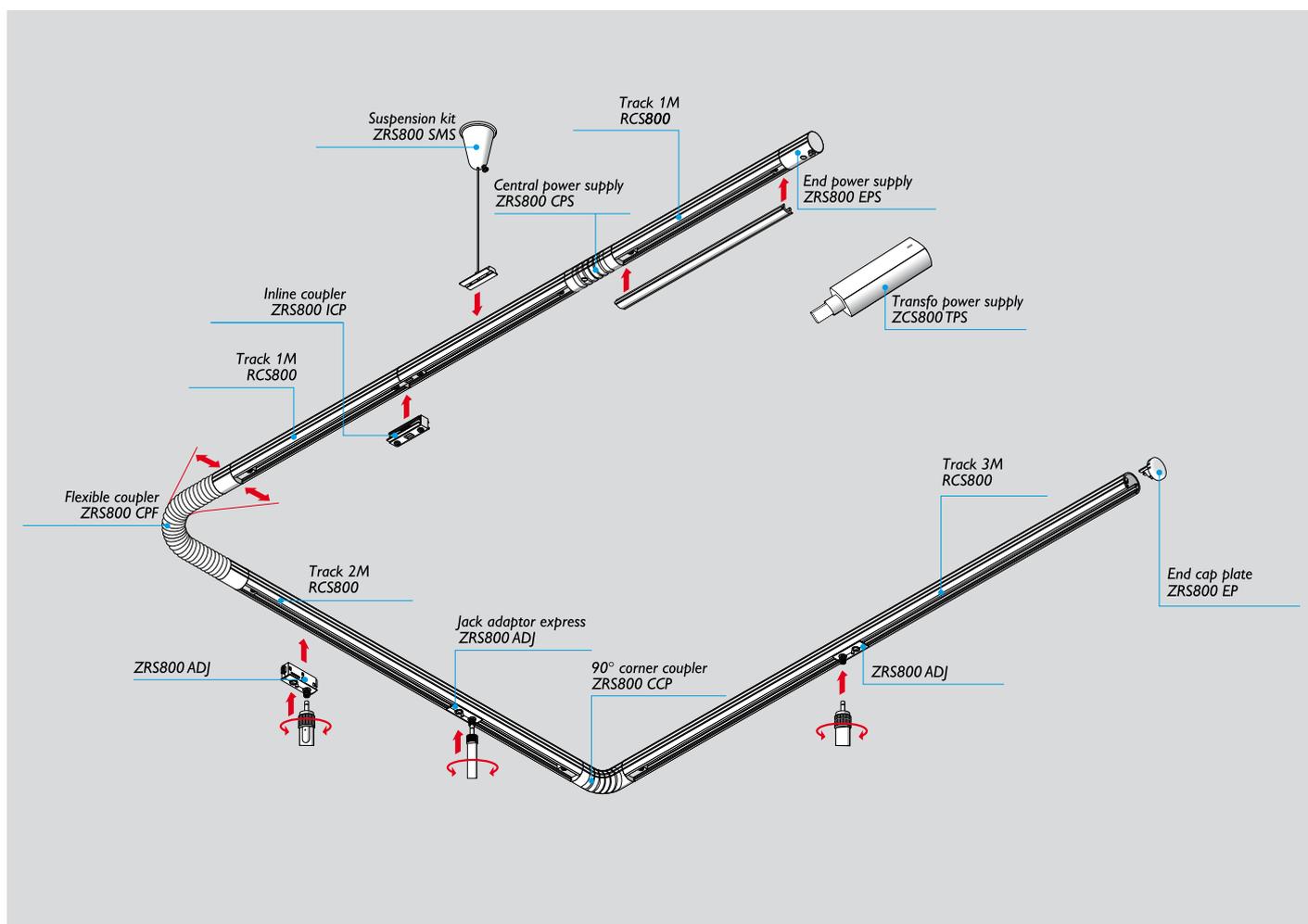
The Minorail Express, with its slightly oval shape (24 x 25 mm), has an exclusive design and is fully compliant with the standards for extra-low-voltage applications. It is based on the well-established 'Express' direct contact system for all Philips miniature projectors. The whole range (track and accessories) is available in white or black, while the track is also available in a sophisticated anodized aluminum finish.

To finish off the track system, it is possible to conceal the interior of the track using a closing profile of the same color.

Minorail is a single-circuit track, 12 V/25 A (32 A theoretical), thus guaranteeing the safety of the electrical installation.

It is composed of:

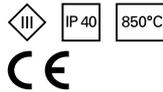
- three track lengths of extruded aluminum painted black or white or of refined anodized aluminum, with two end caps and closing profile
- polycarbonate 850°C-resistance supply, connection and mounting accessories (black or white) for the creation of horizontal or vertical structures.



Minorail Express RCS800

Minorail Express track	
Type	RCS800
Circuit	Single circuit, extra low voltage
Length version	1000 in mm (L1000)
	2000 in mm (L2000)
	3000 in mm (L3000)
Color	White (WH)
	Black (BK)
	Aluminum (ALU)

Installation	Single circuit 12V 25 A, max installed power 300 W Direct screwing on surface
Accessory	Range of supply-, connection and mounting accessories
Remarks	Connection of projectors on the track by 'Express' adapters
Main applications	Office, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Accessories



Minorail Express RCS800 single-circuit extra-low-voltage track system

Product ID	EOC
RCS800 12V L1000 ALU	142005 00
RCS800 12V L2000 WH	143705 00
RCS800 12V L3000 BK	143743 00



End supply connector: Provides an electrical connection between the track and the secondary of the ELV system 230 V/240V - 12V transformer

Product ID	EOC
ZRS800 EPS 12V 25A WH SUPPLY END	389783 99
ZRS800 EPS 12V 25A BK SUPPLY END	389806 99



Central supply connection to provide mechanical and electrical connection between two track modules. (Can be used as mechanical insulating link by removing internal cabling)

Product ID	EOC
ZRS800 CPS 12V 25A WH SUPPLY CENTRAL	389820 99
ZRS800 CPS 12V 25A BK SUPPLY CENTRAL	389844 99



Flexible coupler for mechanical and electrical connection between two track modules

Product ID	EOC
ZRS800 CPF 12V WH FLEXIBLE COUPLER	389943 99
ZRS800 CPF 12V BK FLEXIBLE COUPLER	389967 99



90° corner coupler for electrical and mechanical connection of two track modules

Product ID	EOC
ZRS800 CPL 12V WH L-CORNER COUPLER 90D	389905 99
ZRS800 CPL 12V BK L-CORNER COUPLER 90D	389929 99



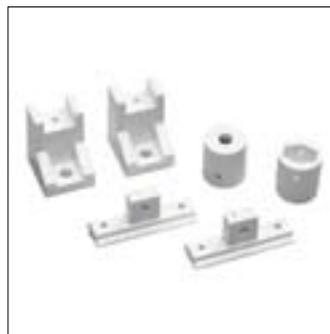
In-line connector: Invisible once installed

Product ID	EOC
ZRS800 ICP 12V WH INLINE COUPLER	389868 99
ZRS800 ICP 12V BK INLINE COUPLER	389882 99



Track suspension kit to allow simple and quick suspension of the Minorail Express. Maximum distance is 1.5 m between 2 suspension points

Product ID	EOC
ZRS800 SMS L2000 WH SUSPENSION SET	389981 99
ZRS800 SMS L2000 BK SUSPENSION SET	390000 99



Set off wall/ceiling fixations. (2 sets with fixing screws included)

Product ID	EOC
ZRS800 CMW WH WALL FIXATION CENTRAL	390024 99
ZRS800 CMW BK WALL FIXATION CENTRAL	390048 99



Express system adaptor for fitting all projectors equipped with Minorail Express connector 12V - 5 A

Product ID	EOC
ZRS800 ADJ 12V WH ADAPTER EXPRESS	389745 99
ZRS800 ADJ 12V BK ADAPTER EXPRESS	389769 99



End cap plate to close track end if cut

Product ID	EOC
ZRS800 EP 12V WH END PLATE	372587 99
ZRS800 EP 12V BK END PLATE	372655 99



ZZX200 baseplate for recessed mounting with Express connector; in aluminum (ALU), grey (GR), white (WH) and black (BK)

Product ID	EOC
ZZX200 RBAJ ALU	008646 99
ZZX200 RBAJ GR	008622 99
ZZX200 RBAJ WH	008615 99
ZZX200 RBAJ BK	008639 99



ZZX200 baseplate with Express connector; in aluminum ALU, grey (GR), white (WH) and black (BK)

Product ID	EOC
ZZX200 BAJ ALU	008608 99
ZZX200 BAJ GR	008585 99
ZZX200 BAJ WH	008578 99
ZZX200 BAJ BK	008592 99



Transformer power supply for direct electrical 12V connection to track. Connection to primary 230V - 240V rated for 150VA, it delivers 11.8V/12.5 A max with protection against short circuits and overloads. Fixing to all surfaces with 2 screws

Product ID	EOC
ZCS800 TPS 230/12V WH TRANSFORMER	158075 00
ZCS800 TPS 230/12V BK TRANSFORMER	158082 00

Spot LED Dynamic



Spot LED Dynamic – paint with light

Catch the eye by adding pulse and dynamics to your lighting.

The optical lens provides perfectly mixed color and gives an amazingly uniform beam without any color shadows. In addition to colored effects, the Spot LED Dynamic also creates high-quality white light varying from 2700 to 6500 K.

With a family of surface-mounted, suspended and recessed versions, Spot LED Dynamic enables true visual consistency using the highest quality materials and finishing. Flexible aiming (tilt and rotation) ensures maximum adjustability.

The Spot LED Dynamic features unique multi-die LED technology (RGBW) with an optical system that delivers 100% color mixing into a 20-degree beam. With no UV or heat in the beam, it is possible for objects to be lit from a short distance. This makes the Spot LED Dynamic ideal for application in showcases, displays and for lighting precious architectural details and works of art.

www.philips.com/lighting

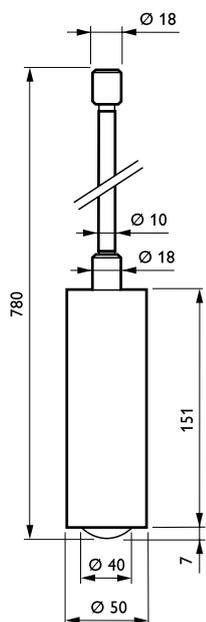
Spot LED Dynamic Pendant

Type	BPG700
Light source	Philips multi-die LED system
Light output	500 cd at 4000 K
Optic	Medium beam (20°)
Light color	RGB
Color temperature	2700-6500 K (tunable white)
Power supply	ECG700 PSU 100-240V/24V-60W DMX
Power consumption	Max 7 W
Lifetime	70% of light output at 25 000 hours at Ta ≤ 35°C

Material	Housing: brushed anodized aluminum Lens: glass
Operating temperature	Ta ≤ 35°C, with overheat protection
Controls	ColourChaser DMX, ColourChaser Wheel
Remarks	Metallic tube length = 622 mm 24V power supply via Control Interface DMX



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BPG700



Spot LED Dynamic Pendant BCG700, a one-LED surface-mounted luminaire

Product ID	Weight (kg)	European Order Code (EOC)
BPG700 1xLED-MD/RGBW 7W 24V	0.55	809021 99

Spot LED Dynamic Recessed



Spot LED Dynamic Projector



Spot LED Dynamic Pendant



UnicOne Pendant



UnicOne Pendant – balancing lighting and design

The UnicOne Pendant range allows you to decorate your interiors with very stylish suspensions while still enjoying the required lighting levels. This makes these luminaires suitable for use in, for example, reception halls, lobbies, supermarkets and other public areas. The Pendant series combines the refined UnicOne design style and details with a wide choice of best-in-class lamps and dedicated optics.

The UnicOne Pendant range includes Micro and Compact versions. Designed around the MASTERColour CDM-Tm Mini 20/35 W lamp, the Micro versions feature a subtle conical lamp housing and a distinctive square ceiling base, connected by sophisticated translucent cables. The Compact versions can be delivered with a visually restrained aluminum cone or a decorative faceted cone of high-quality plastic.

www.philips.com/lighting

UnicOne Projector Micro



UnicOne Projector Mini



UnicOne Pendant Micro



UnicOne Pendant Compact



UnicOne Uplight Micro



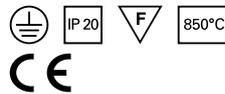
UnicOne Uplight Compact



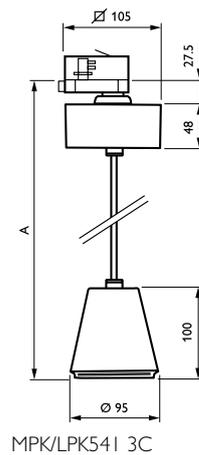
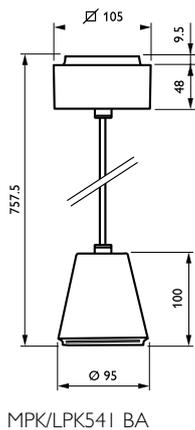
UnicOne Pendant

UnicOne Pendant Micro

Type	MPK541 (HID lamp version) LPK541 (Halogen lamp version)	Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Light source	HID: 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W Halogen: 1 x MASTERLine ES / GU5.3 / 45 W 1 x MASTERCapsule / GY6.35 / 45W	Color	Grey (GR) White RAL 9010 (WH) RAL colors available on request
Lamp beam angle	MASTERLine 8°, 24°, 36°	Material	Aluminum
Optic	Narrow beam (12°) Medium beam (24° and 36°)	Maintenance	Direct lamp access or after removing the front glass
Lamp included	Yes (K or lamp color 830 or 930)	Accessory	Protection glass, sculptural lens, dichroic color filters, glare control glass
Lamp position	Vertical	Remarks	Available in two cable length versions (C600 and C1200)
Gear	Electronic, 220 - 240V / 50 - 60 Hz: Electronic Ballast (EB)	Main applications	Retail, museums, public spaces, offices
Transformer	Electronic (ET) (for halogen lamp version)		



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A
L600	801,5
L1200	1401,5



UnicOne Pendant Micro for baseplate mounting, with discharge or halogen lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK541 CDM-Tm20W/830 EB 12 BA L600 GR	0.78	514117 00
MPK541 CDM-Tm20W/830 EB 24 BA L600 GR	0.78	514124 00
LPK541 HAL-MR50-24-45W K ET BA L600 GR	0.72	514308 00
MPK541 CDM-Tm35W/930 EB 12 BA L600 GR	0.88	671223 00
MPK541 CDM-Tm35W/930 EB 36 BA L600 GR	0.88	671230 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Micro for baseplate mounting, with discharge or halogen lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK541 CDM-Tm20W/830 EB 24 BA L600 WH	0.78	514131 00
LPK541 HAL-MR50-24-45W K ET BA L600 WH	0.72	514315 00
MPK541 CDM-Tm35W/930 EB 24 BA L600 WH	0.88	514193 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Micro for track mounting, with discharge or halogen lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK541 CDM-Tm20W/830 EB 12 3C L600 GR	0.82	514070 00
MPK541 CDM-Tm20W/830 EB 24 3C L600 GR	0.82	514087 00
LPK541 HAL-C50W K ET 24 3C L600 GR	0.78	514216 00
LPK541 HAL-MR50-24-45W K ET 3C L600 GR	0.77	514285 00
MPK541 CDM-Tm35W/930 EB 36 3C L600 GR	0.92	514155 00
MPK541 CDM-Tm35W/930 EB 12 3C L600 GR	0.92	671209 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Micro for track mounting, with discharge or halogen lamp and narrow or medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK541 CDM-Tm20W/830 EB 12 3C L600 WH	0.82	514094 00
MPK541 CDM-Tm20W/830 EB 24 3C L600 WH	0.82	514100 00
LPK541 HAL-C50W K ET 36 3C L600 WH	0.78	514254 00
MPK541 CDM-Tm35W/930 EB 36 3C L600 WH	0.92	514179 00
MPK541 CDM-Tm35W/930 EB 12 3C L600 WH	0.92	671216 00

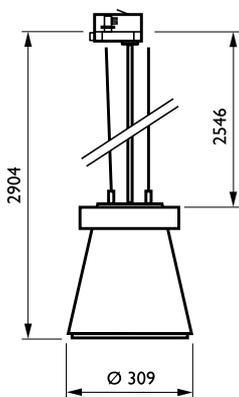
Please contact your local Philips representative for additional configurations

UnicOne Pendant Compact

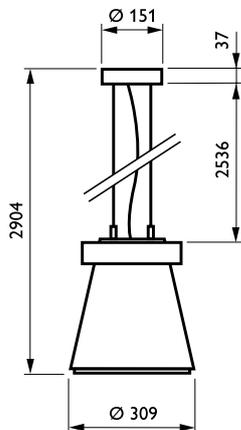
UnicOne Pendant Compact	
Type	FPK561 (aluminum, compact fluorescent lamp version) MPK561 (aluminum, HID lamp version) FPK562 (aluminum/polycarbonate, compact fluorescent version) MPK562 (aluminum/polycarbonate, HID lamp version)
Light source	Compact fluorescent: 1 x MASTER PL-T TOP 4 Pin / GX24q-3 / 32 W 1 x MASTER PL-T TOP 4 Pin / GX24q-4 / 42 W 1 x MASTER PL-T TOP 4 Pin / GX24q-5 / 57 W 1 x MASTER PL-H 4 Pin / 2G8-1 / 60, 85 W HID: 1 x MASTERColour CDM-T / G12 / 70, 150 W 1 x MASTER SDW-TG Mini / GX12-1 / 50, 100 W
Lamp included	Yes (K or lamp color 830, 840 or 930, 942)
Lamp position	Vertical
Optic	FPK561: wide beam MPK561: wide beam FPK562: optic MPK562: wide beam, slotted optic
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) Electronic Ballast (EB)
Installation	Direct on ceiling (no suspension facilities delivered) Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum (561) Aluminum and polycarbonate (562)
Maintenance	Direct lamp access or after opening the front glass
Accessory	For all types: protection glass, UV filter glass FPK561/562: opal protection glass
Remarks	Ready to install Complies with EN 60598
Main applications	Retail, office, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FPK561/562 MPK561/562
3C



FPK561/562 MPK561/562
BA



UnicOne Pendant Compact for ceiling, baseplate or track mounting, with compact fluorescent or HID lamp and wide-beam optic

Preferred selection

Product ID	European Order Code (EOC)
FPK561 PL-TT/4P42W/830 HFP GR	672428 00
FPK561 PL-H60W/830 HFP GR	672664 00
FPK561 PL-H85W/840 HFP 3C GR	672800 00
MPK561 CDM-T70W/830 EB GR	672060 00
MPK561 CDM-T150W/830 EB BA GR	672282 00
MPK561 SDW-TG100W K EB 3C GR	672343 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Compact for ceiling, baseplate or track mounting, with compact fluorescent or HID lamp and wide-beam optic

Preferred selection

Product ID	European Order Code (EOC)
FPK561 PL-TT/4P42W/830 HFP WH	672473 00
FPK561 PL-H60W/830 HFP WH	672671 00
FPK561 PL-H85W/840 HFP WH	672732 00
MPK561 CDM-T70W/830 EB WH	672077 00
MPK561 CDM-T150W/830 EB BA WH	672299 00
MPK561 SDW-TG100W K EB 3C WH	672350 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Compact for ceiling, baseplate or track mounting, with compact fluorescent, or HID lamp

Preferred selection

Product ID	European Order Code (EOC)
FPK562 PL-TT/4P42W/830 HFP GR	673951 00
FPK562 PL-H60W/830 HFP GR	674255 00
FPK562 PL-H85W/840 HFP 3C GR	674347 00
MPK562 CDM-T35W/830 EB 36 GR	672923 00
MPK562 CDM-T70W/830 EB 36 GR	673036 00
MPK562 CDM-T150W/830 EB 36 GR	673357 00

Please contact your local Philips representative for additional configurations



UnicOne Pendant Compact for ceiling, baseplate or track mounting, with compact fluorescent, or HID lamp

Preferred selection

Product ID	European Order Code (EOC)
FPK562 PL-TT/4P42W/830 HFP WH	673968 00
FPK562 PL-TT/4P57W/840 HFP BA WH	674248 00
MPK562 CDM-T35W/830 EB 36 WH	672930 00
MPK562 CDM-T70W/830 EB 24 WH	673029 00
MPK562 CDM-T70W/942 EB 60 WH	673142 00
MPK562 CDM-T150W/942 EB 60 WH	673425 00

Please contact your local Philips representative for additional configurations

Decorative faceted plastic cone



Restrained aluminum cone



Magic virtual light cone



Garnea



Garnea – stylish choice

Garnea is a pendant indoor luminaire that adds decorative to your architecture. It is available in complete metal or prismatic versions with a wide choice of lamps. A direct/indirect (D/I) prismatic version is also available.

The metal version is an easy-to-install, decorative medium-bay luminaire with a complete aluminum housing. Accessories include a louver, protective glass, UV filter glass, textured and decorative glass.

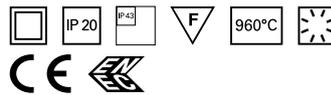
The prismatic version has an aluminum housing and polycarbonate (anti-UV) bowl. Accessories include decorative arms, colored halo rings, a protective cover, UV filter glass and a clamp band.

www.philips.com/lighting

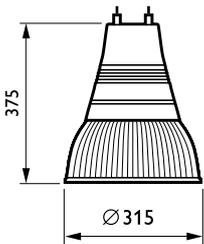
Garnea, prismatic version

Type	CPK630 (small P-D315, halogen lamp version) FPK630, KPK630 (small P-D315) MPK630, SPK630 (small P-D315, HID lamp version) KPK640 (large P-D410) MPK640, SPK640 (large P-D410, HID lamp version)
Light source	CPK/FPK/KPK/MPK/SPK630: Compact fluorescent: 1 x MASTER PL-T 4 Pin / GX24q-4 / 42 W Halogen: 1 x HalogenA Tubular / E27 / 60, 100, 150 W (HAL-T32) HID: 1 x MASTERColour CDM-T / G12 / 70 W 1 x MASTERColour CDM-TP / PG12-2 / 70 W 1 x MASTER SDW-T / PG12-1 / 100 W Induction lamp system: 1 x MASTER QL system / 55 W KPK/MPK/SPK640: Compact fluorescent: 1 x MASTER QL system / 85 W HID: 1 x MASTERColour CDM-T / G12 / 150 W 1 x MASTERColour CDM-TP / PGX12-2 / 150 W 1 x MASTER SDW-T / PG12-1 / 100 W

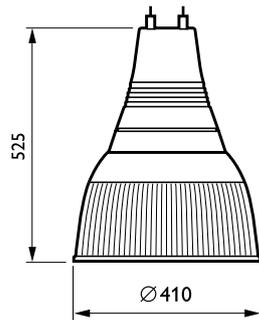
Lamp included	No
Lamp position	Vertical
Light distribution	Direct/Indirect lighting (D/I) in small version
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 / 50 - 60 Hz: High Frequency (HF) High Frequency Performer (HFP) Electronic Ballast (EB)
Color	Grey (GR) White (WH)
Material	Housing: aluminum with anti UV-treated PC bowl
Installation	Direct on ceiling or on 3-circuit track
Maintenance	Direct lamp access or after opening the front glass
Accessory	Base plate, 3-circuit track adapter; hooks set, protective glass, decorative arms, metal cover, colored halo rings, UV-filter glass, clamp band
Remarks	IT* within product designation for Italy only
Main applications	Retail, public spaces



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



CPK/FPK/KPK/MPK/SPK63



KPK/MPK/SPK640



CPK/FPK/KPK/MPK/SPK630 medium-bay luminaire with prismatic reflector; diameter 315 mm (PR)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK630 1xCDM-T70W IC 240V PR-MB GR	4.10	716381 00
SPK630 1xSDW-T50W IC 230V PR-MB GR	4.00	716411 00
FPK630 1xPL-T/4P42W HFP PR GR	2.30	716466 00
MPK630 1xCDM-T70W IC 230V PR-MB GR IT	3.60	716688 00
SPK630 SDW-T50W IC 230V D/I PR-MB GR IT	4.00	716763 00
FPK630 1xPL-T/4P42W HFP D/I PR GR IT	2.30	716800 00

Please contact your local Philips representative for additional configurations



Garnea FPK/KPK/MPK/SPK630 medium-bay luminaire for direct/indirect light distribution, with prismatic reflector; diameter 315 mm (D/I PR)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK630 1xCDM-T70W IC 230V PR-MB WH	4.10	716350 00
SPK630 1xSDW-T50W IC 230V PR-MB WH	4.10	716398 00
FPK630 1xPL-T/4P42W HFP PR WH	2.30	716459 00
MPK630 1xCDM-T70W IC 230V PR-MB WH IT	3.60	716671 00
SPK630 SDW-T50W IC 230V D/I PR-MB WH IT	4.00	716756 00
FPK630 1xPL-T/4P42W HFP D/I PR WH IT	2.30	716794 00

Please contact your local Philips representative for additional configurations



Garnea KPK/MPK/SPK640 medium-bay luminaire with prismatic reflector; diameter 410 mm (PR-MB)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK640 1xCDM-T150W IC 240V PR-MB GR	6.30	716275 00
SPK640 1xSDW-T100W IC 230V PR-MB GR	6.00	716312 00
KPK640 1xQL85W/830 HF PR GR	3.80	716343 00
MPK640 1xCDM-T150W IC 230V PR-MB GR IT	6.30	716626 00
SPK640 1xSDW-T100W IC 230V PR-MB GR IT	6.00	716640 00
KPK640 1xQL85W/830 HF PR GR IT	3.80	716664 00

Please contact your local Philips representative for additional configurations



Garnea KPK/MPK/SPK640 medium-bay luminaire with prismatic reflector; diameter 410 mm (PR-MB)

Preferred selection

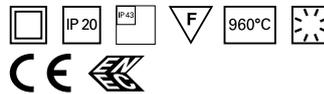
Product ID	Weight (kg)	European Order Code (EOC)
MPK640 1xCDM-T150W IC 230V PR-MB WH	6.30	162517 00
SPK640 1xSDW-T100W IC 230V PR-MB WH	6.00	716299 00
KPK640 1xQL85W/830 HF PR WH	3.80	716336 00
MPK640 1xCDM-T150W IC 230V PR-MB WH IT	6.30	716619 00
SPK640 1xSDW-T100W IC 230V PR-MB WH IT	6.00	716633 00
KPK640 1xQL85W/830 HF PR WH IT	3.80	716657 00

Please contact your local Philips representative for additional configurations

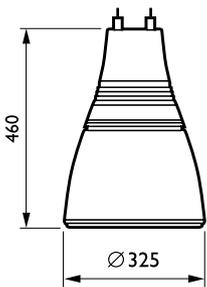
Garnea, metal version

Type	FPK630, KPK630 (small MH, compact fluorescent lamp version) MPK630, SPK630 (small MH, HID lamp version)
Light source	Compact fluorescent: 1 x MASTER PL-T 4 Pin / GX24q-4 / 42 W HID: 1 x MASTERColour CDM-T / G12 / 70, 150 W 1 x MASTERColour CDM-TP / PG12-2 / 70 W 1 x MASTERColour CDM-TP / PGX12-2 / 150 W 1 x MASTER SDW-T / PG12-1 / 50, 100 W Induction lamp system: 1 x MASTER QL system / 85 W
Lamp included	Yes (K or lamp color 830 or 840) No
Lamp position	Vertical

Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF) High Frequency Performer (HFP) Electronic Ballast (EB)
Color	Grey (GR) White (WH)
Material	Housing: aluminum with sandblasted reflector
Installation	Direct on ceiling
Maintenance	Direct lamp access or after opening the front glass
Accessory	Base plate, 3-circuit track adapter; protective glass, UV-filter glass Louver; decorative glasses (for MH versions)
Main applications	Retail, public spaces



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FPK/KPK/MPK/SPK630



FPK/KPK/MPK/SPK630 medium-bay luminaire with matt aluminum reflector; diameter 325 mm (MH)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK630 1xCDM-T70W IC 240V MH GR	5.20	162058 00
MPK630 1xCDM-T150W IC 230V MH GR	6.00	162102 00
MPK630 1xCDM-T70W IC 240V MH WH	5.20	162027 00
MPK630 1xCDM-T150W IC 230V MH WH	6.00	162072 00

Please contact your local Philips representative for additional configurations

Accessories



Base plate available in white and grey

Product ID	EOC
ZCZ643 BA WH	556079 00
ZCZ643 BA GR	556086 00



3-circuit track adapter; available in white and black and hooks for mounting on track

Product ID	EOC
ZRZ643 ADH WH	556093 00
ZRZ643 ADH GR	556109 00



Metal cover to place onto the ZRZ643 adapter set, white or metal grey

Product ID	EOC
ZZG643 ADC WH	573021 00
ZZG643 ADC GR	573038 00



Comfort louver to obtain a higher visual comfort

Product ID	EOC
GBS245 T5-C60	370071 00



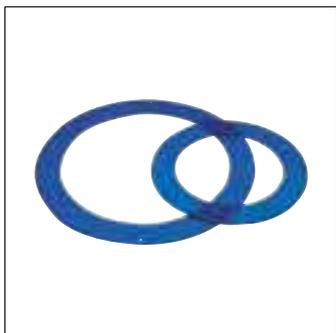
Clamp band, available in white and grey, to fix the halo rings or glass/cover accessories (for Prismatic D315 and D410 version)

Product ID	EOC
ZZZ641 CLB WH	556031 00
ZZZ641 CLB GR	556048 00
ZZZ631 CLB WH	556055 00
ZZZ631 CLB GR	556062 00



Set of decorative arms for the prismatic types, available in white and grey, in complete harmony with the product design. Can be used with or without colored halo rings

Product ID	EOC
ZZZ640 GLS WH	555836 00
ZZZ640 GLS GR	555850 00
ZZZ630 GLS WH	555874 00
ZZZ630 GLS GR	555898 00



Halo rings in two different colors (green and blue). ZPG631/641 can be used in combination with the decorative arms. ZZG631 can be used recessed in D325 MH type or with clamp band in D310 PR; ZZG641 to be used in D410 PR with clamp band

Product ID	EOC
ZPG641 HR BL	555911 00
ZPG641 HR GN	555928 00
ZPG631 HR BL	555935 00
ZPG631 HR GN	555942 00
ZZG641 HR BL	555959 00
ZZG641 HR GN	555966 00
ZZG631 HR BL	555973 00
ZZG631 HR GN	555980 00



Structured recessed prismatic glass providing an elongated light beam, meaning fewer luminaires to install

Product ID	EOC
ZZG631 LS258	555812 00



The decorative arms that surround the luminaire are an innovative accessory for the prismatic version.

Product ID	EOC
ZZG245PG	555829 00
ZZN641 UV	555997 00
ZZN631 UV	556000 00
ZZN245 UV	377186 99
ZZG641 PC	556017 00
ZZG631 PC	556024 00

Pendola



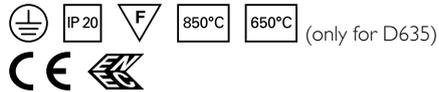
Pendola – quality, decoration, simplicity

Pendola is a high-quality decorative indoor pendant luminaire range suitable for a very wide choice of lamps. It offers a selection of prismatic or metal reflectors and comes with an easy mounting system and integral control gear. The design simplifies installation and reduces cost of ownership, including maintenance costs. Large spacing-to-height ratios permit wide spacing between the luminaires whilst maintaining good uniformity.

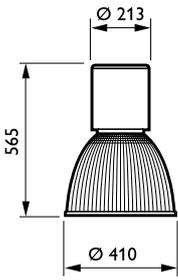
www.philips.com/lighting

Pendola, prismatic version

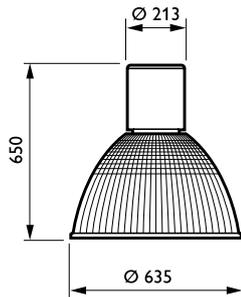
Type	CPK440, FPK440, HPK440, MPK440, SPK440 (prismatic version, Ø 410 mm) HPK460, MPK460 (prismatic version, Ø 635 mm)	Light source	HID: 1 x HPL-N / E40 / 250, 400 W 1 x MASTER HPI-P Plus E40 / 250, 400 W
Light source	Ø 410 mm version HID: 1 x MASTERC colour CDM-TP / PGX12-2 / 70, 150 W 1 x MASTER SDW-T / PG12-1 / 50, 100 W 1 x HPL-N / E40 / 250 W Halogen: 1 x HalogenA Tubular / E27 / 150 W Compact fluorescent: 1 x, 3 x or 4 x MASTER PL-C 4 Pin / G24q-3 / 26 W 1 x, 3 x or 4 x MASTER PL-T 4 Pin / GX24p / 32 - 42 W 1 x MASTER PL-H 120 W max Ø 635 mm version	Lamp included	Yes (K or lamp color 830 or 840)) No
		Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF) High Frequency Performer (HFP) Electronic Ballast (EB)
		Reflector	Prismatic (P-), standard beam or wide beam (WB)
		Material	Housing: aluminum Reflector: polymethacrylate
		Installation	Individual; suspended
		Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



CPK/FPK/HPK/MPK/
SPK440



HPK/MPK460



Pendola CPK/FPK/HPK/MPK/SPK440 high-bay pendant luminaire with prismatic reflector; diameter 410 mm, wide beam (P-D410-WB)



Pendola HPK/MPK460 high-bay pendant luminaire with prismatic reflector; diameter 560 mm (P-D560) or diameter 635 mm, narrow beam (P-D635-NB)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
HPK440 1xHPL-N250W IC 230V P-D410-WB	6.10	717272 00
HPK440 1xHPL-N250W K IC 230V P-D410-WB	6.10	772745 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK460 1xHPI-P250W-BU-P IC 230V P-D635	8.60	570914 00
HPK460 1xHPL-N250W K IC 230V P-D635-NB	7.60	772776 00

Please contact your local Philips representative for additional configurations

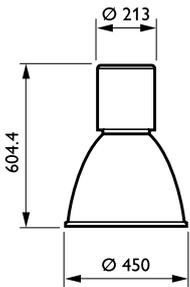
Pendola, metal version

Type	CPK450, FPK450, HPK450, MPK450, SPK450 (metal version, Ø 450 mm)
Light source	<p>HID:</p> <p>1 x MASTERColour CDM-TP / PGX12-2 / 70, 150 W</p> <p>1 x MASTER SDW-T / PG12-1 / 50, 100 W</p> <p>1 x HPL-N / E40 / 250, 400 W</p> <p>1 x MASTER HPI-P Plus / E40 / 250, 400 W</p> <p>Halogen:</p> <p>1 x HalogenA Tubular / E27 / 150 W</p> <p>Compact fluorescent:</p> <p>3 x or 4 x MASTER PL-C 4 Pin / G24q-3 / 26 W</p> <p>1 x 3 x or 4 x MASTER PL-T 4 Pin / GX24q / 32 - 42 W</p> <p>1 x MASTER PL-H 120 W max</p>

Lamp included	Yes (1xPL-H 120W)
Gear	<p>Electro magnetic (low loss), 230 or 240 V / 50 Hz:</p> <p>Inductive, parallel compensated (IC)</p> <p>Electronic, 220 - 240 V / 50 - 60 Hz:</p> <p>High Frequency</p> <p>High Frequency Performer (HFP)</p> <p>Electronic Ballast (EB)</p>
Reflector	Aluminum (M-), standard beam or wide beam (WB)
Material	<p>Housing: aluminum</p> <p>Reflector: aluminum (sandblasted)</p>
Installation	Individual; suspended
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



CPK/FPK/HPK/MPK/SPK450



Pendola FPK/HPK/MPK450 high-bay pendant luminaire with matt aluminum reflector; diameter 450 mm (M-D450)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FPK450 3xPL-T/4P32W/830 HFP M-D450	3.50	772851 00
FPK450 1xPL-T/4P42W/830 HFP M-D450	3.10	772875 00
MPK450 1xCDM-TP150W/830 IC 230V M-D450	5.00	772936 00
MPK450 1xHPI-P400W-BU-P K IC 230V M-D450	6.90	772967 00
HPK450 1xHPL-N250W K IC 230V M-D450	6.00	772981 00

Please contact your local Philips representative for additional configurations

Unibay



Unibay – suspended solution for shops

Unibay is a stylish high-bay luminaire with translucent reflectors designed to create a glow effect in shops and other retail spaces and public areas. It provides not only functional lighting on the shop floor and displays, but also an uplighting effect – making the ceiling appear even higher and thus creating a more attractive space for customers.

Everything is packed in one box – gear unit, reflector, interface and lamp. The lamps in the Unibay range are protected versions, in terms of safety, a front cover is not needed. The decorative glow effect of the luminaires helps to create a pleasant retail environment.

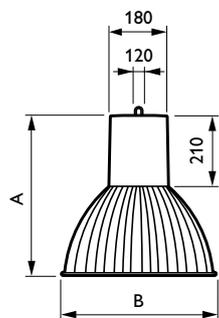
www.philips.com/lighting

Unibay	
Type	MPK188
Light source	HID: MPK188, Ø 316 mm: 1 x MASTERColour CDM-TP / PG12-2 / 70 W MPK188, Ø 412 mm: 1 x MASTERColour CDM-TP / PGX12-2 / 150 W HPK188, Ø 412 mm: 1 x MASTER HPI Plus BU-P / E40 / 250 W HPK188, Ø 569 mm: 1 x MASTER HPI Plus BU-P / E40 / 400 W
Lamp included	Yes (K)
Gear	Electro magnetic (low loss), 230 V or 240 V / 50 Hz: Inductive, parallel compensated (IC)

Reflector	MPK188, Ø 316 and Ø 412 mm: Acrylic, frosted (AR-FR) HPK188, Ø 412 and Ø 569 mm: Acrylic, clear (AR)
Material	Die-cast aluminum, sandblasted finishing Reflector: PMMA
Installation	Individual; suspended
Accessory	Decorative cover (ZPK188 G AC D412) for Ø 412 mm version with clear acrylic reflector
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MPK/HPK188

	A	B
AR-D412	487	412
AR-D569	575	569
AR-FR-D316	400	316
AR-FR-D412	487	412



Unibay MPK188 high-bay luminaire with acrylic reflector; frosted, diameter 316 mm

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK188 1xCDM-TP70W/830 IC AR-FR-D316	11.40	797915 00

Please contact your local Philips representative for additional configurations



Unibay MPK188 high-bay luminaire with acrylic reflector; frosted, diameter 412 mm

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK188 1xCDM-TP150W/830 IC AR-FR-D412	12.30	798509 00

Please contact your local Philips representative for additional configurations



Unibay HPK188 high-bay luminaire with acrylic reflector; diameter 412 mm

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
HPK188 1xHPI-P250W-BU-P K.IC AR-D412	14.50	797892 00

Please contact your local Philips representative for additional configurations



Unibay HPK188 high-bay luminaire with acrylic reflector; diameter 569 mm

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
HPK188 1xHPI-P400W-BU-P K.IC AR-D569	15.80	797908 00

Please contact your local Philips representative for additional configurations

Accessories



Acrylate cover; diameter 412 mm

Product ID	EOC
ZPK188 G AC D412	798424 00

Unibay HPK188 high-bay luminaire with acrylic bowl/cover; diameter 412 mm



Scrabble gridlights suspended



Scrabble gridlights suspended – freedom in accent lighting

Scrabble QPX500 is a suspended gridlight containing 2 or 4 luminaires for halogen reflector lamps in a vertical or horizontal frame. The adjustable cardanic systems offer full freedom for accent lighting in various directions from a single elegant gridlight.

www.philips.com/lighting

Scrabble surface-mounted



Scrabble suspended



Scrabble recessed



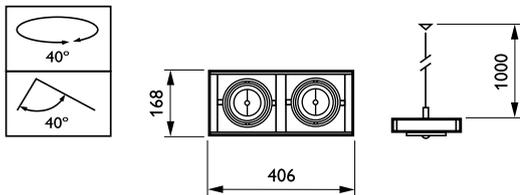
Scrabble gridlights suspended

Scrabble	
Type	QPX500 (suspended, rectangular and square version, horizontal positioning) QPX501 (suspended, rectangular and square version, vertical positioning)
Light source	Halogen: Aluline III / G53 / 50 W (HAL-R111)
Lamp beam angle	10° to 45°, depending lamp type
Lamp included	Yes (K)
Lamp position	Vertical
Transformer	Transformer 12V conventional
Orientation	Lamp unit: cardanic swivel system on two axis to adjust 40° in all directions

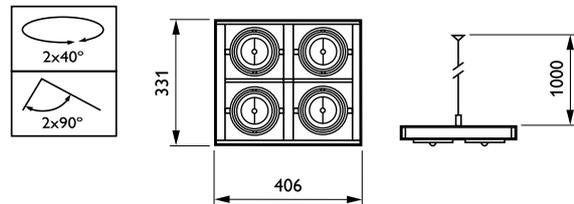
Color	Grey (GR) White (WH)
Material	Aluminum
Installation	Individual; suspended mounting with a set of two single steel-wire suspensions including a power cord (100 cm) Fine adjustment by screw locking devices Maintenance: direct lamp acces
Accessory	Electronic transformer (when transformer not included)
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QPX500/501 2 x 50W



QPX500//501 4 x 50W



Scrabble QPX500 suspended gridlight with halogen lamps



Scrabble QPX500 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX500 2xHAL-R111-50W 230/12V GR	3.50	558769 00
QPX500 2xHAL-R111-24-50W K TR 230/12V GR	3.50	773353 00
QPX500 2xHAL-R111-45-50W K TR 230/12V GR	3.50	773360 00
QPX500 2xHAL-R111-24-50W K 12V GR	1.10	773506 00
QPX500 2xHAL-R111-45-50W K 12V GR	1.10	773513 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX500 2xHAL-R111-50W 230/12V WH	3.50	558752 00
QPX500 2xHAL-R111-24-50W K TR 230/12V WH	3.50	773339 00
QPX500 2xHAL-R111-45-50W K TR 230/12V WH	3.50	773346 00
QPX500 2xHAL-R111-24-50W K 12V WH	1.10	773483 00
QPX500 2xHAL-R111-45-50W K 12V WH	1.10	773490 00

Please contact your local Philips representative for additional configurations



Scrabble QPX501 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX501 2xHAL-RI 11-50W 230/12V GR	3.50	558691 00
QPX501 2xHAL-RI 11-24-50W KTR 230/12V GR	3.50	773292 00
QPX501 2xHAL-RI 11-45-50W KTR 230/12V GR	3.50	773308 00

Please contact your local Philips representative for additional configurations



Scrabble QPX501 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX501 2xHAL-RI 11-50W 230/12V WH	3.50	558684 00
QPX501 2xHAL-RI 11-24-50W KTR 230/12V WH	3.50	773278 00
QPX501 2xHAL-RI 11-45-50W KTR 230/12V WH	3.50	773285 00

Please contact your local Philips representative for additional configurations



Scrabble QPX500 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX500 4xHAL-RI 11-50W 230/12V GR	6.00	558806 00
QPX500 4xHAL-RI 11-50W GR	2.00	575216 00
QPX500 4xHAL-RI 11-45-50W KTR 230/12V GR	6.00	773384 00
QPX500 4xHAL-RI 11-45-50W K 12V GR	2.00	773537 00

Please contact your local Philips representative for additional configurations



Scrabble QPX500 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX500 4xHAL-RI 11-50W 230/12V WH	6.00	558790 00
QPX500 4xHAL-RI 11-50W 240/12V WH	6.00	558813 00
QPX500 4xHAL-RI 11-50W WH	2.00	575209 00
QPX500 4xHAL-RI 11-45-50W KTR 230/12V WH	6.00	773377 00
QPX500 4xHAL-RI 11-45-50W KTR 240/12V WH	6.00	773391 00
QPX500 4xHAL-RI 11-45-50W K 12V WH	2.00	773520 00

Please contact your local Philips representative for additional configurations



Scrabble QPX501 suspended gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QPX501 4xHAL-RI 11-50W 230/12V GR	6.00	559001 00
QPX501 4xHAL-RI 11-50W 230/12V WH	6.00	558721 00
QPX501 4xHAL-RI 11-45-50W KTR 230/12V WH	3.50	773315 00
QPX501 4xHAL-RI 11-45-50W KTR 230/12V GR	6.00	773322 00

Please contact your local Philips representative for additional configurations

UnicOne Uplight Micro



UnicOne Uplight – the perfect blend

With the UnicOne Uplight range you can enhance your interior decor with very fixtures, without compromising on light levels. Accordingly, these products are ideal for application in, for example, office corridors, shops, hotels and other public areas. Featuring the typical UnicOne family design characteristics, the Uplight range integrates the conical and box elements into a well-balanced form.

The UnicOne Uplight range includes Micro and Compact versions. The Micro versions have been designed around the MASTERColour CDM-Tm Mini 20/35 W lamp and are available with a choice of optics and attractive accessories. The new Compact versions feature a new circular optic that creates a very efficient asymmetrical beam of up to 45 degrees, minimizing the number of fixtures required.

www.philips.com/lighting

UnicOne Projector Micro



UnicOne Projector Mini



UnicOne Pendant Micro



UnicOne Pendant Compact



UnicOne Uplight Micro



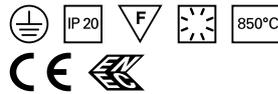
UnicOne Uplight Compact



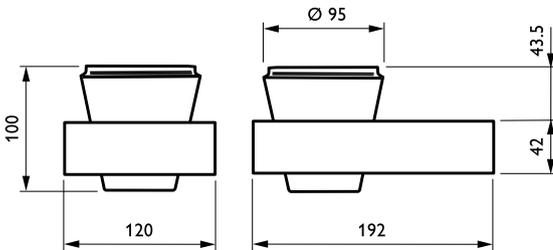
UnicOne Uplight Micro

UnicOne Uplight Micro	
Type	MWG54I (HID lamp version) LWG54I (halogen lamp version)
Light source	HID: 1 x MASTERColour CDM-T mini / PGJ5 / 20, 35 W Halogen: 1 x MASTERLine ES / GU5.3 / 45 W 1 x MASTERCapsule / GY6.35 / 45W
Lamp beam angle	MASTERLine 8°, 24°, 36°
Optic	Narrow beam (12°) Medium beam (24° and 36°)
Lamp included	Yes (K or lamp color 830 or 930)
Lamp position	Vertical

Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)
Transformer	Electronic (ET) (for halogen lamp version)
Color	White (WH) Grey (GR) RAL colors available on request
Material	Aluminum
Installation	Directly on wall, upwards or downwards
Accessory	Protection glass, sculptural lens, dichroic color filters, glare control glass
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MWG/LWG54I



UnicOne Uplight Micro MWG/
LWG54I with discharge or halogen
lamp and narrow or medium-beam
optic



UnicOne Uplight Micro MWG/
LWG54I with discharge or halogen
lamp and narrow or medium-beam
optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MWG54I CDM-Tm20W/830 EB 12 WH	0.92	514407 00
LWG54I HAL-C50W K ET 12 WH	0.91	514490 00
LWG54I HAL-MR50-24-45W K ET WH	0.93	514544 00
MWG54I CDM-Tm35W/930 EB 24 WH	0.83	514445 00
MWG54I CDM-Tm35W/930 EB 36 WH	0.83	514452 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MWG54I CDM-Tm20W/830 EB 12 GR	0.92	514384 00
LWG54I HAL-C50W K ET 12 GR	0.91	514469 00
LWG54I HAL-MR50-36-45W K ET GR	0.93	514520 00
MWG54I CDM-Tm35W/930 EB 24 GR	0.83	514421 00
MWG54I CDM-Tm35W/930 EB 36 GR	0.83	514438 00

Please contact your local Philips representative for additional configurations

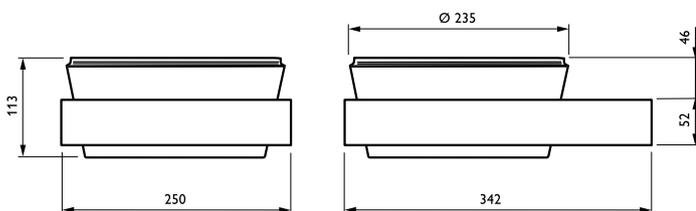
UnicOne Uplight Compact

Type	MWG561 (aluminum, HID version) MWG562 (aluminum/glass, HID version)
Light source	HID: 1 x MASTERColour CDM-TD / RX7s / 70, 150 W
Lamp included	Yes (lamp color 830)
Lamp position	Horizontal
Optic	MWG561: asymmetrical medium beam (A-MB) MWG562: optic
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Ballast (EB)

Color	Grey (GR) White (WH) RAL colors available on request
Material	Aluminum Aluminum and glass
Installation	Screw mounting, directly on surface
Maintenance	Direct lamp access
Remarks	Ready to install Complies with EN 60598
Main applications	Department stores / shopping malls, office, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MWG/QWG561



UnicOne Uplight Compact MWG561 for surface mounting, with discharge and halogen lamp respectively and asymmetrical medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MWG561 CDM-TD70W/830 EB A-MB WH	3.27	674392 00
MWG561 CDM-TD150W/830 EB A-MB WH	3.51	674415 00

Please contact your local Philips representative for additional configurations



UnicOne Uplight Compact MWG561 for surface mounting, with discharge and halogen lamp respectively and asymmetrical medium-beam optic

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MWG561 CDM-TD70W/830 EB A-MB GR	3.27	674385 00
MWG561 CDM-TD150W/830 EB A-MB GR	3.51	674408 00

Please contact your local Philips representative for additional configurations

Adante



Adante – eye-catching effects

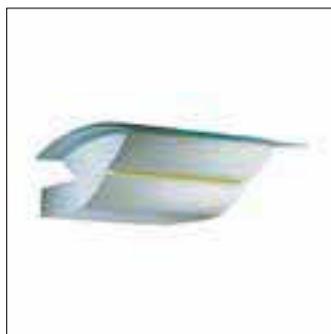
Adante is a range of decorative luminaires comprising two highly distinctive models: Adante diffuse and Adante uplighters.

Adante uplighters are wall-mounted uplighter luminaires for halogen, compact fluorescent and MASTERColour lamps. MASTERColour CDM-TD versions are available with instant switch-on, thanks to an integral auxiliary lamp. These uplighters come with an asymmetrical optic that increases lighting efficiency and creates a homogeneous lighting effect. The integrated adjustable cut-off edge adjusts the light distribution to prevent hot-spots on the wall. Adante uplighters can be customized with white, blue or green light leakage.

Adante diffuse is a wall/ceiling-mounted or pendant luminaire for TL5 C circular and compact fluorescent PL-C lamps. The dedicated hinge device offers easy access to the electrical connection. The pendant version is easy to install thanks to a clamp mechanism for the suspension wires. Accessories include blue and green color filters.

www.philips.com/lighting

Adante Uplighters

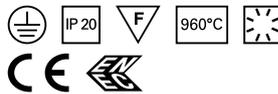


Adante Diffuse

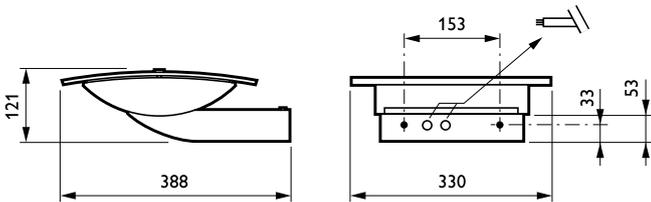


Adante, upright version	
Type	FWG620 (PL-C lamp version) MWG620 (CDM-TD lamp version) QWG620 (Plusline Small lamp version)
Light source	Compact fluorescent: 2 × MASTER PL-C 2 Pin / G24d-I / 26 W 2 × MASTER PL-C 4 Pin / G24q-I / 26 W HID: 1 × MASTERColour CDM-TD/ RX7s / 70, 150 W Halogen: 1 × Plusline Small / R7s / 300 W (HAL-TDS)
Lamp included	Yes (K or lamp color 830 or 840) No
Lamp position	Horizontal
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) (for PL-C versions) Electronic Ballast (EB) (for CDM-TD versions)

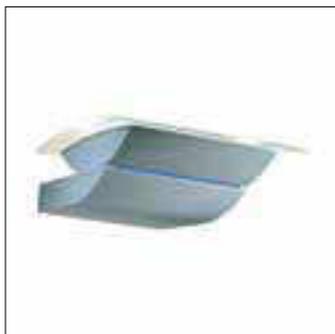
Optic	Asymmetrical (A)
Decorative spill-light	Blue (BUL) Green (GNL) White (WHL)
Cover	Decorative glass (DG)
Color	Grey (GR) White (WH) RAL colors available on request
Material	Housing: die-cast aluminum Decorative silk-screened glass
Installation	Screw mounting, directly on surface
Maintenance	Lamp access after removing the front glass
Remarks	For instant switch on, auxiliary lamp in MWG620 versions (+AUX)
Main applications	Offices, retail



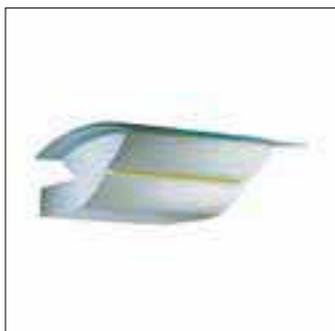
Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FWG/MWG/QWG620



Adante uplighter FWG/MWG/
QWG620, wall-mounted



Adante uplighter FWG/MWG/
QWG620, wall-mounted

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG620 2xPL-C/2P26W/830 IC 230V WHL GR	5.50	773803 00
FWG620 2xPL-C/4P26W/840 HFP A DG GR	4.80	773872 00
MWG620 CDM-TD70W/830 IC 230V A DG GR	6.30	774046 00
MWG620 CDM-TD70W/830 EB A BUL DG GR	5.30	774107 00
MWG620 CDM-TD150W/830 EB A DG GR	5.50	774299 00
MWG620 CDM-TD150W/830 EB A GNL DG GR	5.50	774329 00

Please contact your local Philips representative for additional configurations

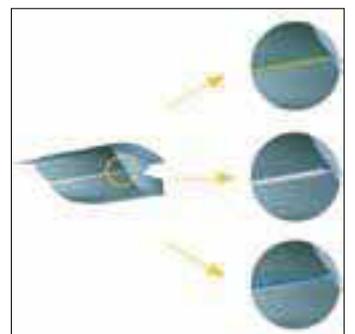
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG620 2xPL-C/2P26W/830 IC 230V A DG WH	5.50	773629 00
FWG620 2xPL-C/4P26W/830 HFP A DG WH	4.80	773704 00
FWG620 2xPL-C/4P26W/840 HFP WHL DG WH	4.80	773735 00
MWG620 CDM-TD70W/830 IC 230V A DG WH	6.30	773940 00
MWG620 CDM-TD70W/830 EB A GNL DG WH	5.30	774039 00
MWG620 CDM-TD150W/830 EB A WHL DG WH	5.50	774206 00

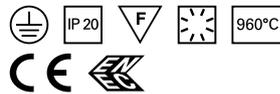
Please contact your local Philips representative for additional configurations



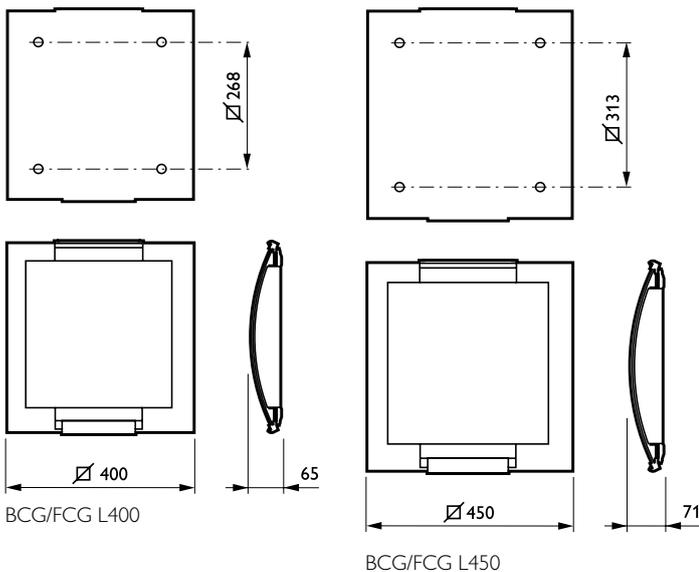
White, blue and green edge illumination



Adante, diffuse version	
Type	BCG620 (TL5 Circular lamp, surface-mounted version) BPG620 (TL5 Circular lamp, suspended-mounted version) FCG620 (PL-C lamp, surface-mounted version) FPG620 (PL-C lamp, suspended-mounted version)
Light source	Fluorescent: 1 x MASTER TL5 Circular / 2GX13 / 22, 40 W Compact fluorescent: 2 x MASTER PL-C 2 Pin / G24d-1 / 18, 26 W
Lamp included	Yes (K or lamp color 830 or 840) No
Lamp position	Vertical
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Cover	Decorative glass (DG)
Color	White (WH)
Material	Housing: aluminum Reflector: aluminum Decorative silk-screened glass Hinge: aluminum (for safe fixation of the glass)
Installation	Surface mounted version: directly on surface Pendant version: adjustable suspension wire (2 m length) with locking clutch device
Maintenance	Lamp access after opening the front glass
Accessory	Metal face (MF) to diffuse the light with blue or green color filter
Remarks	Available in two sizes (L400 and L450) Locking device possible to secure access into the luminaire
Main applications	Offices, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Adante diffuse BCG/FCG620 wall or ceiling-mounted luminaire with decorative glass (DG)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FCG620 2xPL-C/2P18W/840 I 230V DG WH	4.60	774343 00
FCG620 2xPL-C/2P26W/830 I 230V MF WH	7.20	774350 00
FCG620 2xPL-C/2P26W/830 I 230V DG WH	6.35	774411 00
BCG620 1xTL5C22W/830 HF DG WH	4.10	774459 00
BCG620 1xTL5C40W/830 HF DG WH	5.85	774497 00
BCG620 1xTL5C40W/840 HF DG WH	5.85	774503 00

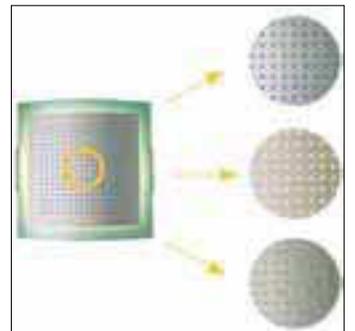
Please contact your local Philips representative for additional configurations



Adante diffuse BPG/FPG620 pendent luminaire



Customization of detailing with white, blue or green decorative light ray; possible for diffuse luminaire with metallic plate (MF)



EFix Wall-mounted



EFix Wall-mounted – decoration made easy

EFix Wall-mounted features a sophisticated yet robust architectural design and high-quality finish, making it the perfect fit for demanding environments. It offers the energy-saving capability and ease of installation you can expect from any EFix product and can be used both indoors and outdoors.

EFix Wall-mounted consists of four easy-to-install versions (round and square), providing direct light or a combination of direct and indirect light. The range has been developed around state-of-the-art Philips HFP electronic ballasts and is approved for IP65 and IK10 environments.

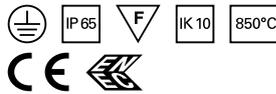
www.philips.com/lighting

EFix Wall-mounted

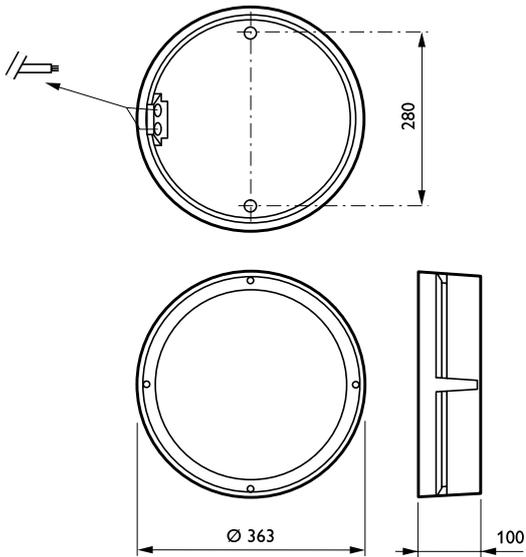
EFix Wall-mounted

Type	FWG261 (circular; direct lighting version) FWG262 (circular; direct/indirect lighting version) FWG263 (square; direct lighting version) FWG264 (square; direct/indirect lighting version)
Light source	Compact fluorescent: 1 x or 2x MASTER PL-C 4 Pin / G24q-2 / 18 W 1 x MASTER PL-C 4 Pin / G24q-3 / 26 W 1 x PL-Q 4 Pin / GRI0q / 28, 38 W
Lamp included	No
Lamp position	Horizontal
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Connection	Push-in connector; inside housing
Optical cover	Opal diffuser (O)

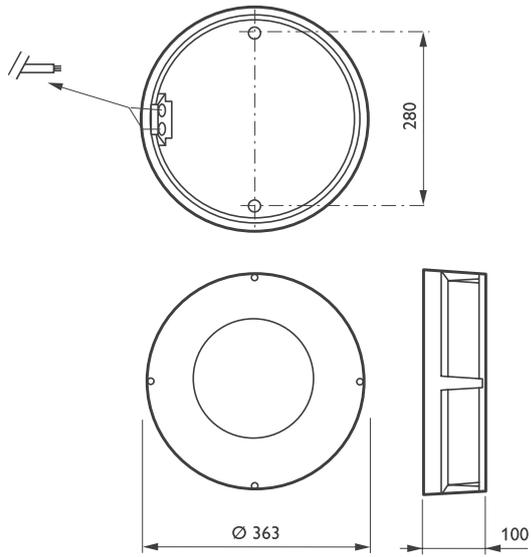
Option	Emergency lighting (integrated): 1 hour (EL1), 3 hours (EL3) HFRregulator electronic gear on request
Material	Housing: die-cast aluminum Optical cover: polycarbonate
Color	White, RAL9010 (WH) Grey (GR)
Installation	Screw mounting, directly onto surface Screws are pre-mounted in gaskets
Maintenance	Lamp access after removing the integrated front cover
Main applications	Retail



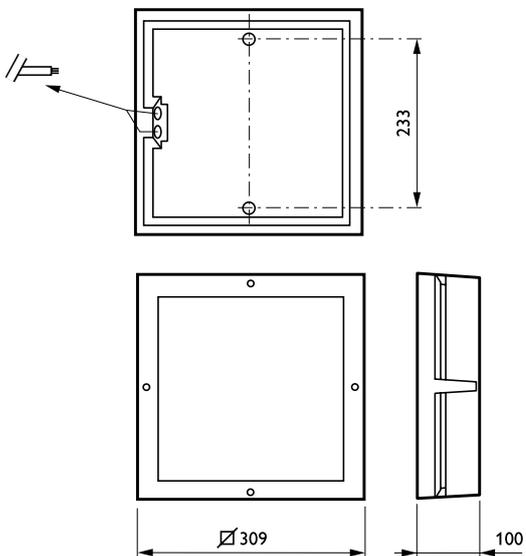
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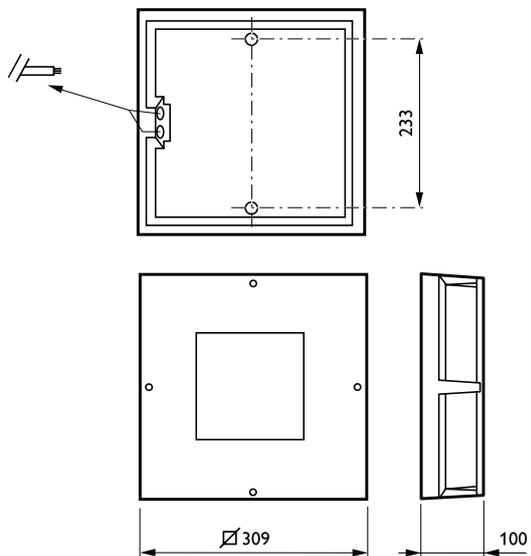
FWG261



FWG262



FWG263



FWG264



EFix Wall-mounted FWG261 with compact fluorescent lamp and opal diffuser

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG261 1xPL-C/4P18W HFP O WH	4.00	398061 00
FWG261 1xPL-C/4P18W HFP O EL1 WH	4.00	398085 00
FWG261 2xPL-C/4P18W HFP O WH	4.00	398146 00
FWG261 2xPL-C/4P18W HFP O GR	4.00	398153 00
FWG261 1xPL-Q/4P28W HFP O GR	4.00	398191 00
FWG261 1xPL-Q/4P28W HFP O EL3 GR	4.50	398214 00

Please contact your local Philips representative for additional configurations



EFix Wall-mounted FWG262 with compact fluorescent lamp and opal diffuser; for direct/indirect lighting

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG262 1xPL-C/4P18W HFP O GR	4.00	398276 00
FWG262 1xPL-C/4P18W HFP O EL1 GR	4.00	398290 00
FWG262 2xPL-C/4P18W HFP O GR	4.00	398351 00
FWG262 2xPL-C/4P18W HFP O WH	4.00	398344 00
FWG262 1xPL-Q/4P28W HFP O WH	4.00	398382 00
FWG262 1xPL-Q/4P28W HFP O EL3 WH	4.00	398405 00

Please contact your local Philips representative for additional configurations



EFix Wall-mounted FWG263 with compact fluorescent lamp and opal diffuser

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG263 1xPL-C/4P18W HFP O GR	4.00	398474 00
FWG263 1xPL-C/4P18W HFP O EL1 GR	4.00	398498 00
FWG263 2xPL-C/4P18W HFP O GR	4.00	398559 00
FWG263 2xPL-C/4P18W HFP O WH	4.00	398542 00
FWG263 1xPL-Q/4P28W HFP O WH	4.00	398580 00
FWG263 1xPL-Q/4P28W HFP O EL3 WH	4.00	398603 00

Please contact your local Philips representative for additional configurations



EFix Wall-mounted FWG264 with compact fluorescent lamp and opal diffuser; for direct/indirect lighting

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG264 1xPL-C/4P18W HFP O WH	4.00	398665 00
FWG264 1xPL-C/4P18W HFP O EL1 WH	4.00	398689 00
FWG264 2xPL-C/4P18W HFP O WH	4.00	398740 00
FWG264 2xPL-C/4P18W HFP O GR	4.00	398757 00
FWG264 1xPL-Q/4P28W HFP O GR	4.00	398795 00
FWG264 1xPL-Q/4P28W HFP O EL3 GR	4.00	398818 00

Please contact your local Philips representative for additional configurations

Scrabble gridlights surface mounted



Scrabble gridlights surface-mounted – freedom in accent lighting

Scrabble QCX500 is a decorative surface-mounted gridlight containing 2 or 4 luminaires for halogen reflector lamps. The adjustable cardanic systems offer full freedom for accent lighting in various directions from a single elegant gridlight.

Scrabble gridlights are also available in recessed, recessed compact and surface-mounted versions.

www.philips.com/lighting

Scrabble suspended



Scrabble recessed



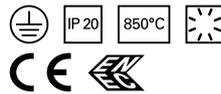
Scrabble surface-mounted



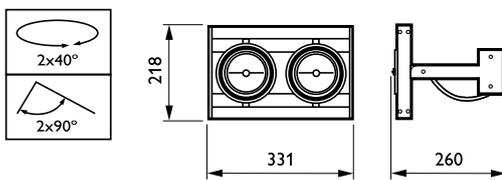
Scrabble gridlights surface mounted

Scrabble	
Type	QCX500 (surface mounted, rectangular version)
Light source	Halogen: 2 x or 4 x Aluline III / G53 / 50W
Lamp beam angle	10° to 45°, depending lamp type
Lamp included	Yes (K or lamp color 830 or 840)
Lamp position	Vertical
Transformer	Transformer 12V conventional
Orientation	Lamp unit: cardanic swivel system on two axis to adjust 40° in all directions Luminaire frame: 2 x 90° rotation possibility and locked in position by a screw

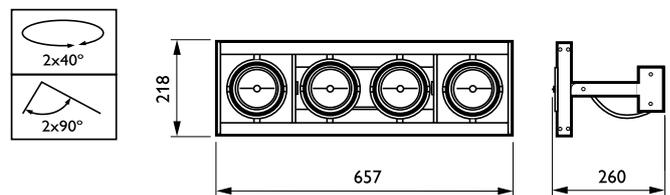
Color	Grey (GR) White (WH)
Material	Aluminum
Installation	Directly on all surfaces in horizontal and vertical position Maintenance: direct lamp access
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



QCX500 2x 50W



QCX500 4x 50W



Scrabble QCX500 surface-mounted gridlight with halogen lamps



Scrabble QCX500 surface-mounted gridlight with halogen lamps



Scrabble QCX500 surface-mounted gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCX500 2xHAL-RI11-50W 230/12V GR	3.60	558844 00
QCX500 2xHAL-RI11-24-50W KTR 230/12V GR	3.60	773421 00
QCX500 2xHAL-RI11-45-50W KTR 230/12V GR	3.60	773438 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCX500 2xHAL-RI11-50W 230/12V WH	3.60	558837 00
QCX500 2xHAL-RI11-45-50W KTR 230/12V WH	3.60	773414 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCX500 4xHAL-RI11-50W 230/12V GR	6.30	558882 00
QCX500 4xHAL-RI11-50W 240/12V GR	6.30	558905 00
QCX500 4xHAL-RI11-45-50W KTR 230/12V GR	6.30	773452 00
QCX500 4xHAL-RI11-45-50W KTR 240/12V GR	6.30	773476 00

Please contact your local Philips representative for additional configurations



Scrabble QCX500 surface-mounted gridlight with halogen lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QCX500 4xHAL-RI I-50W 230/12V WH	6.30	558875 00
QCX500 4xHAL-RI I-50W 240/12V WH	6.30	558899 00
QCX500 4xHAL-RI I-45-50W KTR 230/12V WH	6.30	773445 00
QCX500 4xHAL-RI I-45-50W KTR 240/12V WH	6.30	773469 00

Please contact your local Philips representative for additional configurations



Gondola



Gondola – decorative and durable

Gondola is a wall/ceiling-mounted luminaire for compact fluorescent and/or incandescent lamps. Featuring an opal polycarbonate diffuser and aluminum reflector; this waterproof luminaire is shock- and vandal-resistant.

www.philips.com/lighting

Gondola	
Type	FWG200, FWG210, FWG220, FWG230, FWG240, FWG250 (compact fluorescent lamp version) QWG200, QWG210 (incandescent lamp version)
Light source	Compact fluorescent: 1 x or 2 x MASTER PL-C 2 Pin / G24d-2 / 18 W 1 x or 2 x MASTER PL-C 2 Pin / G24d-3 / 26 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-2 / 18 W 1 x or 2 x MASTER PL-C 4 Pin / G24q-3 / 26 W 2 x MASTER PL-S 2 Pin / G23 / 9 W Incandescent: 1 x A60 / E27 / 75, 100 W
Lamp included	No

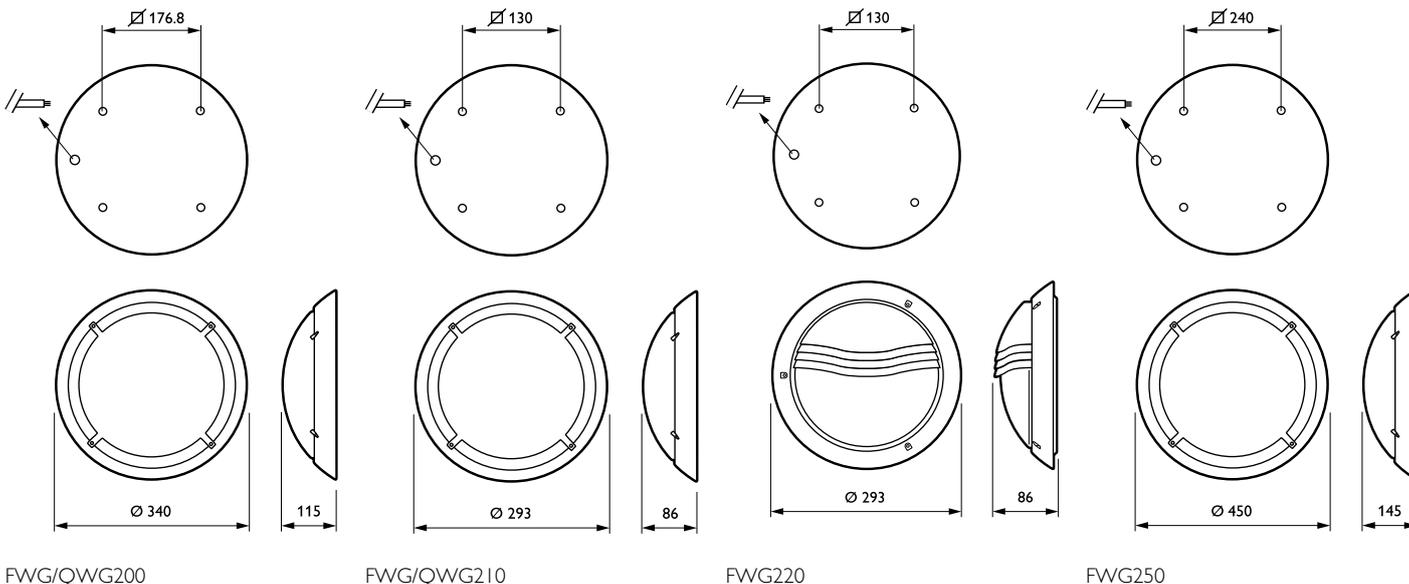
Gear (not for incandescent)	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF) Electro magnetic (low loss), 230 or 240 V / 50 Hz: High Frequency (HF)
Color	White (WH) Black (BK) Aluminum (ALU)
Option	Emergency lighting: 1 hour (ELI)
Material	Base: fiber glass re-inforced thermoplastic Diffuser: opal polycarbonate Reflector: aluminum
Installation	Screw mounting, directly on surface
Maintenance	Lamp acces after removing the polycarbonate cover
Main applications	Education, healthcare, public buildings

 IP65 for FWG220/230/240/250
  IP66 for QWG/FWG200/210
 

 850°C
  IK10

CE

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.





Gondola FWG/QWG200 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QWG200 1xA60-100W CLII WH	1.30	656601 00
FWG200 2xPL-C/2P18W I WH	2.10	656632 00
FWG200 1xPL-C/4P18W I ELI WH	1.30	656663 00
FWG200 2xPL-C/4P18W HF WH	2.25	797809 00
FWG200 1xPL-C/2P18W I WH	1.85	798615 00

Please contact your local Philips representative for additional configurations



Gondola FWG/QWG200 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QWG200 1xA60-100W CLII BK	1.40	656618 00
FWG200 2xPL-C/2P18W I BK	2.00	656649 00
FWG200 1xPL-C/4P18W I ELI BK	2.55	656670 00

Please contact your local Philips representative for additional configurations



Gondola FWG/QWG200 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
QWG200 1xA60-100W CLII ALU	1.40	656625 00
FWG200 2xPL-C/2P18W I ALU	2.20	656656 00
FWG200 1xPL-C/4P18W I ELI ALU	1.10	656687 00
FWG200 2xPL-C/4P18W HF ALU	2.25	797816 00

Please contact your local Philips representative for additional configurations



Gondola FWG/QWG210 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG210 1xPL-C/2P18W I WH	1.10	656694 00
QWG210 1xA60-75W CLII WH	0.70	824383 00
FWG210 1xPL-C/2P18W I BK	0.90	656700 00
FWG210 1xPL-C/2P26W I BK	1.10	656724 00
QWG210 1xA60-75W CLII BK	0.70	824390 00

Please contact your local Philips representative for additional configurations



Gondola FWG220 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG220 1xPL-C/2P18W I WH	1.10	656731 00
FWG220 1xPL-C/4P18W HF WH	0.90	797847 00
FWG220 1xPL-C/2P18W I BK	1.15	656748 00

Please contact your local Philips representative for additional configurations

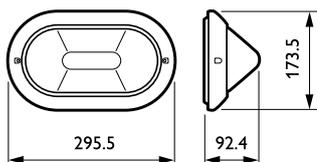


Gondola FWG250 wall/ceiling-mounted luminaire

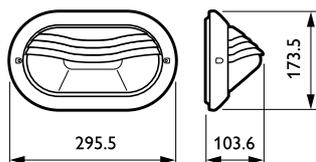
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG250 2xPL-C/4P18W HF ELI WH	2.90	798592 00
FWG250 2xPL-C/2P26W I WH	3.00	798608 00
FWG250 2xPL-C/2P18W I WH	3.00	798622 00

Please contact your local Philips representative for additional configurations



FWG230



FWG240

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG230 2xPL-S/2P9W I WH	0.80	656779 00
FWG230 2xPL-S/2P9W I BK	0.80	656786 00

Please contact your local Philips representative for additional configurations



Gondola FWG230 wall/ceiling-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWG240 2xPL-S/2P9W I WH	0.90	656793 00
FWG240 2xPL-S/2P9W I BK	0.90	656809 00

Please contact your local Philips representative for additional configurations



Gondola FWG240 wall/ceiling-mounted luminaire

Solo



Solo – providing guidance

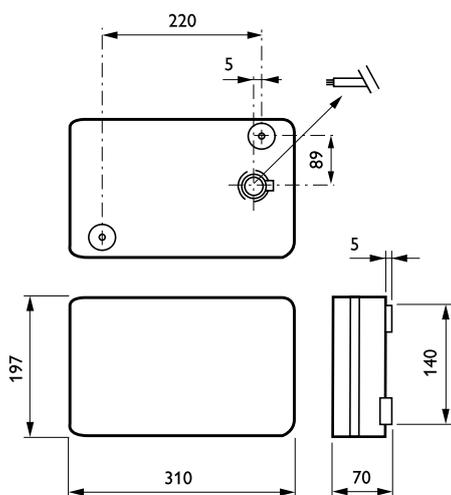
Solo FWW035 is a decorative, waterproof low-energy luminaire for indoor and outdoor orientation, security or information lighting. It incorporates compact fluorescent lamps and is suitable for wall or ceiling mounting. The housing is made of polycarbonate, which together with a unique cover closure/opening system makes it vandal/impact-resistant. The smooth, opal polycarbonate cover is easy to clean and UV-stabilized to prevent yellowing. Versions for emergency lighting (FWH035), supplied with pictograms, are available as well.

www.philips.com/lighting

Solo			
Type	FWH035 FWH035 (emergency lighting version)	Option	Emergency lighting: 3-hour maintained and non-maintained
Light source	Compact fluorescent: 1 × MASTER PL-S 4 Pin / 2G7 / 11 W 1 × PL-Q/2P16W/835 I	Material	Housing: Polycarbonate parts
Lamp included	Yes (lamp color 830 or 840)	Installation	Direct surface screw mounting, including watertight grommets
		Main applications	General amenity, bathrooms, stairwells, corridors



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FWW/FWH035



Solo FWW035 wall-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWW035 1xPL-S/2P7W/840 I	0.94	132808 99
FWW035 1xPL-S/2P11W/840 I	0.96	132822 99
FWW035 1xPL-S/4P11W/840 HFM	0.00	132846 99
FWW035 1xPL-Q/2P16W/835 I	0.98	132860 99
FWW035 2xPL-S/2P11W/840 I	1.33	132884 99

Please contact your local Philips representative for additional configurations



Solo FWH035 wall-mounted luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FWH035 1xPL-S/4P11W/840 I EL3-NM	1.07	132907 99
FWH035 1xPL-S/4P11W/840 I EL3-M	1.38	132921 99
FWH035 1xPL-S/4P11W/830 I EL3-M	1.38	136639 99

Please contact your local Philips representative for additional configurations

iColor Cove



iColor Cove – impressive lighting for tight spaces

With Philips iColor Cove® you can bring dynamic lighting effects to alcoves, accent areas and other tight spaces. These compact LED-based units are highly versatile, offering end-to-end mounting for continuous streams of light to achieve curves or more complex geometries.

iColor Cove MX Powercore

The highest-intensity iColor Cove product, providing uniform color mixing with maximized output.

iColor Cove MX uses Powercore® technology, which is engineered to efficiently and accurately control power output to LED-based systems directly from line voltage, eliminating the need for an external power supply. It increases efficiency, lowers the overall cost, and eases installation of LED-lighting systems by integrating power and data management directly within the fixture.

iColor Cove QLX

A low-voltage, linear luminaire delivering medium-intensity, color-changing illumination for cove and backlighting applications; employing Chromasic® technology, iColor Cove QLX has the capability of auto-addressing, which simplifies installation and programming.

iColor Cove EC

The most cost-effective, lower-intensity iColor Cove product.

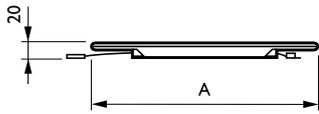
www.philips.com/lighting

iColor Cove EC

Type	BCX440
Light source	30.5 cm: 15 × LED-LP 18 cm: 9 × LED-LP
Light color	RGB
Power supply	24V DC
Power consumption	Max 2 W
Controls (optional)	Philips full line of DMX controllers
Optic / cover	120° × 120°
Operating temperature	-20°C > Ta > 50°C

Material	Housing: plastic
Installation	Surface mounted, optional track
Remarks	Power/data supply, cables and controls needed for proper functioning; to be ordered separately
Lifetime	50 000 hours (50% lumen maintenance at Ta=25° C)
Main applications	Indoor (office, retail, hospitality)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX440



BCX440 iColor Cove EC

	A
BCX440 15 × LED	310
BCX440 9 × LED	180

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX440 15xLED-LP/RGB 24V 120	0.08	710021 99
BCX440 9xLED-LP/RGB 24V 120	0.05	710038 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data available

Accessories

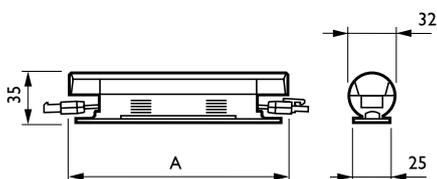
Product ID	Description	EOC
ZCX440 MB (10PCS)	Mounting bracket (10 pcs)	709902 99
ZCX440 RA	Mounting rail	710137 99
ZCX440 ECC (12PCS)	External cable clip (12 pcs)	710601 99
ZCX440 C9150FL	Power cable, length 9150 mm, floating connection	710618 99
ZCX440 C305P-M-F	Power cable, length 305 mm, male-female	710687 99
ZCX440 C1525P-M-F	Power cable, length 1525 mm, male-female	710694 99

iColor Cove QLX

Type	BCX444
Light source	30.5 cm: 30 × LED-HB 15.2 cm: 15 × LED-HB
Light color	RGB
Power supply	24V DC
Power consumption	30.5 cm: max 4 W 15.2 cm: max 2 W
Controls (optional)	Philips full line of DMX controllers
Optic / cover	120° × 120° 100° × 40°
Operating temperature	-20°C > Ta > 50°C

Material	Housing: plastic
Installation	Surface mounted, optional track
Adjustment	Adjustable mounting bracket; which provides 180° aiming rotation
Remarks	Power/data supply, cables and controls needed for proper functioning; to be ordered separately
Lifetime	50 000 hours (50% lumen maintenance at Ta=25° C)
Main applications	Indoor (office, retail, hospitality)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX444

	A
BCX444 30 × LED	305
BCX444 15 × LED	152



BCX444 iColor Cove QLX,
30 × LED-HB

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX444 30xLED-HB/RGB 24V 120	0.15	714012 99
BCX444 15xLED-HB/RGB 24V 120	0.086	714029 99
BCX444 30xLED-HB/RGB 24V 40	0.15	714036 99
BCX444 15xLED-HB/RGB 24V 40	0.086	714043 99

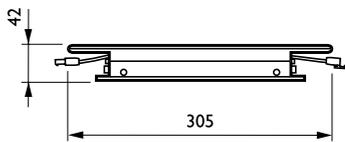
Please contact your local Philips representative for additional configurations
At the time of going to press, not all data available

iColor Cove MX Powercore

Type	BCX450
Light source	18 x LED-HB
Light color	RGB
Power supply	100 - 240V / 50 - 60 Hz
Power consumption	12 W (at full output)
Controls (optional)	Philips full line of DMX controllers
Optic / cover	70° x 70° 20° x 60°
Operating temperature	-20°C > Ta > 50°C

Material	Housing: powder coated aluminum
Installation	Surface mounted, optional track
Adjustment	180° rotation, with detents every 10°
Remarks	Data enabler; cables and controls needed for proper functioning; to be ordered separately
Lifetime	50 000 hours (50% lumen maintenance at Ta=25° C)
Main applications	Indoor (office, retail, hospitality)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX450



BCX450 iColor Cove MX Powercore

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX450 18xLED-HB/RGB 100-240V WB70 DMX	0.44	275512 99
BCX450 18xLED-HB/RGB 100-240V MB20 DMX	0.44	275529 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

Accessories

Product ID	Description	EOC
ZCX450 C12200FL	Power cable, length 12,2 m, floating connection	275536 99
ZCX450 C305P-M-F	Power cable, length 305 mm, male-female	275543 99
ZCX450 C1525P-M-F	Power cable, length 1525 mm, male-female	275550 99
ZCX450 TERMINATOR (10PCS)	Terminator (10 pcs)	711356 99
ZCX450 RA L1220 BK	Mounting rail, 1220 m, black	711387 99



iW Cove Powercore



iW Cove Powercore – tuneable white light for tight spaces

With Philips iW™ Cove Powercore you can bring tuneable white lighting effects to alcoves, accent areas and other tight spaces. These compact LED-based units are highly versatile, offering end-to-end mounting for continuous streams of light to achieve curves or more complex geometries.

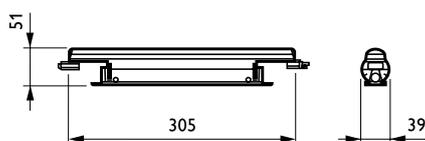
The iW Cove Powercore is a robust, high-performance linear system that delivers high-quality tuneable white light. The IntelliWhite (iW) series for applications of LED-based white light allows the simple customisation of environments with color temperature control – whether to mimic changes in daylight or to alter displays without re-lamping.

iW Cove Powercore uses Powercore® technology, which is engineered to efficiently and accurately control power output to LED-based systems directly from line voltage, eliminating the need for an external power supply. It increases efficiency, lowers the overall cost, and eases installation of LED-lighting systems by integrating power and data management directly within the fixture.

www.philips.com/lighting

iW Cove Powercore			
Type	BCX430	Material	Housing: powder coated aluminum
Light source	10 × LED-HB	Installation	Surface mounted, optional track
Light color	Tunable white 3000-6500 K	Adjustment	180° rotation, with detents every 10°
Power supply	100 - 240 V / 50 - 60 Hz	Remarks	Data enabler, cables and controls needed for proper functioning; to be ordered separately
Power consumption	15 W	Lifetime	50 000 hours (50% lumen maintenance at Ta=25° C)
Controls (optional)	iW scene controller	Main applications	Indoor (office, retail, hospitality)
Optic / cover	50° × 50° 20° × 30° × 160° (asymmetric)		
Operating temperature	-20°C > Ta > 50°C		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX430



BCX430 iW Cove Powercore,
10 × LED-HB

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX430 10xLED-HB/WH-3000-6500 50 ALU	0.44	711905 99
BCX430 10xLED-HB/WH-3000-6500 A ALU	0.44	711912 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

eW Cove



eW Cove – sustainable lighting for tight spaces

With Philips eW[®] Cove you can bring essential white lighting effects to alcoves, accent areas and other tight spaces. These compact LED-based units are highly versatile, offering end-to-end mounting for continuous streams of light to achieve curves or more complex geometries. eW Cove products are available in Powercore[®] enabling sustainable lighting effects.

The Philips eW Cove range comprises:

eW Cove Powercore

Best-of-breed luminaire that delivers high-quality white light and allows simple line-power installation.

eW Cove Powercore uses Powercore[®] technology, which is engineered to efficiently and accurately control power output to LED-based systems directly from line voltage, eliminating the need for an external power supply. It increases efficiency, lowers the overall cost, and eases installation of LED-lighting systems. eW Cove Powercore uses DIMand™ technology to enable dimming with commercially available ELV-type dimmers.

eW Cove

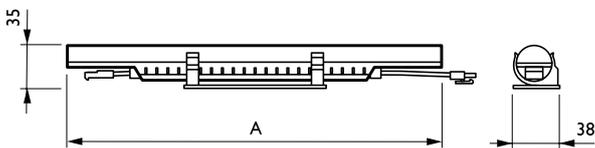
A cost-effective, dimmable, medium-luminance cove system.

www.philips.com/lighting

eW Cove	
Type	BCX400
Light source	30.5 cm: 10 × LED-HB 15.2 cm: 5 × LED-HB
Light color	Warm white: 2800 K, 3000 K Neutral white: 4200 K
Power supply	24V DC
Power consumption	30.5 cm: max 2.5 W 15.2 cm: max 1.3 W
Controls (optional)	If dimming control is desired, the eW Cove dimming adapter kit is required
Optic / cover	120° × 120°
Operating temperature	-20°C > T _a > 50°C

Material	Housing: plastic
Installation	Surface mounted, optional track
Adjustment	Adjustable mounting bracket; which provides 180° aiming rotation
Remarks	Leader cable needed for proper functioning, to be ordered separately.
Lifetime	50 000 hours (70% lumen maintenance at T _a =25° C)
Main applications	Indoor (office, retail, hospitality)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX400



BCX400 eW Cove

	A
BCX410 10 × LED	305
BCX410 5 × LED	152

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX400 10xLED-HB/WW-2700 24V 120	0.15	711585 99
BCX400 10xLED-HB/WW-3000 24V 120	0.15	711592 99
BCX400 10xLED-HB/NW-4200 24V 120	0.15	711608 99
BCX400 5xLED-HB/WW-2700 24V 120	0.064	711615 99
BCX400 5xLED-HB/WW-3000 24V 120	0.064	711622 99
BCX400 5xLED-HB/NW-4200 24V 120	0.064	711639 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

eW Cove Powercore

Type	BCX410	Material	Housing: plastic
Light source	30.5 cm: 5 x LED-HB	Installation	Surface mounted, optional track
Light color	Warm white: 2800 K Neutral white: 4200 K	Adjustment	Adjustable mounting bracket; which provides 180° aiming rotation
Power supply	230 V AC	Remarks	Leader cable needed for proper functioning, to be ordered separately
Power consumption	30.5 cm: 6 W max. at startup; 4.5 W max. steady state	Lifetime	50 000 hours (70% lumen maintenance at Ta=25° C)
Controls (optional)	Line switches and commercially available ELV-type (electronic low voltage) dimmers.	Main applications	Indoor (office, retail, hospitality)
Optic / cover	110° x 110°		
Operating temperature	-20°C > Ta > 50°C		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX410



BCX410 eW Cove Powercore

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX410 5xLED-HB/WW-2800 230V	0.11	275451 99
BCX410 5xLED-HB/NW-4200 230V	0.065	275468 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

Accessories

Product ID	Description	EOC
ZCX410 C3050P	Leader cable, length 305 mm with plug	275475 99
ZCX410 RA L1220 (25PCS)	Mounting rail, 1220 mm (25 pcs)	275505 00
ZCX410 TERMINATOR (10PCS)	Terminator (10 pcs)	
ZCX410 C305P-M-F	Jumper cable, length 305 mm male-female	275482 99
ZCX410 C1525P-M-F	Jumper cable, length 1525 mm male-female	275499 99

LiteWand LED



LiteWand LED – a magical wand of color

Philips LiteWand LED is a super-slim adjustable LED batten housed in matte aluminum channel with a clear PC cover.

The LiteWand LED has a sleek unobtrusive form factor; with extremely low power consumption in a choice of saturated colors. It comes with rotary mounting clips that enable the orientation of the luminaire even after installation. Up to 3 battens can be interconnected.

The LiteWand LED is ideal for general mood lighting as well as cabinets, coves and displays in shops, hospitality and residential environments.

The luminaire is available in six mono-color and RGB versions, in two configurations. The LiteWand LED is available as a KIT, containing a batten, power supply unit and mounting accessories. The RGB KIT configuration also comes with an integrated, pre-programmed controller. The stand-alone configuration of the product contains only the batten and the interconnecting accessories.

www.philips.com/lighting

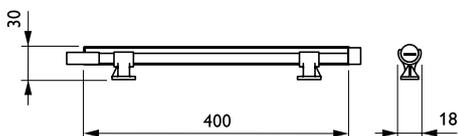
LiteWand LED

Type	BPG301
Light source	12 x LP LED, per 40 cm, SMD LEDs for RGB version
Light color	RGB Mono - red, green, blue, amber, orange, white
Power supply	120 - 240 V / 50 - 60 Hz
Power consumption	Mono - 1 W per 40 cm RGB - 2.9 W per 40 cm
Driver	Included
Optic	PC cover
Lifetime	50 000 hours (50% lumen maintenance)

Adjustment	Adjustable up to $\pm 80^\circ$ via included Rotary mounting clips
Material	Anodized aluminum housing, PC cover
Installation	Surface mounted via provided Rotary Mounting clips. Plug-and Play Driver included
Remarks	RGB version supplied with Pre-Programmed Controller
Main applications	Cove lighting, Shelf lighting



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BPG301



BPG301

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BPG301 12xLED-LP/BL	0.08	810423 99
BPG301 12xLED-LP/CV	0.08	810454 99
BPG301 12xLED-LP/GN	0.08	810416 99
BPG301 12xLED-LP/OR	0.08	810447 99
BPG301 12xLED-LP/RD	0.08	810409 99
BPG301 12xLED-LP/RGB	0.1	810461 99
BPG301 12xLED-LP/YE	0.08	810430 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

Grazer LED



Grazer LED – for striking light patterns

Grazer LED is a family of innovative grazing luminaires with LUXEON® inside. This plug-and-play range enables grazing concepts on walls and ceilings, and these can be adjusted to create vertical, inclined or horizontal grazing light patterns.

The Grazer LED luminaires are impact-resistant and cool to the touch, and also feature low power consumption. Grazer LED is available in cube (single and twin) and carousel (single and twin) versions. There are two accessories for the single cube version – a refractor and a luminance accessory.

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Grazer LED

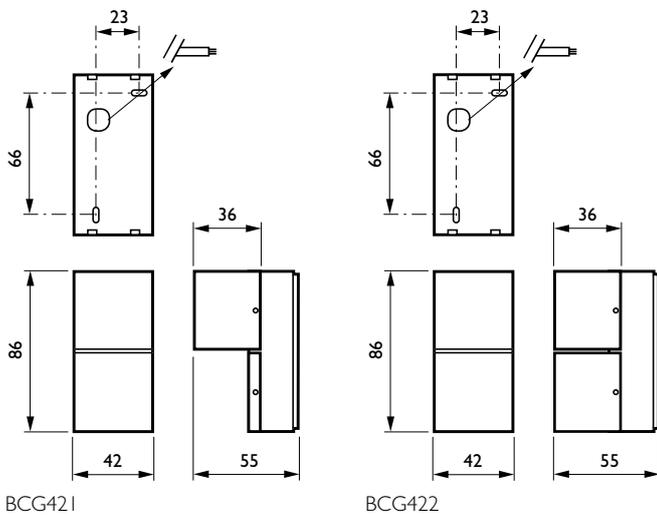
Grazer LED, rectangular

Type	BCG421 (single version) BCG422 (twin version)
Light source	BCG421: 1 x LUXEON® I BCG422: 2 x LUXEON® I
Light color	Mono: red, green, blue, amber, cool white
Power supply	100 - 240V / 50 - 60 Hz
Power consumption	BCG421: 1.7 W BCG422 : 2.4 W

Lifetime	50,000 hrs (70% lumen maintenance)
Material	Housing: aluminum Optic: glass
Installation	Surface mounted
Accessory	Luminance accessory (ZCG421 O), refractor (ZCG421 P)
Main applications	Grazing on walls and ceilings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG421

BCG422



Grazer LED BCG421 grazing luminaire, with blue, amber, cool white, red or green light



Grazer LED BCG422 grazing luminaire, with blue, amber, cool white, red or green light

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG421 1xLED-LXN/BL PSU 100-240V CLII	0.29	800530 99
BCG421 1xLED-LXN/AM PSU 100-240V CLII	0.29	800547 99
BCG421 1xLED-LXN/CW PSU 100-240V CLII	0.29	800554 99
BCG421 1xLED-LXN/RD PSU 100-240V CLII	0.29	800561 99
BCG421 1xLED-LXN/GN PSU 100-240V CLII	0.29	800578 99

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG422 2xLED-LXN/BL PSU 100-240V CLII	0.29	800585 99
BCG422 2xLED-LXN/AM PSU 100-240V CLII	0.29	800592 99
BCG422 2xLED-LXN/CW PSU 100-240V CLII	0.29	800608 99
BCG422 2xLED-LXN/RD PSU 100-240V CLII	0.29	800615 99
BCG422 2xLED-LXN/GN PSU 100-240V CLII	0.29	800622 99

Please contact your local Philips representative for additional configurations

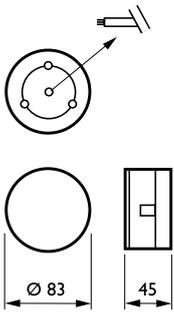
Grazer LED, round

Type	BCG431 (single version) BCG432 (twin version)
Light source	BCG431: 1 x LUXEON® I BCG432: 2 x LUXEON® I
Light color	Mono: red, green, blue, amber, cool white
Power supply	100 - 240V / 50 - 60 Hz
Power consumption	BCG431: 1.7 W BCG432 : 2.4 W

Lifetime	50,000 hrs (70% lumen maintenance)
Material	Housing: aluminum Optic: glass
Installation	Surface mounted
Main applications	Grazing on walls and ceilings



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG431/432



Grazer LED
BCG431/432 grazing
luminaire, with blue,
amber, cool white, red
or green light

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG431 1xLED-LXN/BL PSU 100-240V CLII	0.29	800639 99
BCG431 1xLED-LXN/CW PSU 100-240V CLII	0.29	800653 99
BCG431 1xLED-LXN/GN PSU 100-240V CLII	0.29	800677 99
BCG432 2xLED-LXN/AM PSU 100-240V CLII	0.31	800691 99
BCG432 2xLED-LXN/RD PSU 100-240V CLII	0.31	800714 99

Please contact your local Philips representative for additional configurations

Accessories



Prismatic refractor (ZCG421 P)

Product ID	EOC
ZCG421 P	800745 99



Opal diffuser (ZCG421 O)

Product ID	EOC
ZCG421 O	800738 99

Grazer LED BCG421 grazing luminaire, with prismatic refractor (ZCG421 P)



Grazer LED BCG421 grazing luminaire, with opal diffuser (ZCG421 O)



Marker LED



Marker LED – eye-catching

Featuring SMD LEDs in combination with a diffusing glass cover, this luminaire is a clearly visible marker with a uniform light output, opening up a wide range of creative options and effects.

The Marker LED RGB version enables dynamic color changes, opening up a wide range of creative options and effects.

The robustly designed Marker LED is available in round, rectangular and square versions and has an easy-to-install wall- and ground-recessed mounting box.

Featuring SMD LEDs in combination with a diffusing glass cover, this luminaire is a clearly visible marker with a uniform light output, opening up a wide range of creative options and effects.

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Marker LED

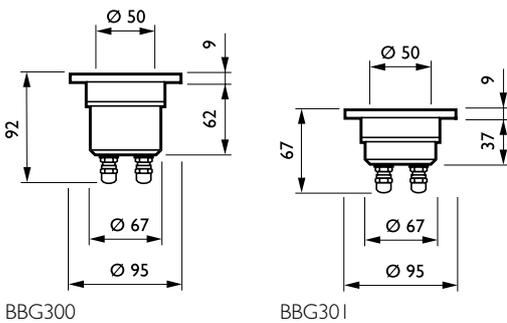
Marker LED, round

Type	BBG300 (220 - 240V version) BBG301 (24V version)
Light source	Mono: 12 × SMD LED RGB: 10 × SMD LED
Light color	Mono: red, green, blue, amber, cool white RGB
Power supply	BBG300: 220 - 240 V / 50 - 60 Hz BBG301: 24 V DC
Power consumption	Max 4 W (RGB 220 - 240 V)
Optic / cover	Glass with internal diffuser
Lifetime	50,000 hrs (70% lumen maintenance)

Option (only in RGB version)	Lighting controls: ColourChaser DMX, ColourChaser Wheel
Material	Top cover: tempered glass Top ring: stainless steel Gearbox: polycarbonate
Installation	Wall and ground recessed
Accessory	Recessed boxes ZBG300 RMB and ZBG300 RMB RGB Recessed and pre-recessed boxes for concrete ZBG300 RMB+RMBH and ZBG300 RMB+RMBH RGB
Main applications	Outdoor (urban), indoor (office, retail, hospitality)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Marker LED BBG300 ground- and wall-recessed luminaire, round

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG300 LED-HB/WH PSU 220-240V II	0.48	009926 99
BBG300 LED-HB/AM PSU 220-240V II	0.48	009933 99
BBG300 LED-HB/RD PSU 220-240V II	0.48	009940 99
BBG300 LED-HB/BL PSU 220-240V II	0.48	009964 99
BBG300 LED-HB/RGB PSU 220-240V II	0.40	802350 99

Please contact your local Philips representative for additional configurations



Marker LED BBG301 ground- and wall-recessed luminaire, round

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG301 LED-HB/WH 24V II	0.30	009971 99
BBG301 LED-HB/AM 24V II	0.30	009988 99

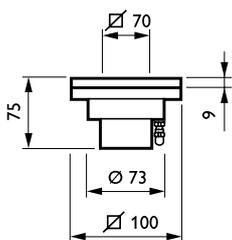
Marker LED, square

Type	BBG310 (220 - 240V version) BBG311 (24V version)
Light source	Mono: 16 × SMD LED RGB: 20 × SMD LED
Light color	Mono: red, green, blue, amber, cool white RGB
Power supply	BBG310: 220 - 240 V / 50 - 60 Hz BBG311: 24V DC
Power consumption	Max 7 W (RGB 220 - 240 V)
Optic/cover	Glass with internal diffuser
Lifetime	50,000 hrs (70% lumen maintenance)

Option (only in RGB version)	Lighting controls: ColourChaser DMX, ColourChaser Wheel
Material	Top cover: tempered glass Top ring: stainless steel Gearbox: polycarbonate
Installation	Wall and ground recessed
Accessory	Recessed boxes ZBG310 RMB and ZBG310 RMB RGB Recessed and pre-recessed boxes for concrete ZBG310 RMB+RMBH and ZBG310 RMB+RMBH RGB
Main applications	Outdoor (urban), indoor (office, retail, hospitality)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BBG310/311



Marker LED BBG310/311 ground- and wall-recessed luminaire, square

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG311 LED-HB/BL 24V II	0.35	797168 99
BBG311 LED-HB/RGB 24V III	0.35	802381 99
BBG310 LED-HB/WH PSU 220-240V II	0.54	797076 99
BBG310 LED-HB/BL PSU 220-240V II	0.54	797113 99
BBG310 LED-HB/RGB PSU 220-240V II	0.54	802374 99

Please contact your local Philips representative for additional configurations

Marker LED

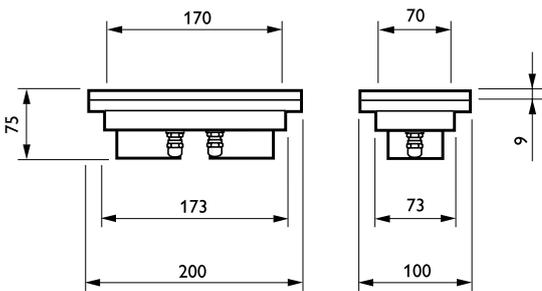
Marker LED, rectangular

Type	BBG320 (220 - 240V version) BBG321 (24V version)
Light source	Mono: 40 × SMD LED RGB: 40 × SMD LED
Light color	Mono: red, green, blue, amber, cool white RGB
Power supply	BBG320: 220 - 240 V / 50 - 60 Hz BBG321: 24 V DC
Power consumption	Max 13 W (RGB 220 - 240 V)
Optic/cover	Glass with internal diffuser
Lifetime	50,000 hrs (70% lumen maintenance)

Option (only in RGB version)	Lighting controls: ColourChaser DMX, ColourChaser Wheel
Material	Top cover: tempered glass Top ring: stainless steel Gearbox: polycarbonate
Installation	Wall and ground recessed
Accessory	Recessed boxes ZBG320 RMB and ZBG320 RMB RGB Recessed and pre-recessed boxes for concrete ZBG320 RMB+RMBH and ZBG320 RMB+RMBH RGB
Main applications	Outdoor (urban), indoor (office, retail, hospitality)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BBG320/321



Marker LED BBG320/321 ground- and wall-recessed luminaire, rectangular

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG321 LED-HB/WH 24V II	0.70	797229 99
BBG321 LED-HB/RGB 24V III	0.70	802404 99
BBG320 LED-HB/RD PSU 220-240V II	0.89	797199 99
BBG320 LED-HB/BL PSU 220-240V II	1.08	797212 99
BBG320 LED-HB/RGB PSU 220-240V II	1.08	802398 99

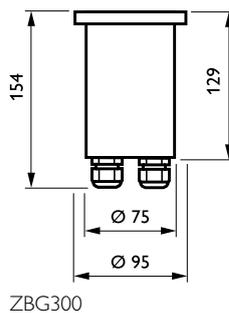
Please contact your local Philips representative for additional configurations

Accessories



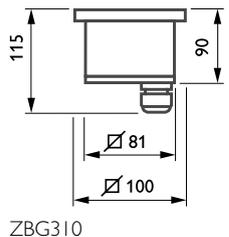
Recessed box for BBG300/301

Product ID	EOC
ZBG300 RMB	797274 99
ZBG300 RMB RMBH	802008 99
ZBG300 RMB-RGB RMBH	802022 99
ZBG300 RMB-RGB	801988 99



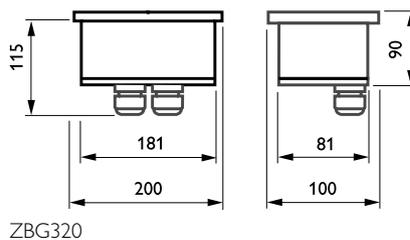
Recessed box for BBG310/311

Product ID	EOC
ZBG310 RMB	797328 99
ZBG310 RMB RMBH	802251 99
ZBG310 RMB-RGB RMBH	802275 99
ZBG310 RMB-RGB	802237 99



Recessed box for BBG320/321

Product ID	EOC
ZBG320 RMB	797342 99
ZBG320 RMB RMBH	802312 99
ZBG320 RMB-RGB RMBH	802336 99
ZBG320 RMB-RGB	802299 99



Wall Marker LED



Wall Marker LED – enhancing interiors

Easy to recess in existing plug housings, the fully flush Wall marker LED offers a choice of colors (white, blue and RGB) to enhance the indoor ambience and provide colorful guidance. The brushed high-grade aluminum creates a sophisticated look and feel, while the frosted flat cover produces a uniform, symmetrical color effect.

Wall marker LED is available in round and square versions.

www.philips.com/lighting

Wall marker, 3 LEDs

Type	BBW300 (3 LED, round version) BBW301 (3 LED, square version)
Light source	3 x SMD LED
Light color	RGB with automatic changing colors
Power supply	220 - 240V / 50 - 60 Hz
Power consumption	Max 5 W

Lifetime	30,000 hrs (70% lumen maintenance)
Option	Lighting controls: RGB: automatic sequence. Switch to select static color
Material	Cover: brushed aluminum and frosted glass
Installation	Recessed in existing plug housing
Main applications	Guidance lighting indoor (wall, corridor; staircase)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

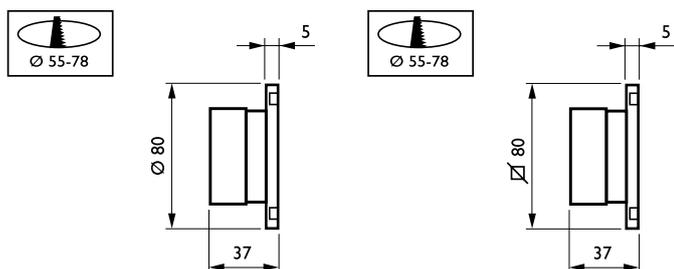
Wall marker, 5 LEDs

Type	BBW300 (5 LED, round version) BBW301 (5 LED, square version)
Light source	5 x SMD LED
Light color	Mono: blue, cool white
Power supply	220 - 240V / 50 - 60 Hz
Power consumption	Max 5 W

Lifetime	30,000 hrs (70% lumen maintenance)
Option	Lighting controls: Mono: switch only
Material	Cover: brushed aluminum and frosted glass
Installation	Recessed in existing plug housing
Main applications	Guidance lighting indoor (wall, corridor; staircase)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BBW300

BBW301



Wall marker LED BBW300, round version

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBW300 5xLED-HB/WH 220-240V	0.14	801117 99
BBW300 5xLED-HB/BL 220-240V	0.14	801124 99
BBW300 3xLED-HB/RGB 220-240V	0.14	801131 99

Please contact your local Philips representative for additional configurations



Wall marker LED BBW301, square version

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBW301 5xLED-HB/WH 220-240V	0.15	801148 99
BBW301 5xLED-HB/BL 220-240V	0.15	801155 99
BBW301 3xLED-HB/RGB 220-240V	0.15	801162 99

Please contact your local Philips representative for additional configurations

Amazon LED



Amazon LED – a touch of ambience

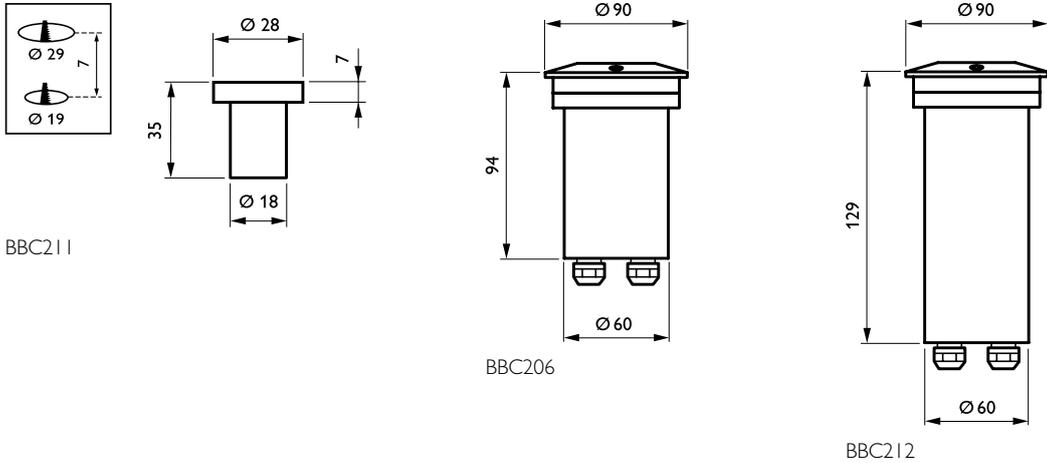
Create an attractive and appealing entrance or pathway with guiding lights. At the heart of the Amazon LED range of marker lights are top-quality diodes that deliver outstanding brightness. Amazon LED offers a choice of five different colors – yellow, red, blue, green and white (color temperature 5600 - 6500 K) – to add a touch of ambience to a variety of settings.

Amazon LED Kit, available in white and blue, is a complete guiding light kit with remote control that can be applied indoor and outdoor.

www.philips.com/lighting

Amazon LED			
Type	BBC211 (single pack, 10 pack, 10 pack KIT version) BBC206 (single pack version) BBC212 (single pack version)	Material	BBC211: Top cover: polycarbonate Housing: die-cast aluminum, grey BBC206/212: Housing: technopolymer (PBT) Top cover: tempered glass and polycarbonate Top ring: stainless steel
Light source	BBC211: 1 x SMD LED High Brightness BBC206: 6 x LED High Brightness (5 mm) BBC212: 12 x LED High Brightness (5 mm)	Installation	Ceiling, wall and ground recessed
Light color	BBC211, 10 pack KIT: blue, white Mono: red, green, blue, amber, white	Accessory	Aluminum decorative ring, luminaire tube, transformer covers, ceiling fixation clips, 230 V / 24V transformer, 230 V / 9 V transformer + remote control
Power supply	BBC211 single pack, 10 pack: 9V DC BBC211 10 pack KIT: 220 - 240V / 50 - 60 Hz BBC206: 24V DC BBC212: 220 - 240V / 50 - 60 Hz	Remarks	BBC211 10 pack KIT: including transformer, remote control, battery, 20 m cable and 22 quick-fit connectors
Power consumption	BBC211 single pack: 0.25 W BBC211 10 pack KIT: 3 W BBC206: 0.5 W BBC212: 0.8 W	Main applications	Office, retail, hospitality
Operating temperature	-20°C > T _a > 35°C	 for BBC212  for BBC206/211  for BBC211, IP55 power transformer  for BBC206/212  static load: 1000 kg 	
Lifetime	50,000 hours (70% lumen maintenance at T _a = 25°C)	 	
Optic / cover	BBC211: frosted polycarbonate BBC206/212: frosted glass		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.





Amazon LED BBC211 kit with single SMD LEDs, combipacked transformer and remote control. Also available in single units and sets of 10 pieces. Respective codes for new kit and set versions, and related accessories are available separately

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBC211 1xLED-HB/WH 9V SET10	0.90	800479 99
BBC211 1xLED-HB/BL 9V SET10	0.90	800486 99

Please contact your local Philips representative for additional configurations



Amazon LED BBC206 with 6 LEDs

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBC206 6xLED-HB/BL 24V	0.41	143507 00
BBC206 6xLED-HB/WH 24V	0.41	143491 00
BBC206 6xLED-HB/RD 24V	0.41	143521 00
BBC206 6xLED-HB/GN 24V	0.41	143514 00
BBC206 6xLED-HB/YE 24V	0.41	143538 00

Please contact your local Philips representative for additional configurations



Amazon LED BBC212 with 12 LEDs

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBC212 12xLED-HB/BL 230V	0.50	145839 00
BBC212 12xLED-HB/GN 230V	0.50	143415 00
BBC212 12xLED-HB/RD 230V	0.50	143422 00
BBC212 12xLED-HB/YE 230V	0.50	143439 00
BBC212 12xLED-HB/WH 230V	0.50	145822 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZBC206 DR ALU	Deco ring aluminium for Amazon LED 6 and 12	143644 00
ZBC206 TUBE	Recessed tube for ground installation Amazon LED 6 and 12	143651 00
EBC206 ETR 230/24V	Electronic power supply for BBC206 in recessed box IP65	145808 00
ZBC206 CFC	Ceiling fixation clips for Amazon LED 6 and 12	145846 00
ZBC206 TRC ALU	Aluminium cover for BBC206 transformer	145853 00
ZBC206 TRC IX	Stainless steel cover for BBC206 transformer	145860 00

Origami



Origami – expressive

Origami is a rimless lighting tile with maximum color impact. It comes in square and rectangular models. Its evenly lit surface displays a virtually unlimited range of dynamically changing colors (RGB).

The pace of the color changes can be easily adjusted. Origami is compatible with both DALI and DMX and has a pre-programmed color-changing mode for stand-alone usage.

Origami is available in surface-mounted, suspended and recessed versions.

www.philips.com/lighting

Origami suspended



Origami ground-recessed



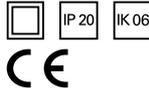
Origami surface-mounted



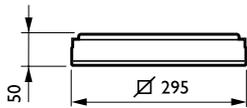
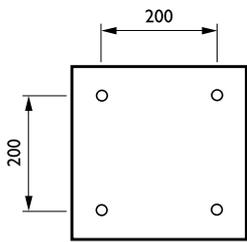
Origami, square surface-mounted

Type	BCG732
Light source	27 x LUXEON® I
Light color	RGB
Power supply	24V DC
Power consumption	32 W
Optic / cover	Multi-layer diffuser
Lifetime	50,000 hrs (70% lumen maintenance)
Option	Lighting controls: ColourChaser DMX, ColourChaser Wheel, ColourChaser DALI

Material	Housing: anodized aluminum Backplate: steel Top cover: PMMA (PC on request)
Remarks	When no external control signal is detected, RGB versions revert to their automatic pre-programmed color sequence
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG732



Origami BCG732 surface-mounted luminaire

Preferred selection

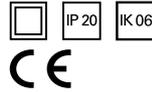
Product ID	Weight (kg)	European Order Code (EOC)
BCG732 27xLED-LXN/RGB 24V PC DMX D7 CLII	3.02	484402 00
BCG732 27xLED-LXN/RGB 24V DMX D7 CLII	3.02	778174 00

Please contact your local Philips representative for additional configurations

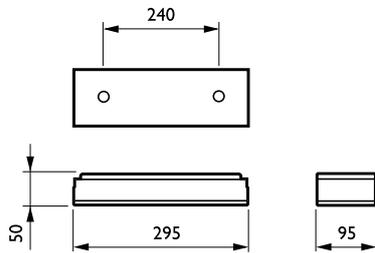
Origami, rectangular surface-mounted

Type	BCG731
Light source	9 x LUXEON® I
Light color	RGB
Power supply	24V DC
Power consumption	11 W
Optic / cover	Multi-layer diffuser

Lifetime	50,000 hrs (70% lumen maintenance)
Option	Lighting controls: ColourChaser DMX, ColourChaser Wheel, ColourChaser DALI
Material	Housing: anodized aluminum Backplate: steel Top cover: PMMA (PC on request)
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG731



Origami BCG731 surface-mounted luminaire

Preferred selection

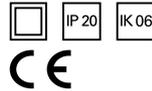
Product ID	Weight (kg)	European Order Code (EOC)
BCG731 9xLED-LXN/RGB 24V PC DMX D7 CLII	1.26	484341 00
BCG731 9xLED-LXN/RGB 24V DMX D7 CLII	1.26	778112 00

Please contact your local Philips representative for additional configurations

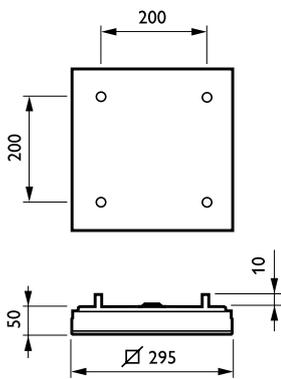
Origami

Origami, suspended	
Type	BPG732
Light source	27 x LUXEON® I
Light color	RGB
Power supply	24V DC
Power consumption	32 W
Optic / cover	Multi-layer diffuser
Lifetime	50,000 hrs (70% lumen maintenance)
Option	Lighting controls: ColourChaser DMX, ColourChaser Wheel

Material	Housing: anodized aluminum Backplate: steel Top cover: PMMA (PC on request)
Remarks	When no external control signal is detected, RGB versions revert to their automatic pre-programmed color sequence
Main applications	Retail, hospitality



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BPG732



Origami BPG732 suspended luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BPG732 27xLED-LXN/RGB 24V PC DMX D7 CLII	3.78	484761 00
BPG732 27xLED-LXN/RGB 24V DMX D7 CLII	3.78	780023 00

Please contact your local Philips representative for additional configurations



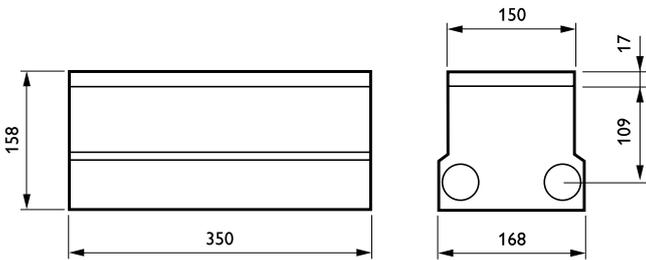
Origami, recessed

Type	BBG731
Light source	9 x LUXEON® I
Light color	RGB
Power supply	24V DC
Power consumption	11 W
Optic / cover	Multi-layer diffuser

Lifetime	50,000 hrs (70% lumen maintenance)
Option	Lighting controls: ColourChaser DMX, ColourChaser Wheel
Material	Housing: die-cast aluminum Cover: tempered glass
Main applications	Guidance lighting indoor and outdoor



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BBG731



Origami BBG731 ground-recessed luminaire

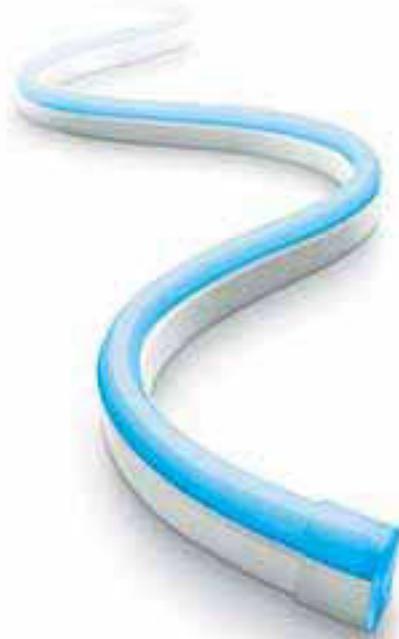
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BBG731 9xLED-LXN/RGB 230-240V DMX D7 CLI	7.44	778532 00

Please contact your local Philips representative for additional configurations



Flexible tube LED



Flexible tube LED – bendable light

The Flexible tube LED is a linear luminaire that creates a clean and smooth colored line even around corners. 79 LEDs per meter, encapsulated in insulating PVC, produce a high luminosity on the surface of the tube, in a choice of colors and lengths. In short it enables total freedom of really flexible contour lighting.

Its miniaturized, flexible structure and uniform luminance make it ideal for integration in architectural elements. The tube can be customized or configured in various lengths and is highly impact-resistant.

www.philips.com/lighting

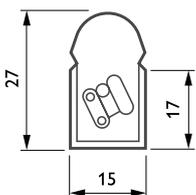
Flexible tube LED

Type	BCG200
Light source	79 x LED, per meter
Light color	Mono: red, green, blue, amber; white
Power supply	220 - 240 V / 50 - 60 Hz

Power consumption	4.7 W per meter (red, amber) 6.6 W per meter (white, green, blue)
Lifetime	30,000 hrs (30% lumen maintenance)
Material	Tube: silicon modified PVC
Main applications	In every architectural element, coves



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCG200



Flexible tube LED BCG200 is delivered in lengths up to 50 meters. Currently Flexible tube LED is only available as project codes. The next generation of Flexible tube is expected soon and shall be available as standard codes with EOC

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCG200 LED-LP/BL 220-240V CLII L50K	23.50	009049 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZCG200 RA L2000 SI (15PCS)	Mounting rail, length 2 m	009087 00
ZCG200 EP (10PCS)	End caps	009148 99

Flexible tube LED BCG200, blue



Flexible tube LED BCG200, green



Flexible tube LED BCG200, red



CareGlow



CareGlow – guides you through the dark

In an unfamiliar room it can be difficult to find your way in the dark. When hotel guests or hospital patients get out of bed at night they need a visual reference to help them walk safely through the room without having to reach out for the blinding main light.

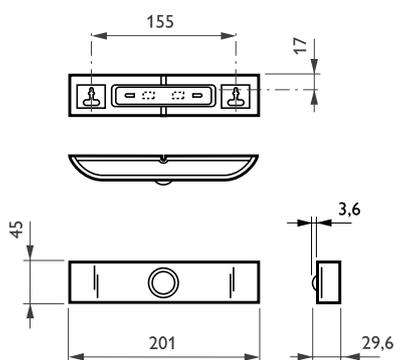
The CareGlow is a motion-activated lighting system designed to provide a soft light to guide you through badly lit places, when needed. It can be placed on a wall or under a nightstand to illuminate a path. When the sensor detects motion in the dark, the CareGlow switches on and provides a soft light for a minimum of 12 seconds. When the room is lit, or when there is enough daylight, the CareGlow light sensor is not activated. CareGlow is available either integrated sensor module or separate sensor module.

www.philips.com/lighting

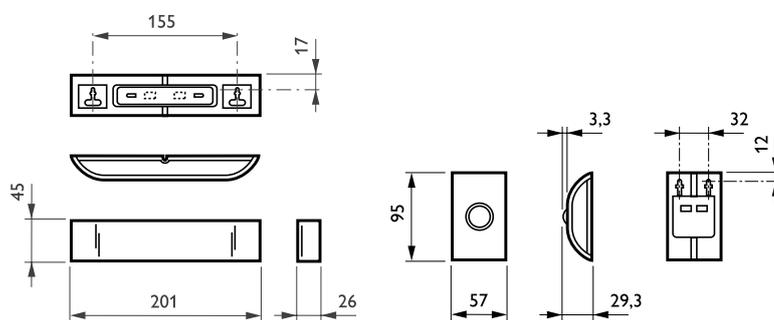
CareGlow			
Type	BWH355, 1 piece (self containing unit) BWH356, 2 separate pieces (light and sensor module)	Operating temperature	$-10^{\circ}\text{C} < T_a < 50^{\circ}\text{C}$
Light source	4 x SMD LED High Brightness	PIR sensor beam	140°
Light color	Warm white (2800 K)	Material	Housing: polycarbonate
Power supply	9V DC, 600 mA	Installation	Surface mounting
Power consumption	Max. 5.4 W	Remarks	Fade out after 12 seconds in 2 seconds Two GlowCare luminaires can be connected to a single transformer



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BWH355



BWH356



BWH355 with integrated sensor module

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWH355 4xLED-HB/WW 100-240V	0.22	805283 99

Please contact your local Philips representative for additional configurations



BWH356 with separate light and sensor module

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BWH356 4xLED-HB/WW 100-240V	0.34	805290 99

Please contact your local Philips representative for additional configurations

Batten LED



Batten LED – ideal for scene setting

Batten LED is a mono-color system available in five standard color versions – red, green, blue, amber and white – for dynamic ambience, façade lighting and luminance applications.

It is ideal for scene setting with color, with the light appearing to become an integral element of the architecture. It can be used to power-wash a surface from 1 m up to 3 m, to reveal form and texture. The batten form of the luminaire minimizes the dark area between adjoining fixtures.

The low-power, high-efficiency Batten LED is available in four versions, with 24, 48, 72 and 96 individual LEDs respectively.

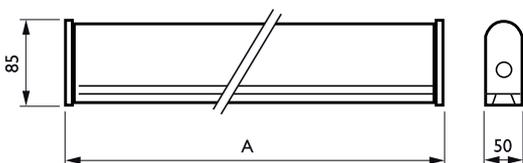
www.philips.com/lighting

Batten LED	
Type	BCS103 BCS106 BCS109 BCS112
Light source	BCS103: 24 × LED-LP BCS106: 48 × LED-LP BCS109: 72 × LED-LP BCS112: 96 × LED-LP
Light color	Mono: red, green, blue, amber, white
Power supply	24V DC
Power consumption	BCS103: 2 W BCS106: 4 W BCS109: 6 W BCS112: 8 W

Operating temperature	-20°C > T _a > 35°C
Lifetime	30,000 hrs (70% lumen maintenance)
Material	Housing: PMMA Clips: steel
Remarks	Sealed for life
Main applications	Façade lighting, contour lighting



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCS103/106/109/112 RD/GN/BL/AM/RGB

	A
BCS103	300
BCS106	595
BCS109	890
BCS112	1185



Batten LED BCS103 system

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCS103 24xLED-LP/GN 24V L300	0.37	008813 99
BCS106 48xLED-LP/RD 24V L595	0.67	008844 99
BCS109 72xLED-LP/AM 24V L890	1.00	008905 99
BCS112 96xLED-LP/BL 24V L1185	1.25	008974 99
BCS112 96xLED-LP/WH 24V L1191	1.10	008981 99
ECS100 PSU220-240/24V-150W-50-60Hz	2.60	009018 00

Please contact your local Philips representative for additional configurations

Blue LEDs; red and green also available



Green LEDs; red and blue also available



Red LEDs; green and blue also available





High-bay and low-bay luminaires

Selection guide – High-bay and low-bay luminaires

Luminaire family	Page	Lamps					Reflectors		
		CFL	QL	CHID	HID	I kW HID	Aluminum	Acrylic	Polycarbonate
Megalux 	7.4	•	•	•	•	•	•	•	•
PerformaLux 	7.14	•	•	•	•		•	•	•
Cabana 	7.20				•		•		
TPS350 	7.24	• (4 x TL5)					•		
Mini 300 Stealth 	7.30			•			•		
Mini 300 Cube 	7.34			•			•		

CFL = compact fluorescent

QL = induction lamp

CHID = compact high intensity discharge lamp

HID = high intensity discharge lamp

NB = Narrow beam

MB = Medium beam

WB = Wide beam

Luminaire family	Light distribution			Protection	Max ambient temperature	Auxiliary lighting	Emergency lighting	Dimming
	NB 	MB 	WB 					
Megalux	•	•	•	IP65 IP23 IP20	60°C	• (on request)	• (on request)	
PerformaLux	•	•	•	IP65 IP23 IP20	45°C	•	•	• (only for SON and CDM lamps)
Cabana	•		•	IP65 IP23	35°C	•		
TPS350	•	•	•	IP20	depends		•	• (HFR and HF-DALI)
Mini 300 Stealth	•	•	•	IP65	35°C	• (on request)		
Mini 300 Cube	•	•	•	IP65	35°C	• (on request)		

Megalux



Megalux – think big

Megalux's modern, functional design and robust, high-quality materials make it ideally suited to a wide range of applications. Although initially designed for industrial applications, Megalux is also highly suitable for large non-industrial spaces with high ceilings.

The Megalux range features four different housings that consist of an upper part including the gear unit and a lower part including the lamp holder.

The housing is completely pre-wired and made of robust cast aluminum. The lamp holder of the 4ME450 and 4ME550 housing is adjustable for different beam shapes (narrow beam, medium beam, wide beam). All aluminum reflectors have a high-gloss anodized inner surface.

It can accommodate not only various high-pressure discharge lamps between 70 and 1000 W, but also compact fluorescent lamps and QL induction lamps.

The Megalux reflector range offers light performance in compliance with the latest lighting norm (EN 12464-1 - lighting of indoor work places). The high-temperature (HT) versions of Megalux can withstand ambient temperatures of up to 60°C.

www.philips.com/lighting

Megalux, electrical unit, 4ME450 HPI-P / SON in silver with aluminum reflector 9ME100 R D450 and tempered glass cover 9ME100 GC450



Megalux, electrical unit, 4ME450 HPI-P / SON in black with aluminum reflector 9ME100 R D450 and tempered glass cover 9ME100 GC450



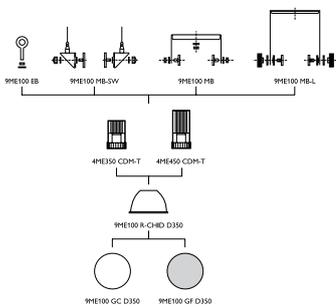
Megalux (dedicated for CDM-T lamps)

Type	4ME350 + 9ME100 R-CHID D350 4ME450 + 9ME100 R-CHID D350
Light source	HID: 1 x MASTERColour CDM-T / G12 / 70, 150, 250 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC)
Optic	Aluminum reflector (9ME100 R-CHID D350) for CDM-T versions

Material	Housing: robust cast aluminum, silver coated (SI) Reflector: spun aluminum Glass cover: tempered glass (GC) and frosted glass (FG)
Installation	Individual; suspended
Accessory	Mounting brackets
Ambient temperature	35 or 45°C (depends version)
Main applications	Hyper-/supermarkets, do-it-yourself shops, industries with tempered protective glass



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



- 9ME100 EB BK/SI eyebolt for single suspension, black/silver
- 9ME100 MB BK/SI mounting bracket for wall/ceiling mounting, black/silver
- 9ME100 MB-L BK/SI mounting bracket long version for wall/ceiling mounting, black/silver
- 9ME100 MB-SW BK/SI (2 PCS) mounting brackets for steel wire, black/silver
- 9ME100 R-CHID D350 aluminum reflector for compact high intensity discharge lamps
- 9ME100 GC D350 glass cover; clear
- 9ME100 GF D350 glass cover; frosted

All components are to be ordered separately, see the relevant ordering table

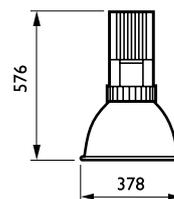


Megalux, electrical unit, 4ME350 CDM-T with aluminum reflector 9ME100 R-CHID D350; both to be ordered separately. Glass cover 9ME100 GC/GF 350 to be used with CDM-T lamps

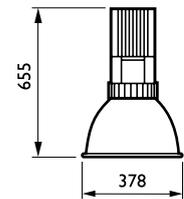
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4ME350 1xCDM-T0W IC SI	5.80	223213 00
4ME350 1xCDM-T150W IC SI	6.49	223220 00
4ME350 1xCDM-T250W IC SI	8.19	224173 00

Please contact your local Philips representative for additional configurations



4ME350 CDM-T + 9ME100 R-CHID D350



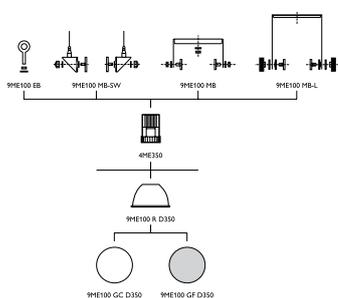
4ME450 CDM-T + 9ME100 R-CHID D350

Megalux (350 Line)

Type	4ME350 + 9ME100 R D350	Material	Housing: robust cast aluminum, silver coated (SI) Reflector: spun aluminum Glass cover: tempered glass (GC) and frosted glass (FG)
Light source	Compact fluorescent: 1 x MASTER PL-H / 2G8-1 / 60 W 1 x MASTER PL-T 4P / GX24d-2 / 42 W	Installation	Individual; suspended
HID:	1 x MASTER CityWhite CDO-ET / E40 / 100 W	Accessory	Mounting brackets
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC) for CDO-ET lamps Electronic, 220 - 240 V / 50 - 60 Hz: Performance (HFP) for PL-H and PL-T lamps	Ambient temperature	35 or 45°C (depends version)
Optic	Aluminum reflector (9ME100 R D350)	Main applications	Office spaces, recreational areas, supermarkets



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



- 9ME100 EB BK/SI eyebolt for single suspension, black/silver
- 9ME100 MB BK/SI mounting bracket for wall/ceiling mounting, black/silver
- 9ME100 MB-L BK/SI mounting bracket long version for wall/ceiling mounting, black/silver
- 9ME100 MB-SW BK/SI (2 PCS) mounting brackets for steel wire, black/silver
- 9ME100 R D350 aluminum reflector
- 9ME100 GC D350 glass cover, clear
- 9ME100 GF D350 glass cover; frosted (on request)

All components are to be ordered separately, see the relevant ordering table

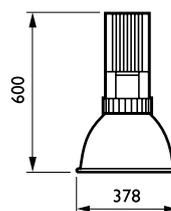


Megalux, electrical unit, 4ME350
CDO-ET/PL-H in silver with aluminum
reflector 9ME100 R D350, both to
be ordered separately. Glass cover
9ME100 GC/GF 350 to be used with
CDO-ET lamps

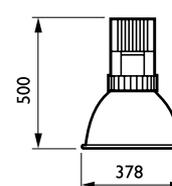
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4ME350 1xPL-H60W HFP SI	4.73	223183 00
4ME350 1xCDO-ET100W IC SI	6.11	223206 00
4ME350 1xPL-T/4P42W HFP SI	3.73	223190 00

Please contact your local Philips representative for additional configurations



4ME350 CDO-ET/PL-H + 9ME100 R D350



4ME350 PL-T/4P + 9ME100 R D350

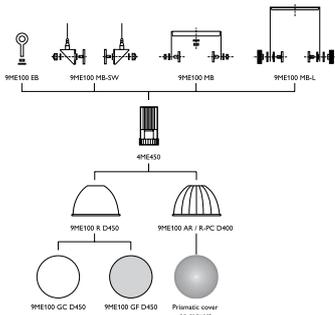
Megalux (450 Line)

Type	4ME450 + 9ME100 R D450
Light source	HID: 1 x MASTER HPI Plus / E40, 250 W 1 x SON Pro / E40 / 250 W 1 x HPL-N / E40 / 250 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC)
Optic	Aluminum reflector (9ME100 R D450) Acrylic reflector (9ME100 AR D400) Polycarbonate reflector (9ME100 R-PC D400)

Material	Housing: robust cast aluminum, silver (SI) or black (BK) coated Reflector: spun aluminum Transparent reflector: acrylic or polycarbonate Glass cover: tempered glass (GC) and frosted glass (FG)
Installation	Individual; suspended
Accessory	Mounting brackets
Ambient temperature	25°C (acrylic and polycarbonate reflector) 35 or 45°C (aluminum reflector) 60°C high temperature (HT60 electrical units with aluminum reflector)
Main applications	Hyper-/supermarkets, do-it-yourself shops, industries with tempered protective glass cover



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



- 9ME100 EB BK/SI eyebolt for single suspension, black/silver
- 9ME100 MB BK/SI mounting bracket for wall/ceiling mounting, black/silver
- 9ME100 MB-L BK/SI mounting bracket long version for wall/ceiling mounting, black/silver
- 9ME100 MB-SW BK/SI (2 PCS) mounting brackets for steel wire, black/silver
- 9ME100 R D450 aluminum reflector
- 9ME100 AR acrylic reflector Ø 400
- 9ME100 R-PC polycarbonate reflector Ø 400 (on request)
- 9ME100 GC D450 glass cover; clear
- 9ME100 GF D450 glass cover; frosted (on request)

All components are to be ordered separately, see the relevant ordering table

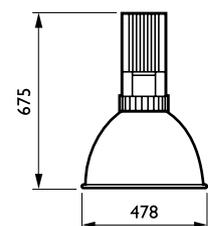
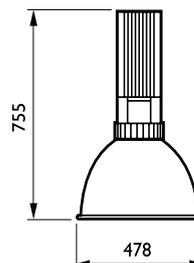


Megalux, electrical unit, 4ME450 HPI-P/SON in black with aluminum reflector 9ME100 R D450, both to be ordered separately. Glass cover 9ME100 GC/GF 450 to be used with HPI-P lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4ME450 1xSON250W IC HT60 BK	9.26	223848 00
4ME450 1xHPI-P250W IC HT60 BK	9.21	223855 00
4ME450 1xHPI-P250W IC SI	7.37	223237 00
4ME450 1xSON250W IC SI	8.44	223244 00
4ME450 1xHPL-N250W IC HT60 BK	8.30	223831 00

Please contact your local Philips representative for additional configurations

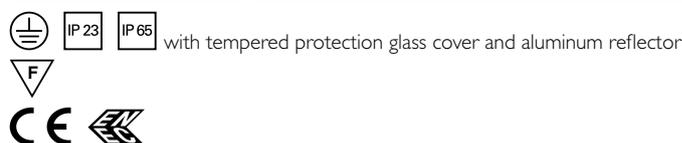


4ME450 HPI-P/SON + 9ME100 R D450 4ME450 HPL-N + 9ME100 R D450

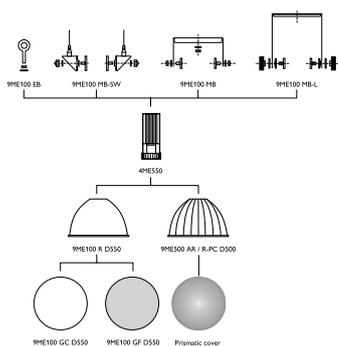
Megalux (550 Line)

Type	4ME550 + 9ME100 R D550
Light source	HID: 1 x MASTER HPI Plus / E40 / 400 W 1 x SON / E40 / 400 W 1 x HPL-N / E40 / 400 W Induction lamp system: 1 x MASTER QL / E40 / 165 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High frequency (HF) for QL lamp system
Optic	Aluminum reflector (9ME100 R D550) Acrylic reflector (9ME100 AR D500) Polycarbonate reflector (9ME100 R-PC D500)

Material	Housing: robust cast aluminum, silver (SI) or black (BK) coated Reflector: spun aluminum Transparent reflector: acrylic or polycarbonate Glass cover: tempered glass (GC) and frosted glass (FG)
Installation	Individual; suspended
Accessory	Mounting brackets
Ambient temperature	25°C (acrylic and polycarbonate reflector) 35 or 45°C (aluminum reflector) 60°C high temperature (HT60 electrical units with aluminum reflector)
Main applications	Hyper/supermarkets, do-it-yourself shops, industries with tempered protective glass cover



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



- 9ME100 EB BK/SI eyebolt for single suspension, black/silver
- 9ME100 MB BK/SI mounting bracket for wall/ceiling mounting, black/silver
- 9ME100 MB-L BK/SI mounting bracket long version for wall/ceiling mounting, black/silver
- 9ME100 MB-SW BK/SI (2 PCS) mounting brackets for steel wire, black/silver
- 9ME100 R D550 aluminum reflector
- 9ME100 AR acrylic reflector Ø 500
- 9ME100 R-PC polycarbonate reflector Ø 500 (on request)
- 9ME100 GC D550 glass cover; clear
- 9ME100 GF D550 glass cover; frosted (on request)

All components are to be ordered separately, see the relevant ordering table

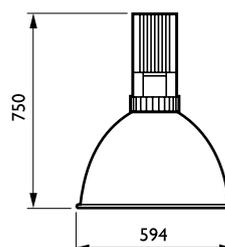


Megalux, electrical unit, 4ME550 HPI-P/SON in black with aluminum reflector
 9ME100 R D550, both to be ordered separately. Glass cover 9ME100 GC/GF 550 to be used with HPI-P lamps or use HPI-Plus protected lamps

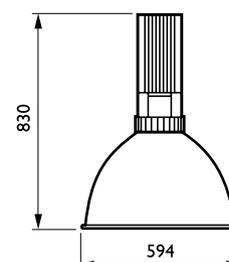
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4ME550 1xSON400W IC HT60 BK	12.34	223879 00
4ME550 1xHPI-P400W IC HT60 BK	9.75	223886 00
4ME550 1xHPI-P400W IC SI	8.42	223268 00
4ME550 1xSON400W IC SI	9.80	223275 00
4ME550 1xQL165W/840 HF R SI	7.05	223299 00

Please contact your local Philips representative for additional configurations



4ME550 HPL-N/QL + 9ME100 R D550



4ME550 HPI-P/SON + 9ME100 R D550

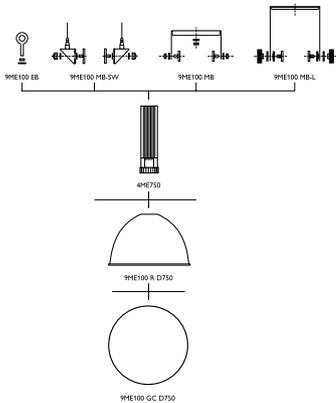
Megalux (750 Line)

Type	4ME750 + 9ME100 R D750
Light source	HID: 1 x HQI-E / E40 / 1000 W 1 x SON / E40 / 1000 W 1 x HPL-N / E40 / 700, 1000 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC)
Optic	Aluminum reflector (9ME100 R D750)

Material	Housing: robust cast aluminum, silver (SI) or black (BK) coated Reflectors: spun aluminum Glass cover: tempered glass (GC)
Installation	Individual; suspended
Accessory	Mounting brackets
Ambient temperature	35 or 45°C (depends version) 60°C high temperature (HT60)
Main applications	Hyper-/supermarkets, do-it-yourself shops, industries with tempered protective glass cover



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



- 9ME100 EB BK/SI eyebolt for single suspension, black/silver
 - 9ME100 MB BK/SI mounting bracket for wall/ceiling mounting, black/silver
 - 9ME100 MB-L BK/SI mounting bracket long version for wall/ceiling mounting, black/silver
 - 9ME100 MB-SW BK/SI (2 PCS) mounting brackets for steel wire, black/silver
 - 9ME100 R D750 aluminum reflector Ø 750
 - 9ME100 GC D750 glass cover, clear Ø 750
- All components are to be ordered separately, see the relevant ordering table

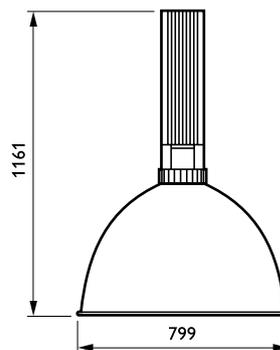


Megalux, electrical unit, 4ME750
HQI-E/SON in silver with aluminum reflector 9ME100 R D750, both to be ordered separately. Glass cover 9ME100 GC/GF 750 to be used with HQI lamps

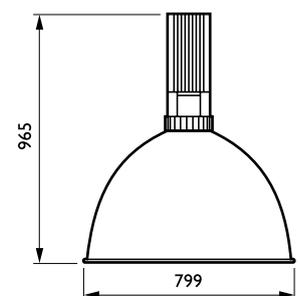
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4ME750 1xSON1000W IC SI	19.30	223329 00
4ME750 1xHQI-E1000W IC SI	19.01	223336 00
4ME750 1xHPL-N700W IC HT60 BK	12.52	223893 00
4ME750 1xHPL-N1000W IC SI	14.87	223312 00

Please contact your local Philips representative for additional configurations



4ME750 HQI-E/SON + 9ME100 R D750



4ME750 HPL-N + 9ME100 R D750

Accessories



Aluminum reflector 9ME100 R-CHID D350 for electrical unit 4ME350 CDM-T and 4ME450 CDM-T; all to be ordered separately.

Product ID	EOC
9ME100 R-CHID D350	628674 99



Aluminum reflector 9ME100 R D350 for electrical unit 4ME350, both to be ordered separately.

Product ID	EOC
9ME100 R D350	628490 99



Acrylic reflector 9ME100 AR D400 or polycarbonate reflector 9ME100 R-PC D400 for electrical unit 4ME450, reflector fixation collar 9ME100 RC400 to be ordered separately

Product ID	EOC
9ME100 AR D400	531110 99
9ME100 R-PC D400	623617 99
9ME100 R D450	628407 99



Acrylic reflector 9ME100 AR D500 or polycarbonate reflector 9ME100 R-PC D500 for electrical unit 4ME550, all to be ordered separately.

Product ID	EOC
9ME100 AR D500	531103 99
9ME100 R-PC D500	613298 99



Aluminum reflector 9ME100 R D550 for electrical unit 4ME550, both to be ordered separately.

Product ID	EOC
9ME100 R D550	628506 99



Aluminum reflector 9ME100 R D750 for electrical unit 4ME750, both to be ordered separately.

Product ID	EOC
9ME100 R D750	628513 99

Accessories



Mounting bracket for wall-/ceiling mounting, available in black (BK) and silver (SI)

Product ID	EOC
9ME100 MB BK	071678 00
9ME100 MB SI	071746 00



Mounting bracket long version for swiveling, available in black (BK) and silver (SI)

Product ID	EOC
9ME100 MB-L BK	071692 00
9ME100 MB-L SI	071753 00



Mounting brackets for steel wire, available in black (BK) and silver (SI) for steel wire diameter 2 mm - 2.5 mm (max)

Product ID	EOC
9ME100 MB-SW BK (2PCS)	073177 00
9ME100 MB-SW SI (2PCS)	073184 00



Glass cover clear with frame

Product ID	EOC
9ME100 GC D350	628414 99
9ME100 GC D450	628438 99
9ME100 GC D550	628452 99
9ME100 GC D750	628476 99



Eyebolt for single suspension, available in black (BK) and silver (SI)

Product ID	EOC
9ME100 EB BK	070916 00
9ME100 EB SI	071081 00



Steel wire for suspension, available in 1000 and 1500 mm

Product ID	EOC
9ME100 SW L1000	071555 00
9ME100 SW L1500	071562 00

PerformaLux



PerformaLux – a real performer

The PerformaLux HPK380 luminaire has been designed to offer the best light output on the market and to withstand harsh industrial conditions.

The best-in-class light output ratio means fewer luminaires are required to maintain the desired lighting level, thus reducing total cost of ownership.

An integrated beam adjuster provides extra flexibility when set-ups or production layouts are changed. The beam width can be modified from narrow to medium or wide using a simple handle.

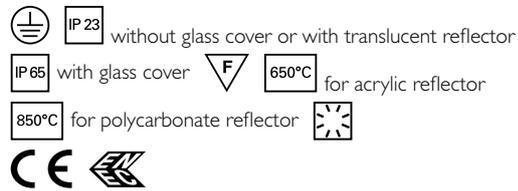
Although initially designed for industrial applications, the robust design of this luminaire, combined with a wide range of light sources and both aluminum and decorative translucent reflectors, makes it suitable for other general lighting applications, e.g. shops and department stores.

The PerformaLux HPK380 is available in three sizes: large, medium and small.

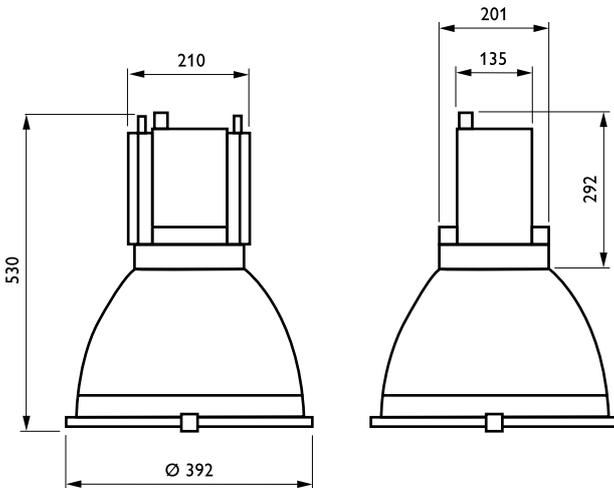
www.philips.com/lighting

PerformaLux	
Type	FPK/MPK380 (small gear unit version)
Light source	HID: MASTERColour CDM-T(P) Elite / G12 / 70, 150 W Compact fluorescent: MASTER PL-H 4 Pin / 2G8-1 / 60, 85, 120 W MASTER PL-T 4 Pin / GX24q-5 / 57 W
Lamp included	Yes (K)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Optic	Aluminum reflector (GPK380 R D465 (PL-H), GPK380 R D350 (CDM-T)) Frosted reflector (GPK380 ARF D305/D394, GPK380 PCF D305/D394)
Option	Emergency lighting (external battery pack, provided by installer)

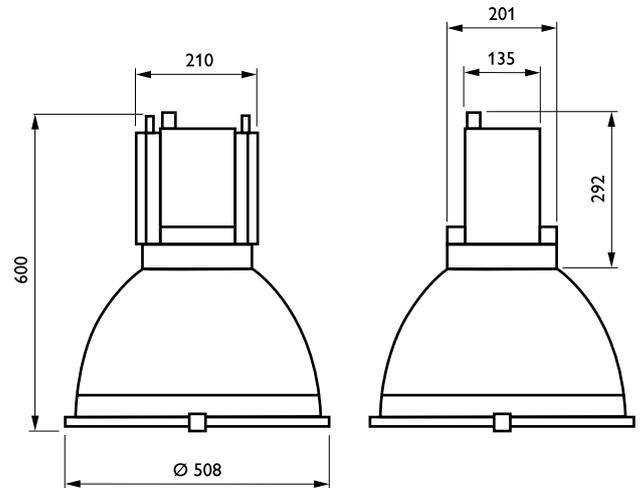
Material	Gear unit: die-cast aluminum Reflector: spun aluminum with 99.85% AL purity grade Frosted reflector: PMMA or polycarbonate Glass cover: tempered glass (GC)
Installation	Individual; suspended or direct on ceiling
Accessory	Mounting bracket, steel-wire cables, twin mounting bracket, catenary Mounting bracket, suspension hook
Remarks	Ready-to-install versions (KIT), inclusive lamp(s) and installation material Complies with norm EN55015 and EN61547
Main applications	Industry, retail, DIY stores, public spaces, supermarket/hypermarket



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



MPK380 CDM-TP Elite



FPK380 PL-H



PerformaLux MPK380 high-bay luminaire with GPK380 R D350 aluminum reflector and glass cover; all to be ordered separately

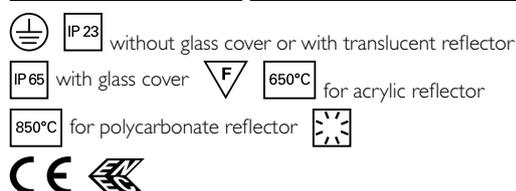
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MPK380 1xCDM-T70W IC 230V	7.60	724966 00
MPK380 1xCDM-T150W IC 240V	7.80	725000 00
MPK380 1xCDM-T150W EB	8.00	725031 00
MPK380 1xCDM-TP150W IC 230V	8.00	725062 00
MPK380 1xCDM-TP150W EB	7.60	725109 00

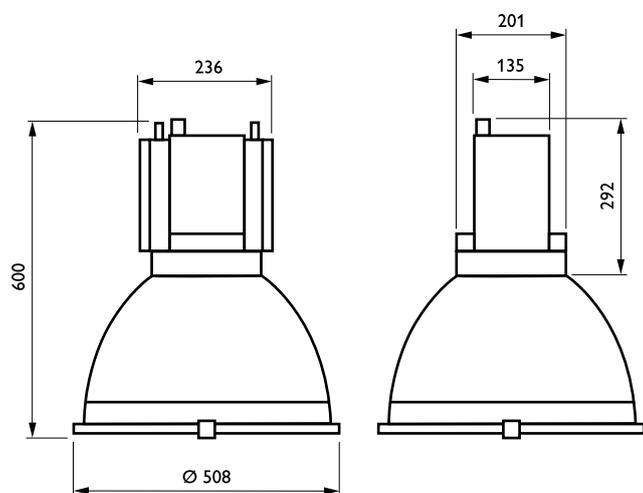
Please contact your local Philips representative for additional configurations

PerformaLUux	
Type	HPK/MPK380 (medium gear unit version)
Light source	HID: MASTER HPI Plus / E40 / 250 W HPL-N / E40 / 250 W SON / E40 / 250 W MASTERC colour CDM-T(P) / G12 / 70, 150, 250 W
Lamp included	Yes (K)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Parallel compensated (IC) Ignitor semi-parallel self-stopping (ST)
Optic	Aluminum reflector (GPK380 R D465, GPK380 R D350 (CDM-T)) Translucent reflector (GPK380 AR D394, GPK380 PC D394) Frosted reflector (GPK380 ARF D305/D394, GPK380 PCF D305/D394)
Option	Emergency lighting (external battery pack, provided by installer) Auxiliary lamp for instant start-up (AUX)

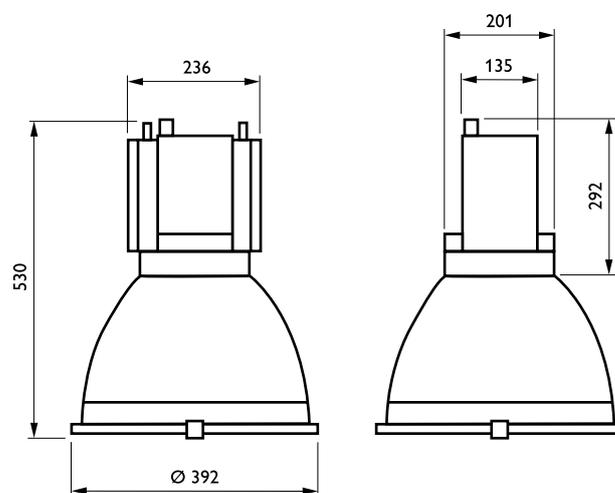
Material	Gear unit: die-cast aluminum Reflector: spun aluminum with 99.85% AL purity grade Translucent reflector: acrylic or polycarbonate Frosted reflector: acrylic or polycarbonate Glass cover: tempered glass (GC)
Installation	Individual; suspended or direct on ceiling
Accessory	Mounting bracket, steel-wire cables, twin Mounting bracket, catenary mounting bracket, suspension hook
Remarks	Ready-to-install versions (KIT), inclusive lamp(s) and installation material Complies with norm EN55015 and EN61547
Main applications	Industry, retail, DIY stores, public spaces, supermarket/hypermarket



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



HPK380 SON/SON-PP 250 W, HPI-P/QL/HPL-N



MPK380 CDM-T



PerformaLux HPK380 high-bay luminaire with GPK380 R D465 aluminum reflector and glass cover; all to be ordered separately

Preferred selection

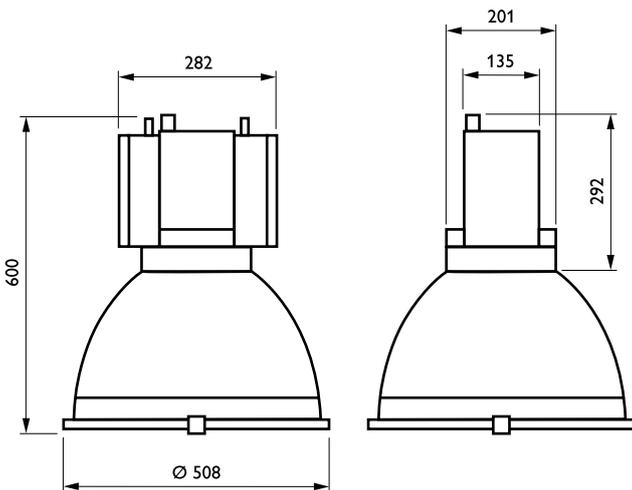
Product ID	Weight (kg)	European Order Code (EOC)
HPK380 1xHPI-P250W-BU IC 230V	8.00	724836 00
HPK380 1xHPI-P400W-BU IC 240V CS	8.50	724904 00
HPK380 1xSON250W IC ST 230V	8.15	724911 00
MPK380 1xCDM-T150W IC 230V	7.80	724980 00
MPK380 1xCDM-T150W IC 240V	7.80	725017 00

Please contact your local Philips representative for additional configurations

PerformaLux			
Type	HPK380 (large gear unit version)	Option	Lighting controls: external dimming controller used for electro magnetic ballast and DynaVision controller; provided by installer Emergency lighting (external battery pack, provided by installer) Auxiliary lamp for instant start-up (AUX)
Light source	HID: MASTER HPI Plus / E40 / 400 W HPL-N / E40 / 400 W SON / E40 / 400 W MASTER SON / E40 / 250, 400 W (with DynaVision controller) Compact fluorescent: MASTER QL system / 165 W	Material	Gear unit: die-cast aluminum Reflector: spun aluminum with 99.85% AL purity grade Translucent reflector: acrylic or polycarbonate Glass cover: tempered glass (GC)
Lamp included	Yes (K)	Installation	Individual; suspended or direct on ceiling
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Parallel compensated (IC) Ignitor semi-parallel self-stopping (ST) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)	Accessory	Mounting bracket, steel-wire cables, twin mounting bracket, catenary Mounting bracket, suspension hook
Optic	Aluminum reflector (GPK380 R D465) Aluminum reflector (black outside, white inside, easy to clean) (GPK380 WR D465 BK) Translucent reflector (GPK380 AR D546, GPK380 PC D546)	Remarks	Ready-to-install versions (KIT), inclusive lamp(s) and installation material Complies with norm EN55015 and EN61547
		Main applications	Industry, retail, DIY stores, public spaces, supermarket/hypermarket

 IP 23 without glass cover or with translucent reflector
 IP 65 with glass cover  650°C for acrylic reflector
 850°C for polycarbonate reflector 
 

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



HPK380 SON/SON-PP 400 W



PerformaLux HPK380 high-bay luminaire with GPK380 R D465 aluminum reflector and glass cover; all to be ordered separately

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
HPK380 1xHPI-P400W-BU IC 230V	8.50	724836 00
HPK380 1xSON250W IC ST 230V	8.15	724904 00
HPK380 1xSON400W IC ST 230V	10.15	724911 00

Please contact your local Philips representative for additional configurations

Accessories



Aluminum reflector

Product ID	EOC
GPK380 R D350	72556799
GPK380 R D465	72557499



Acrylic reflector

Product ID	EOC
GPK380 AR D394	72558199
GPK380 AR D546	72559899



Glass cover

Product ID	EOC
ZPK380 GC D350	72567399
ZPK380 GC D465	72568099

Accessories

Product ID	Description	EOC
GPK380 PCR D394	Polycarbonate reflector	725604 99
GPK380 PCR D546	Polycarbonate reflector	725611 99
GPK380 ARF D394	Frosted acrylic reflector	725635 99
GPK380 PCRF D394	Frosted polycarbonate reflector	725659 99
GPK380 WR D465 BK	White reflector	725666 99
ZPK380 PC D465	Polycarbonate cover	725697 99
ZPK380 HS	Suspension hook	725703 99
ZPK380 MB-SW	Mounting bracket for steel wire	725734 99
ZPK380 CB	Catenary bracket	725758 99
ZPK380 MB	Mounting bracket for steel wire	725765 99
GPK380 WR D465	PH-L reflector	725796 99

Cabana



Cabana – ultra-convenient

Cabana HPK150 is a functional high-bay indoor luminaire for high-intensity discharge lamps. It is supplied with a reflector, which can be attached to the unit without screws by means of an ingenious bayonet construction. The innovative external beam regulator enables easy lamp adjustment (narrow or wide beam) at the installation site. The external connector means the electrical connection can be made without opening the unit. Two standard versions are available: a compact version with unit and reflector in one box, and a kit version with unit, reflector and lamp installed.

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Cabana HPK150 high-bay luminaire with reflector and lamp included

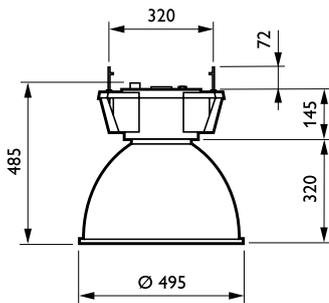


Cabana	
Type	HPK150
Light source	HID: HPL-N / E40 / 250, 400 W MASTER HPI Plus / E40 / 250, 400 W SON / E40 / 250, 400 W
Lamp included	Yes (K) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC)
Option	Gear: dedicated gears for SON and HPI/HPL lamps respectively Emergency lighting: 1 hour (ELI) Auxiliary lamp for instant switch on

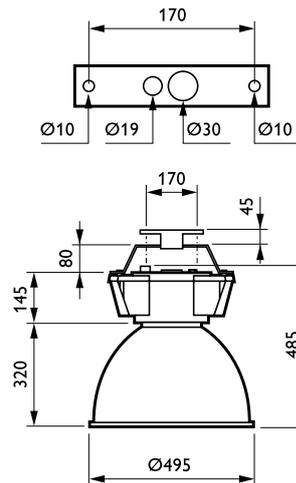
Material	Gear-plate: die-cast aluminum Housing: PC Reflector: aluminum
Installation	Individual; chain mounting Connection is made outside housing
Accessory	Mounting bracket, glass cover
Remarks	Two different beams can be created thanks the adjustable lampholder HPI-P versions are delivered with protection glass Dedicated ready-to-install versions available (KIT) Cabana is not suitable for applications in which oil vapors may be released
Main applications	Industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



HPK150



HPK150 + ZPK150 MB



Cabana HPK150 high-bay luminaire with reflector and clear glass

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
HPK150 1xHPL-N250W K IC IP65 KIT	8.00	142296 00
HPK150 1xHPL-N400W K IC IP65 KIT	9.10	142302 00
HPK150 1xHPI-P250W-BU K IC IP65 KIT	8.10	142319 00
HPK150 1xHPI-P400W-BU K IC IP65 KIT	9.10	142326 00
HPK150 1xSON400W K IC IP65 KIT	10.70	142340 00

Please contact your local Philips representative for additional configurations

Accessories



Mounting bracket for installation to ceiling, cable duct and threaded rod

Product ID	EOC
ZPK150 MB	143033 00



Cabana HPK150 high-bay luminaire with reflector and clear glass

Product ID	EOC
ZPK150 GC	143019 00
GPK150 R	143026 00

Product ID	Description	EOC
ZPK150 CH (2PCS)	Chain hook	143040 00

TPS350



TPS350 – contemporary lighting for high-ceiling rooms

TPS350 is a functional TL5 luminaire with very high light output and efficiency, designed in particular for general lighting in retail, DIY outlets and industrial environments with ceiling heights between 5 and 15 meters.

It has been conceived as an alternative to classical high-bay luminaires (equipped with HID lamps). Using four state-of-the-art MASTER TL5 80/54 W lamps (instead of HID lamps) ensures optimal color rendering and significantly longer lamp lifetime, as well as extensive dimming, switching and emergency lighting options. The need for maintenance is minimized, further reducing total cost of ownership.

TPS350's light performance – compliant with the latest lighting norms for indoor work places – can help create a pleasant retail ambience that puts shoppers in the mood to buy. Similarly, in industry it can improve visual conditions, boosting performance.

TPS350 is available with a choice of dedicated reflectors for wide-, medium- and narrow-beam light distribution, and with the option of a white steel louver for glare control. Accessories allow versatility in mounting: suspended with steel cable, fixed to industrial track systems (e.g. Telemecanique) or direct ceiling mounting.

www.philips.com/lighting

TPS350 luminaire with TL5 lamps and narrow, medium or wide-beam optic, for suspended, surface or track mounting

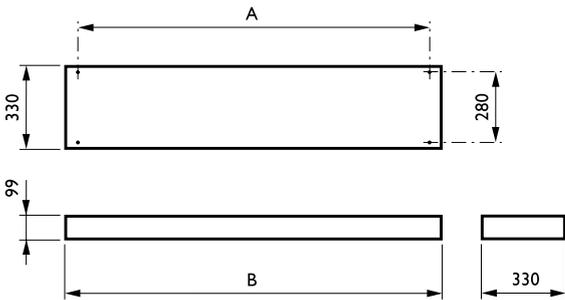


TPS350	
Type	TPS350
Light source	Fluorescent TL5: 4 x MASTER TL5 / G5 / 54, 80 W
Lamp included	Yes (lamp color 840)
Light distribution	Direct (D)
Mains voltage	220 - 240 V
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; DALI (HFD)
Optic	Two internal aluminum reflectors - narrow beam (NB) Two internal aluminum reflectors - medium beam (MB) Two internal aluminum reflectors - wide beam (WB) Louver made from white coated steel (L) as accessory

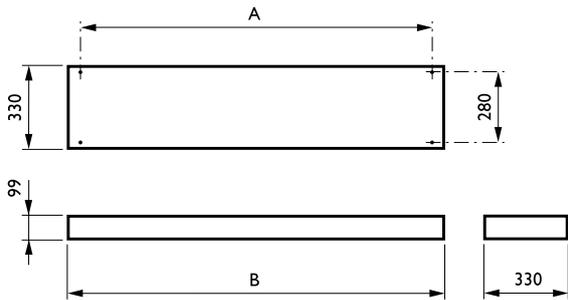
Connection	Push-in connector with pull relieve, inside housing accessible from outside by baffle
Option	Emergency lighting: 1 or 3 hours (EL1/EL3)
Material	Housing: zinc-coated steel, white Reflectors: high-purity aluminum, semi-high-gloss Louver: white steel
Installation	Suspended: individual; suspension set (steel cables with 'Reutlinger' adjustment) as accessory Surface mounted: individual; screw mounting Prepared for industrial track systems (e.g. Telemecanique Canalis)
Main applications	Do-it-yourself markets, retail, industrial applications with ceiling heights between 5 and 15 meters for general lighting



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TPS350 54 W



TPS350 80 W



TPS350 luminaire with TL5 lamps and narrow, medium or wide-beam optic, for suspended, surface or track mounting

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TPS350 4XTL5-54W/840 HFP NB	6.20	238194 00
TPS350 4XTL5-54W/840 HFP MB	5.70	238200 00
TPS350 4XTL5-54W/840 HFP WB	6.20	238217 00
TPS350 4XTL5-80W/840 HFP NB	7.09	238286 00
TPS350 4XTL5-80W/840 HFP MB	7.00	238293 00
TPS350 4XTL5-80W/840 HFP WB	7.00	238309 00

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

Accessories

Product ID	Description	EOC
9ZZ001 xxx	Suspension set	239238 00
GPS350 4 54 L	Louver, 54 W	645381 99
GPS350 4 80 L	Louver, 80 W	645398 99



Bringing spaces to life

In our drive to provide better lighting experiences, we focus on the needs and wishes of those directly affected by our solutions – the general public, shoppers, workers in industry, etc. Applying our deep understanding of the effect lighting has on people, we seek to create appealing solutions that enhance their daily lives. For example:

In industry – increasing efficiency and productivity by improving visual task performance and safety and, on a more personal level, enhancing workers' general sense of well-being.

In public areas – creating a safe and welcoming atmosphere, in this case thanks to the Mini 300's perfect balance between horizontal and vertical lighting levels.



Sparkling

Featuring state-of-the-art CDM lamps, the Mini 300 Stealth offers near-daylight color rendering, which adds a touch of sparkle – and therefore ambience – to the night-time environment.

High color rendering

True colors are important for brand presentation and a comfortable environment. The outstanding high color rendering and color temperature of Philips' leading-edge CDM lamps create a daylight impression and add another dimension to retail, industrial and public spaces. In the fresh food section of a supermarket, for example, the light from the Mini 300 brings the rich diversity of colors to life, making the produce irresistible.

www.philips.com/lighting

MINI 300 Stealth DWP333



Mini 300 Stealth – visual power

Mini 300 Stealth is a range of extremely efficient luminaires that can be used to illuminate large areas with direct and/or indirect light. Their high light output ratio is attributable to a patented white reflector coating, which offers up to 35% higher energy efficiency (W/m^2) than traditional lighting systems. Optimal lighting results are achieved thanks to the good balance of horizontal and vertical light levels combined with the white light and good color rendering of the lamp.

Mini 300 Stealth is supplied as standard with an asymmetric medium-beam reflector; wide and narrow-beam versions are available as an option. It is also available with the road-lighting POT optic, making it suitable for site perimeter, parking and open area lighting. The light source is shielded by a patented louver system, minimizing glare.

Mini 300 Stealth is suitable for pole (DGP333), ceiling (DWP333), wall (DVP333) or surface mounting.

Within the Mini 300 product family there is also a dedicated under-canopy version (Mini 300 Cube), e.g. petrol-stations.

Mini 300 Stealth DWP333 is an extremely efficient luminaire that can be used to illuminate large areas with direct and/or indirect light. The high light output ratio is attributable to a patented white reflector coating, which offers up to 35% higher energy efficiency (W/m^2) than traditional lighting systems. Optimal lighting results are achieved thanks to the good balance of horizontal and vertical light levels combined with the white light and good color rendering of the lamp.

Mini 300 Stealth DWP333 is supplied as standard with an asymmetric medium-beam reflector; wide and narrow-beam versions are available as an option. The light source is shielded by a patented louver system, minimizing glare.

Within the Mini 300 Stealth product family there is also pole (DGP333) and surface (DVP333) mounting versions. In addition, within the Mini 300 product family there is also a dedicated under-canopy version (Mini 300 Cube) for downlighting.

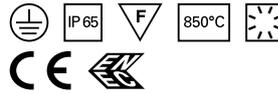
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The Mini 300 Stealth is a pure, timeless design and can be used for both up and down lighting

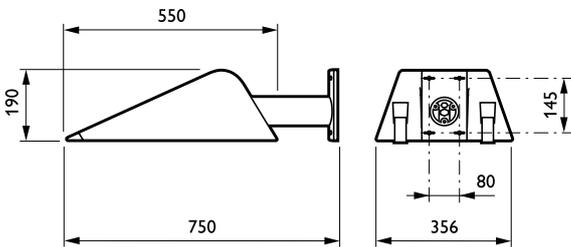


Mini 300 Stealth	
Type	DWP333
Light source	HID: 1 x MASTERColour CDM-T / G12 / 70, 150, 250 W 1 x MASTERColour CDM-TD / RX7s / 70, 150 W
Lamp included	Yes (K or lamp color 830 or 942)
Gear (integrated)	Electro magnetic (low loss), 230 or 240 V / 50 Hz: IC: parallel compensated Electronic, 220 - 240 V / 50 - 60 Hz: EB: electronic
Optic	A-NB: asymmetrical narrow beam A-MB: asymmetrical medium beam A-WB: asymmetrical wide beam
Option	Frosted glass (dedicated for e.g showrooms) Special coating (SWP) to cope with chlorine environments (e.g swimming pools) Auxiliary lamp (AUX), providing immediate light during warm-up phase of the HID lamp

Material	Housing and front frame: high-pressure die-cast aluminum Reflector: aluminum, special coated Glass: thermally toughened 3 mm-thick (hold by front frame) Clips: stainless-steel (to secure the frame) Mounting bracket: high-pressure die-cast and extruded aluminum
Color	SI: silver Other (RAL-) colors available on request
Installation	Screw mounting directly on surface with dedicated wall bracket
Remarks	Luminaire is delivered with gear, lamp and wall bracket Dedicated versions available for pole mounting (DGP versions) and for flood lighting (DVP versions)
Main applications	Recreational areas, shopping malls, show rooms, transportation hubs



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



DWP333



Mini 300 Stealth DWP333 wall-mounted area flood-lighting luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
DWP333 CDM-TD150W/942 IC A-WB SI	10.00	378018 00
DWP333 CDM-TD150W/942 IC A-MB SI	10.00	378025 00
DWP333 CDM-TD150W/942 IC A-NB SI	10.00	378032 00

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZWP333 MBW SI	Mounting bracket	380639 00

For installation and lamp replacement, easy access is possible by opening the front frame, which holds the tempered front glass





MINI 300 Cube DCP300



Mini 300 Cube – daylight impression

Mini 300 Cube is an extremely efficient low-glare recessed luminaire specially designed for downlighting under canopies. This efficiency is achieved by a patented optic coating (which reflects 97% of the light) and by use of a CDM-TD 150 W 4200 K lamp. The combination of this lamp and the white-coated reflector creates an inviting atmosphere with color rendering of 96. Mini 300 Cube delivers a uniform light distribution with an asymmetric or bi-directional beam creating outstanding illuminances on vertically oriented objects like petrol pumps, cars or merchandise in gondolas (shops).

The range comprises versions for recessed, surface, pole and wall-mounting. Within the Mini 300 product family there is also a dedicated floodlight version (Mini 300 Stealth).

Mini 300 Cube is an extremely efficient low-glare luminaire specially designed for downlighting. The efficiency is achieved by a patented optic coating (which reflects 97% of the light) and by use of e.g. the CDM-TD 150 W 4200 K lamp. The combination of this lamp and the white-coated reflector creates an inviting atmosphere with color rendering of 96. Mini 300 Cube delivers a uniform light distribution with an asymmetric or bi-directional beam creating outstanding illuminances in industrial and retail environments.

The range comprises versions for recessed (DBP300) and surface mounted (DCP300). Within the Mini 300 product family there is also a dedicated floodlight version (Mini 300 Stealth).

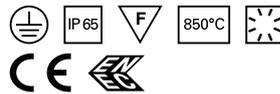
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Polycarbonate transparent bowl (TB) for applications in which glass covers are not permitted (e.g. food industry)

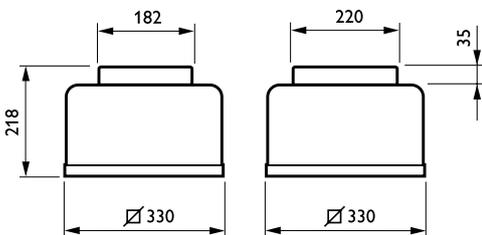


MINI 300 Cube	
Type	DCP300 (surface-mounted version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 250 W 1 x MASTERColour CDM-TD / RX7s / 70, 150 W
Lamp included	Yes (K or lamp color 830 or 942)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: Electronic (EB), not for CDM-T lamp version
Optic	Asymmetrical, medium beam (A-MB) Asymmetrical, wide beam (A-WB), not for CDM-T lamp version Symmetrical, wide beam (S-WB) Symmetrical, wide beam, bi-directional (S-WB-BD)
Optical cover	Flat glass
Option	Frosted glass (dedicated for e.g showrooms), not for CDM-T lamp version Special coating (SWP) to cope with chlorine environments (e.g swimming pools) Auxiliary lamp (AUX), providing immediate light during warm-up phase of the HID lamp Hot restrike ignitor (HR), for CDM-TD 150 W lamp version only

Material	Housing: injection-moulded base plate with deep-drawn aluminum hood Glass: thermally hardened clear flat glass Silver (SI), black (BK), grey (GR) and other RAL colors available on request
Installation	Locking the luminaire into pre-mounted frame (delivered with the luminaire) Electrical connection by means of Wieland plug and socket
Accessory	Suspension brackets, transparent bowl
Remarks	Delivered in kombipack format; complete with lamp and all necessary mounting parts (K) Dedicated versions available for pole mounting (DGP versions) and recessed mounting (DBP300)
Main applications	Recreational areas, shopping malls, showrooms, transportation hubs



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



DCP300



Mini 300 Cube DCP300 surface-mounted luminaire for fixed ceilings and under canopies

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
DCP300 CDM-TD I 50W/942 230V S-WB WH	7.00	180970 00
DCP300 CDM-TD I 50W/942 240V S-WB WH	7.00	180994 00
DCP300 CDM-T250W/942 230V S-WB WH	8.00	385092 00
DCP300 CDM-T250W/942 240V S-WB WH	8.00	385108 00

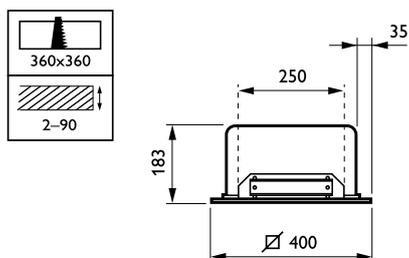
Please contact your local Philips representative for additional configurations

MINI 300 Cube	
Type	DBP300 (recessed version)
Light source	HID: 1 x MASTERColour CDM-T / G12 / 250 W 1 x MASTERColour CDM-TD / RX7s / 70, 150 W
Lamp included	Yes (K or lamp color 830 or 942)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: Electronic (EB), not for CDM-T lamp version
Optic	Asymmetrical, narrow beam (A-NB) Asymmetrical, medium beam (A-MB) Asymmetrical, wide beam (A-WB), not for CDM-T lamp version Symmetrical, wide beam (S-WB) Symmetrical, wide beam, bi-directional (S-WB-BD)
Optical cover	Flat glass
Option	Frosted glass (dedicated for e.g showrooms), not for CDM-T lamp version Special coating (SWP) to cope with chlorine environments (e.g swimming pools) Auxiliary lamp (AUX), providing immediate light during warm-up phase of the HID lamp Hot restrike ignitor (HR), for CDM-TD 150 W lamp version only

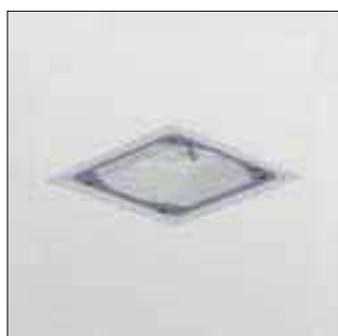
Material	Housing: injection moulded base plate with deep-drawn aluminum hood Glass: thermally hardened clear flat glass Mounting frame: galvanised white-coated steel, white (WH) Silver (SI), black (BK), grey (GR) and other RAL colors available on request
Installation	Recessed ceiling mounting All versions equipped with mounting frame and mains supply cable
Accessory	Transparent bowl, mounting ring, infill plate
Remarks	Delivered in kombipack format; complete with lamp and all necessary mounting parts (K) Dedicated versions available for pole mounting (DGP versions) and surface mounting (DCP300)
Main applications	Petrol service stations, public areas, shopping malls, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



DBP300



Mini 300 Cube DBP300 recessed luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
DBP300 CDM-TD150W/942 230V A-WB WH	8.00	180840 00
DBP300 CDM-TD150W/942 240V A-WB WH	8.00	180864 00
DBP300 CDM-TD150W/942 240V S-WB WH	8.00	180895 00
DBP300 CDM-TD150W/942 230V S-WB WH	8.00	180918 00

Please contact your local Philips representative for additional configurations

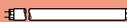
Accessories

Product ID	Description	EOC
ZBP300 IP WH	Infill plate, white	181298 00
ZBP300 CFRM	Ceiling frame for recessed mounting	183834 00
GBP300 TB	Transparent bowl	248854 00
ZBP300 GT-S	Tempered glass	183766 00



Light-line systems

Selection guide – Light-line systems

Luminaire family	Page	Lamps		Reflectors		Wiring		
		Fluorescent		Steel	Aluminum	5-wire mm ²	7-wire mm ²	9-wire mm ²
		TL5 	TL-D 					
Maxos 	8.4	•	•	•	•	•	•	
TTX400 	8.32	•	•	•	•	•	•	•
Tetrix TTX150 	8.64	•	•	•		•	•	

Luminaire family	Wiring			Protection	Emergency lighting	Lighting control	Dynamic lighting option (color mixing)
	2x5 wire mm ²	2x7 wire mm ²	Bus bar (flexible positioning)				
Maxos	•	•	•	IP64 IP63 IP40 IP20	•	•	•
TTX400				IP20	•	•	
Tetrix TTX150				IP20	•		

Light-line systems

Maxos



Maxos – the multifunctional performer, in proper style

Maxos has been designed on the basis of in-depth knowledge of end-user needs in the retail business and industry. It also offers solutions for schools, offices and public spaces. Maxos' durable quality and electrical flexibility, combined with a wide selection of reflectors and accessories, ensure well-designed, cost-effective lighting solutions with minimum energy consumption.

Maxos is designed for fast installation and is available in TL-D and TL5 versions, in the colors silver and white, and with IP20 and IP64 protection. The possibility of integrating projectors and the flexibility in positioning electrical units make it the ideal system for retail outlets.

www.philips.com/lighting

Facetted reflector with D6-louver



Aluminum reflector TL5



Trapeze reflector



Aluminum reflector TL-D, perforated





1

2

Main applications

I Retail

Combining attractive design and compact dimensions with outstanding light output and distribution, Maxos is ideally suited to retail applications – e.g. food, non-food and fashion stores. The combination of TL5 lamps and aluminum reflectors, for example, delivers exactly the right amount of light precisely where it is needed. Maxos also offers extensive options to integrate projectors/spots, as well as flexibility in positioning of electrical units and spots (bus bar system). The light-line system is available in both silver and white, ensuring a perfect match with the store interior.

2 Industry

The Maxos light-line system helps to boost operating efficiency and safety in industrial facilities by delivering high lighting levels with low glare, while at the same time reducing energy consumption and maintenance. Dedicated TL-D aluminum reflectors are available for each application. Maxos has IP64 protection options across the system. A dedicated IP63 reflector unit – the outside of which can be cleaned – has been developed for the automotive and food industries. Maxos is also available in versions with up to 14 wires; this allows, among other things, zones for separate switching and emergency lighting with cabling separated from the standard mains.

3 Offices

In office environments, the Maxos light-line system delivers high lighting levels, combined with low glare, for example by means of TL5 lamps in combination with OLC semi-high-gloss high-quality aluminum optics with 3D lamellae (D6). This creates a bright, stimulating ambience that minimizes visual fatigue and improves productivity.

4 Public spaces

Maxos' appealing design aesthetic and system flexibility makes it eminently suited to a host of applications in public spaces.

3

4





Suspension brackets in silver and white



Trunkings in silver and white



Electrical units in silver and white



Reflectors and mirror inlays



Louvers and optics





Maxos TL-D / IP20 / IP40



SDW-T / CDM-T units



4MX014...IP63



Maxos TL-D IP64

9MX056



4MX056

5-wire 1.5 mm²
7-wire 1.5 mm²
5-wire 2.5 mm²
7-wire 2.5 mm²

4MX056...2x (double wiring)

2x5-wire 1.5 mm²
2x7-wire 1.5 mm²
2x5-wire 2.5 mm²
2x7-wire 2.5 mm²

4MX056 A.../M...E...

Extended trunkings
5-wire 1.5 mm²/300 mm
600 mm

4MX056...IP64

White only
7-wire 1.5 mm²
5-wire 2.5 mm²
7-wire 2.5 mm²

Projector connection

Electrical units with 3C track

4MX091

1-lamp TL-D
2-lamp TL-D
1-lamp TL-D EL
2-lamp TL-D EL
2-lamp TL-D FSG32 mm

4MX013

CDM-T lamp
SDW-T lamp
Includes faceted reflector

4MX014...IP63

White only
1-lamp TL-D
2-lamp TL-D
1-lamp TL5
2-lamp TL5

4MX091...IP64

1-lamp TL-D
2-lamp TL-D
1-lamp TL-D EL
2-lamp TL-D EL
1-lamp TL-D FF-sign
2-lamp TL-D FF-sign

4MX092...T

Trapeze reflector
- without mirror
- with wide-beam mirror
- with narrow-beam mirror
- 'wall washer'
- perforated without mirror
- slotted without mirror

4MX092...F

Faceted reflector
- without mirror
- with wide-beam mirror
- with asymmetrical beam mirror
- slotted without mirror

4MX092...D/C/Wing

Aluminum reflector
- narrow beam
- wide beam
- asymmetrical beam
- very narrow beam
- wide beam / perforated
Wing optic reflector/indirect

4MX092...IP64

Trapeze reflector

4MX093...L

White louver
Silver louver

4MX093... L/PL/C6/D6

White louver
Prismatic optic
Semi-high-gloss optic
- wide-beam optic
- narrow-beam optic

Fast and smooth installation

Maxos can be quickly and easily set up by installers of all ability levels, thanks to its clearly definable components and simple click together assembly.



A variety of suspension brackets can be clicked into place along the trunking groove.



The two trunkings are connected via a sturdy coupler. Then the prewired 5- or 7-pole electrical connections can be manually connected.



The gear units are secured in the trunking via a two-way turnable clip, simply click them into place. The locks are made of steel.



Reflectors are fitted onto the same mounting points as the gear units.



Louvers and optics can be easily put in place, enabling easy relamping.



Maxos aluminum reflectors and optics

The aluminum reflectors for TL5 and TL-D lamps are optimized for applications in supermarkets, shops, distribution centers and industry. They are made of high-quality aluminum and are available for electrical units holding 1 or 2 TL5 or TL-D lamps. A semi-high-gloss (D) aluminum reflector is available for wide-beam, medium-beam, narrow-beam, asymmetrical beam and (double-) asymmetrical-beam light distributions. For very narrow beams a high-gloss (C) aluminum reflector is available. For TL-D, a perforated decorative high-gloss aluminum reflector in wide beam can be ordered.

TL5 aluminum reflectors can be equipped with aluminum louvers with profiled lamellae (M2) or with a simple white steel louver (L) for glare reduction.

All the reflectors are fixed to the electrical unit via a simple click. They can be connected to each other in a line by means of an overlap; for the TL5 versions, additional coupling pieces (9MX056 CP/TL5) are available as an option. Also for the TL5 versions, decorative end-plates for the beginning and end of the light-line are available as accessories.

	Maxos TL5 Aluminum reflectors and optics
Type	4MX692 (TL5 reflector) 4MX693 (TL5 louver/optic)
Suitable electrical unit	For 1 and 2 TL5 35, 49, 54 and 80 W versions
Material and light distribution	Reflector: Semi-high gloss aluminum (D), narrow beam (-NB) Semi-high gloss aluminum (D), medium beam (-MB) Semi-high gloss aluminum (D), wide beam (-WB) Semi-high gloss aluminum (D), asymmetric beam (-A) Semi-high gloss aluminum (D), double asymmetric beam (-DA) High gloss aluminum (C), very narrow beam (-NB) Louver: Aluminum with profiled lamellae (M2) Steel, white coated (L-D WH)
Accessory	Aluminum reflector end caps (9MX056 EP/TL5 SI / WH)*, coupling pieces (9MX056 CP/TL5) *not for C-NB reflector
Remarks	Optics and louvers are suitable for 1- and 2 lamp versions
Main applications	Retail (e.g. food, fashion)

	Maxos TL-D Aluminum reflectors
Type	4MX092
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions
Material and light distribution	Semi-high gloss aluminum (D), narrow beam (-NB), 1- and 2-lamp Semi-high gloss aluminum (D), wide beam (-WB), 1- and 2-lamp Semi-high gloss aluminum (D), asymmetrical beam (-A), 1- and 2-lamp High gloss aluminum (C), very narrow beam (-NB), 1-lamp High gloss aluminum, perforated (CP), wide beam (-WB), 1-lamp
Remarks	*2-lamp versions of aluminum reflectors to be used with dedicated electrical unit (with lampholder F32 mm)
Main applications	Industry, logistics, retail

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

Maxos 4MX692 TL5 aluminum reflector with semi-high-gloss mirror, available for narrow-, medium-, wide-beam, asymmetrical and double asymmetrical light distribution (D-NB/D-MB/D-WB/D-A/D-DA)



Maxos 4MX692 TL5 aluminum reflector with high-gloss mirror for very narrow-beam light distribution



Maxos 4MX692 TL5 aluminum reflector for narrow, medium, wide, asymmetrical or double-asymmetrical-beam light distribution, with aluminum optic with profiled lamellae (4MX693 M2) or white lamellae louver (4MX693 L-D)

TL-D

Maxos 4MX092 TL-D aluminum reflector for I-lamp electrical unit with a semi-high-gloss mirror for narrow or wide-beam light distribution (D-NB/D-WB) or a high-gloss mirror for narrow-beam light distribution (C-NB)



Maxos 4MX092 TL-D perforated aluminum reflector for wide-beam light distribution and upward lighting



Maxos 4MX092 TL-D aluminum reflector for 2-lamps electrical units with 32 mm lamp holder (F32)

Maxos faceted reflectors and optics

Faceted reflectors for TL5 and TL-D give shops and offices a high-class appearance.

They are made of steel, with a white or silver coating, and are available for electrical units holding 1 or 2 TL5 or TL-D lamps.

The faceted reflector can be integrated with a semi-high-gloss (D6) OLC optic of high-quality aluminum. This optic has parabolic side reflectors and parabolic lamellae, and it can create either a medium beam (with an integrated white top reflector) or a narrow beam (with

an integrated mirror top reflector). Moreover, a prismatic acrylic cover (P) and a white steel louver (L-F) are also available.

End-plates for the beginning and end of the light-line are available as accessories.

	Maxos TL5 Faceted reflectors and optics
Type	4MX692 (TL5 reflector) 4MX693 (TL5 louver/optic)
Suitable electrical unit	For 1 and 2 TL5 35, 49, 54 and 80 W versions
Material and light distribution	Reflector: Steel, faceted (F) in white (WH) or silver (SI) Reflector option: Steel, faceted (F) with high-gloss aluminum mirror; wide beam (-WB) Steel, faceted (F) with high-gloss aluminum mirror; asymmetrical beam (-A) Optic: Semi-high gloss, high-quality aluminum, (D6), wide beam (-WB) Semi-high gloss, high-quality aluminum, (D6), narrow beam (-NB) Cover: PMMA prismatic cover (P) Louver: Steel lamellae, white (L-F WH)
Installation	Click-in fixation on electrical unit
Accessory	Faceted reflector end caps (9MX056 EP-F WH/SI), faceted reflector coupling pieces (9MX056 CP-F WH/SI)
Remarks	Reflectors and optics are suitable for 1- and 2 lamp versions
Main applications	Offices, schools, cash areas in shops

	Maxos TL-D Faceted reflectors and optics
Type	4MX092 (TL-D reflector) 4MX093 (TL-D louver/optic)
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions
Material and light distribution	Reflector: Steel, faceted (F) Steel, faceted (F) with high gloss aluminum mirror; wide beam (-WB) Steel, faceted (F), with high gloss aluminum mirror; asymmetrical beam (-A) Reflector option: Steel, faceted (F) with symmetrical beam, direct/indirect (F-S-D/I) Louver: Semi-high gloss, high-quality aluminum, (D6), wide beam (-WB) Semi-high gloss, high-quality aluminum, (D6), narrow beam (-NB) PMMA prismatic cover (P) Steel lamellae, white (L-F WH)
Installation	Click-in fixation on electrical unit
Accessory	Faceted reflector end caps (9MX056 EP-F WH/SI), faceted reflector coupling pieces (9MX056 CP-F WH/SI)
Remarks	*2-lamp versions of faceted reflectors to be used with dedicated electrical unit (with lampholder F32 mm) Reflectors and optics are suitable for 1- and 2-lamp versions
Main applications	Offices, schools, cash areas in shops

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



Maxos 4MX692 TL5 faceted reflector; also for wide or asymmetric-beam light distribution (F/F-WB/F-A)



Maxos 4MX692 TL5 slotted faceted reflector with direct/indirect light distribution (F-S-D/I); a version for emergency lighting is also available (F-S-D/I-EL)



Maxos 4MX692 TL5 faceted reflector; for wide or asymmetric-beam light distribution with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (4MX693 D6)



Maxos 4MX692 TL5 faceted reflector with prismatic refractor (4MX693 P)



Maxos 4MX692 TL5 aluminum reflector with semi-high-gloss mirror for narrow, medium, wide, asymmetrical or double-asymmetrical-beam light distribution, with lamellae louver for faceted reflector (4MX693 L-F)

TL-D



Maxos 4MX092 TL-D faceted reflector; also for wide or asymmetric-beam light distribution (F/F-WB/F-A)



Maxos 4MX092 TL-D slotted faceted reflector with direct/indirect light distribution (F-S-D/I); a version for emergency lighting is also available (F-S-D/I-EL)



Maxos 4MX092 TL-D faceted reflector; for wide or asymmetric-beam light distribution, with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (4MX093 D6)



Maxos 4MX092 TL-D faceted reflector with prismatic refractor (4MX093 P)



Maxos 4MX092 TL-D faceted reflector; for narrow or wide-beam light distribution, with a lamellae louver for faceted reflector (4MX093 L)

Maxos trapeze reflectors and optics

The sturdy trapeze reflectors for TL5 and TL-D are designed primarily for applications in industry, supermarkets and shops. They are made of steel with a white or silver outer finish. The reflectors are optimized for electrical units holding 1 or 2 TL5/TL-D lamps and provide an excellent light output ratio.

There are basic trapeze reflectors without an additional mirror inlay and trapeze reflectors with dedicated aluminum mirror inlays. These are designed for wide-beam, narrow-beam and asymmetrical wall-washing light distributions. Moreover, perforated and slotted trapeze reflectors (without mirror inlays) can be ordered for design reasons or to create an indirect uplighting effect. For glare reduction, the trapeze reflector can be equipped with a steel louver.

	Maxos TL5 Trapeze reflectors and optics
Type	4MX692 (TL5 reflector) 4MX693 (TL5 louver/optic)
Suitable electrical unit	For 1- and 2 TL5 49, 54 and 80 W versions
Material and light distribution	Reflector: Steel, trapeze (T) Steel, trapeze (T) with high gloss aluminum mirror; medium beam (-MB) Steel, trapeze (T) with high gloss aluminum mirror; narrow beam (-NB) Reflector option: Slotted, direct/indirect (T-S-D/I) or perforated (T-P) Louver: Steel lamellae, white (L-T WH)
Installation	Click-in fixation on electrical unit
Accessory	Trapeze reflector end caps (9MX056 EPI-T WH/SI)
Remarks	Reflectors and optics are suitable for 1- and 2-lamp versions
Main applications	Retail and general industry

Emergency lighting, for TL-D only

If emergency lighting by means of separately connected orientation light units (E27-sockets) is required, special trapeze reflectors with a bigger cut-off must be used. The length of this reflector corresponds to that of the 58 W trunking length. A 36 W electrical unit plus the orientation light unit will fill this length.

	Maxos TL-D Trapeze reflectors and optics
Type	4MX092 (TL-D reflector) 4MX093 (TL-D louver/optic)
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Reflector: Steel, trapeze (T) Steel, trapeze (T), with high gloss aluminum mirror; wide beam (-WB) Steel, trapeze (T), with high gloss aluminum mirror; narrow beam (-NB) Steel, trapeze (T), with high gloss aluminum mirror; asymmetrical half reflector (-A)* Steel, trapeze (T), with high gloss aluminum mirror; asymmetrical wallwasher (TI-A)* Reflector option: Slotted, direct/indirect (T-S-D/I) or perforated (T-P) Optic and louver: Steel lamellae, white (L-T WH) or silver (L-T SI)
Installation	Click-in fixation on electrical unit
Accessory	Trapeze reflector end caps 1 and 2-lamp version (9MX056 EPI-T WH/SI, 9MX056 EP2-T WH/SI)
Remarks	* For 1-lamp version only Dedicated reflectors for 1- and 2-lamp TL-D versions
Main applications	Retail and general industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



Maxos 4MX692 TL5 trapeze reflector; also for narrow or wide-beam light distribution (T/T-NB/T-WB)



Maxos 4MX692 TL5 perforated trapeze reflector (T-P)



Maxos 4MX692 TL5 trapeze reflector; for narrow or wide-beam light distribution, with a lamellae louver for trapeze reflector (4MX693 L-T)



Maxos 4MX692 TL5 slotted trapeze reflector (T-S-D/I)

TL-D



Maxos 4MX092 TL-D perforated trapeze reflector



Maxos 4MX092 TL-D trapeze reflector; for narrow or wide-beam light distribution, with lamellae louver for trapeze reflector (4MX093 L-T)



Maxos 4MX092 TL-D trapeze reflector; also for narrow or wide-beam light distribution (T/T-NB/T-WB)



Maxos 4MX092 TL-D trapeze reflector; also for narrow or wide-beam light distribution (T/T-NB/T-WB)



Maxos, 4MX092 TL-D asymmetrical trapeze reflector

Maxos TL-D Wing optic

The Wing optic is a reflector solution creating soft indirect light, without glare, and is ideal for office and shop applications. Designed for electrical units holding 1 or 2 TL-D lamps, it is made of white powder-coated steel and a perforated curved sheet conceals the lamps. The 2-lamp version must be used with special electrical units (lamp holder F32 mm). TL5 solutions are available on request. The Wing optic is fixed to the electrical unit via a simple click-in. The

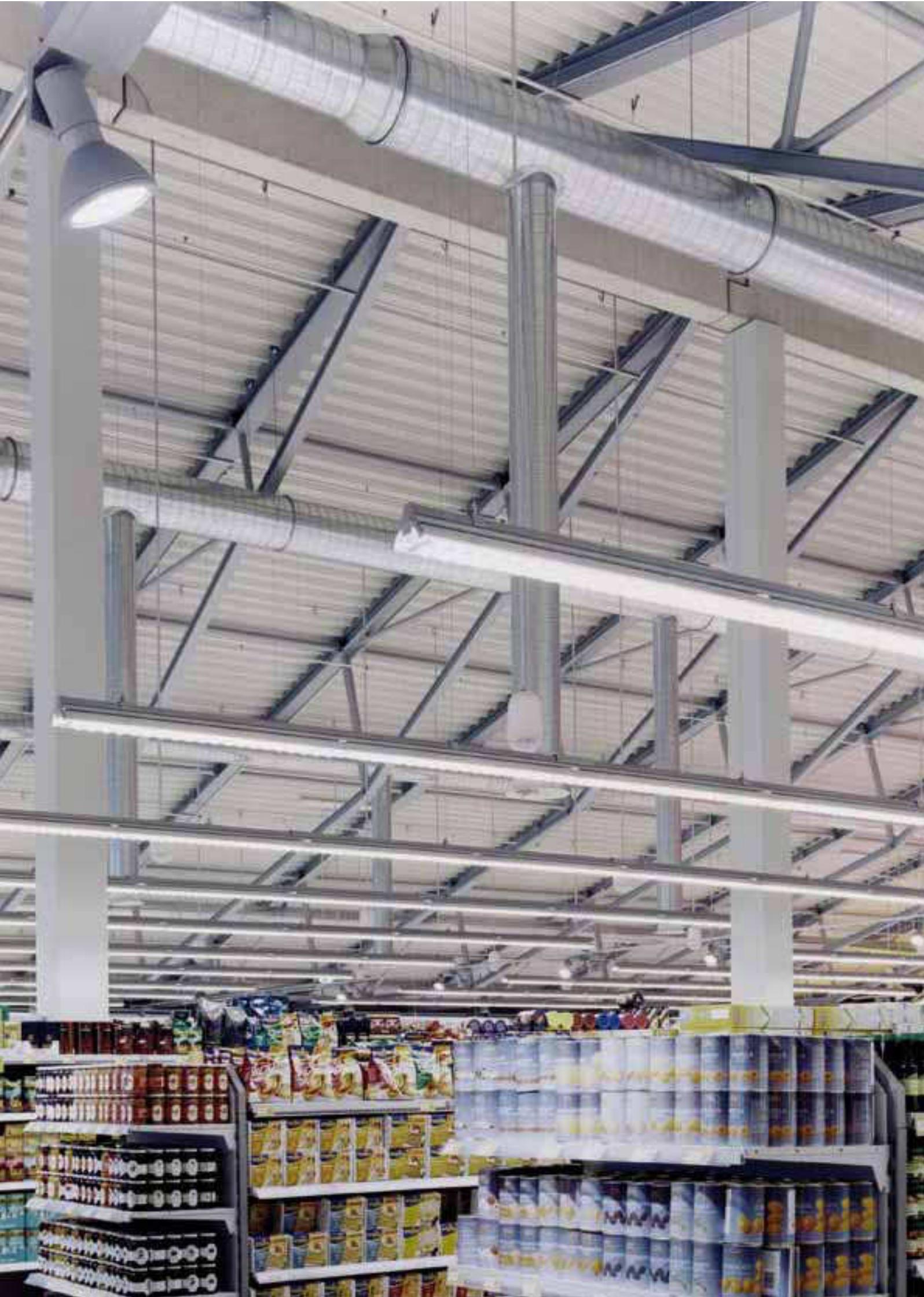
reflectors can be connected to each other without additional coupling pieces, as they are delivered with an integrated connection side at one end of the reflector. Decorative end-plates for the beginning and end of the light-line are available as accessories.

Maxos TL-D Wing optic			
Type	4MX092 WG	Accessory	End plates (9MX056 EP-WG)
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions	Remarks	*2-lamp versions of the Wing optic to be used with dedicated electrical unit (with lampholder F32 mm)
Material	Steel, white coated (WH)	Main applications	shops, offices
Installation	Click-in fixation on electrical unit		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



4MX092 WG Wing optic



Maxos electrical units

The electrical units for Maxos trunking sections can hold 1 or 2 TL5 or TL-D lamps and are designed for quick and reliable click-in mounting. They are made of steel with a white or silver coating.

The electrical units can be equipped with HFP electronic ballasts, HFR dimming ballasts (allowing light output of a TLD-lamp to be regulated from 3 to 100%), HF-DALI ballasts or low-loss conventional ballasts. HFR and HF-DALI units must be mounted to 7-wire trunking sections. The conventional ballasts are available parallel compensated (IC) or inductive (I).

Special electrical units equipped with an emergency battery pack for 1 or 3 hours (EL1/EL3) are available. These units must be used with 7-wire trunking sections. If trunkings with double wiring are used, one flat ribbon cable will be connected to the central battery. This provides a completely separate emergency lighting circuit.

Some 2-lamp TL-D reflectors need dedicated electrical units (F32) with a short distance between the lamps. On request, the TL-D electrical units can be upgraded from IP20 to IP40 with an IP40 set that is available as an accessory.

	Maxos TL5 Electrical units
Type	4MX69I
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 35, 54, 49, 80 W
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; DALI (HFD)
Option	Emergency lighting: 1 hour (EL1) 3 hours (EL3)
Material	Sheet steel in white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking

	Maxos TL-D Electrical units
Type	4MX09I
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Basic (HF-Dali)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) 2-lamp lampholder of 32 mm (F32) to be used in faceted and aluminum reflectors, standard is 115 mm Master/slave unit: pair of electrical units one with gear (M) one without gear (S)
Material	Sheet steel in white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking
Remarks	Dedicated IP40 sets for upgrading from IP20 to IP40

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



Maxos 4MX691 TL5 1-lamp electrical unit



Maxos 4MX691 TL5 2-lamp electrical unit

TL-D



Maxos 4MX091 TL-D 1-lamp electrical unit



Maxos 4MX091 TL-D 2-lamp electrical unit



Maxos 4MX091 TL-D 2-lamp electrical unit; 32 mm lamp holders (F32) enable smaller cutouts using 1/2-lamp reflectors.

Maxos standard trunking

The trunking fulfils two functions: first, it provides a sturdy in-line mounting rail on which to fix the electrical units, and second, it provides a housing for the electrical cables that bring power to the units. All the trunking sections are made of hot-dip galvanized steel with a white or silver finish and available in lengths of 1, 2 and 3 electrical units 36 W and 58 W.

A flat ribbon cable (5 or 7 wires) or two flat ribbon cables (2 x 5 or 2 x 7 wires) are integrated in the trunking and guarantee (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling. The 7-wire cable is used to integrate light regulation or emergency lighting for those electrical units that are equipped with emergency battery packs. Double wiring (2 x 5 or 2 x 7 wires) is needed to provide a completely separate mains supply to the

electrical units. Double wiring is mostly used for emergency lighting by central emergency batteries or separate switching. Hence, no extra contact blocks or wiring are required.

For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory). On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.

The trunking is available with a complete range of interchangeable components that optimize flexibility. The outstanding stability of the sections and coupling pieces allows suspension intervals of 3.4 to 5 m (TL5) / 4.8 m (TL-D).

	Maxos TL5 Standard trunkings
Type	4MX656
Length	1 x, 2 x or 3 x length of electrical unit 49 W (491, 492 or 493), for 80 and 35 W electrical units as well 1 x, 2 x or 3 x length of electrical unit 54 W (541, 542 or 543)
Electrical circuit option	1 x or 2 x flat ribbon cable, 5 or 7 wires: 1 x or 2 x 5 x 1.5 or 2.5 mm ² (1x5x2.5 etc) 1 x or 2 x 7 x 1.5 or 2.5 mm ² (1x7x2.5 etc)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece, mains connection, trunking coupling pieces, etc. (see chapter Maxos accessories)
Remarks	7-wire cable for integration of light regulation or emergency lighting Double wiring for emergency lighting by central emergency batteries or separate switching

	Maxos TL-D Standard trunking
Type	4MX056
Length	1 x, 2 x or 3 x length of electrical unit of 58 W (581, 582 or 583) or 36 W (361, 362 or 363)
Electrical circuit option	1 x or 2 x flat ribbon cable, 5 or 7 wires: 1 x or 2 x 5 x 1.5 or 2.5 mm ² (1x5x2.5 etc) 1 x or 2 x 7 x 1.5 or 2.5 mm ² (1x7x2.5 etc)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece and mains connection set (9MX056 EP SET), trunking coupling pieces etc. (see chapter Maxos accessories)
Remarks	7-wire cable for integration of light regulation or emergency lighting Double wiring for emergency lighting by central emergency batteries or separate switching

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5/TL-D



Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with 5-wire flat ribbon cable (5x1.5/5x2.5)



Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with 7-wire flat ribbon cable (7x1.5/7x2.5); for dimming (1-10V), DALI or emergency lighting with local battery



Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with two 5-wire flat ribbon cables (2x5x1.5/2x5x2.5); to create different zones in an application or use central emergency systems



Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with two 7-wire flat ribbon cables (2x7x1.5/2x7x2.5); to create different lighting zones with dimming or separate emergency lighting



Maxos projectors and HID solutions

Accent lighting is part of the integral concept of Maxos. The lightlines can be equipped with almost the full range of different projectors next to all the reflector solutions based on TL5 and TL-D fluorescent lamps. Often in specific areas of shops projectors are requested in addition to fluorescent general lighting.

For Maxos trunkings with flat ribbon cable (5 x 2.5, 7 x 2.5), units with integrated 3C-rail are available. These units can be clicked into the trunking sections like a regular electrical unit.

Projectors with a 3C adapter can be fixed to the system. These can

be fixed to the trunking similar to a regular electrical unit. 4MX013 faceted reflector units with HID lamps are often used to illuminate fruit and vegetables in supermarkets.

The electrical components are integrated in a white-coated housing with the shape of a faceted reflector. The lengths of these units correspond to those of the 36 W trunking.

End-plates for the beginning and the end of the light-line are available as accessories.

Type	4MX013 Facetted reflector with HID-lamp units
Suitable trunking unit	For trunking with flat ribbon cable (5/7 wires), length of electrical unit 36 W (361), other lengths available on request
Light source	1-lamp or 2-lamp version: HID: 1 x or 2 x MASTER SDW-T / PG12-I / 50, 100 W 1 x or 2 x MASTERColour CDM-T / G12 / 70 W Double lamp version: 1 x MASTER SDW-T / PG12-I / 50 W and 1 x MASTERColour CDM-T / G12 / 35 W 1 x MASTER SDW-T / PG12-I / 100 W and 1 x MASTERColour CDM-T / G12 / 70 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC)
Material	Steel, white-coated, shape of a facetted reflector (F)
Installation	Turning bolt fixation (mechanical and electrical) on trunking
Accessory	Decorative end-plates
Main applications	Retail (e.g. food, fashion)

Type	4MX094 3C units for projectors
Suitable trunking and projectors	For trunkings with flat ribbon cable (5/7 wires) to fix projectors with 3C adapter
Length	Length of electrical unit 58 W (581) or 49 W (491)
Projector fixation	3-circuit power track adapter (3C)
Material	Sheet steel, white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking
Main applications	Retail (e.g. food, fashion)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Maxos 4MX013 HID-lamp units



Maxos 4MX094 unit with integrated 3C rail and projector with 3C adapter

Maxos TL-D extended trunking

The extended trunking sections are made of hot-dip galvanized steel with a white or silver finish. They are available in lengths of 1 and 2 electrical units of 58 W. Extensions of 300 and 600 mm in the middle only (M), or in the middle and at the end of these trunking sections (ME), allow interrupted lines where the gaps between the electrical units correspond to the extended trunking length. The gaps can be filled by blind covers, available as accessories.

A flat ribbon cable (5 wires) is integrated in the trunking and guarantees (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling.

For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory). On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.

Type	4MX09 I Projector adapter for Bus bar system
Suitable trunking and projectors	For trunkings with Bus bar system only, to fix specific projectors with ceiling base plate
Length	600 mm
Material	Sheet steel, white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking. Most Philips projectors, versions with ceiling base plate - can be fixed by screwing the base plate to the projector adapter units
Main applications	Retail (e.g. food, fashion)

Maxos TL-D**Extended trunking**

Type	4MX056
Length	1 x or 2 x length of electrical unit 58 W (581 or 582)
Electrical circuit option	Flat ribbon cable, 5 or 7 wires Others on request
Extension length	300 and 600 mm in the middle (M), or in the middle and at the end (ME)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece and mains connection set (9MX056 EP SET), trunking coupling pieces etc. (see chapter Maxos accessories)



Maxos 4MX09 I projector adapter



Maxos 4MX056 TL-D extended trunking section M300/E300/M600/E600 and blind cover; used to close the spaces in the trunking where no electrical units are mounted; available in white or silver

Maxos TL-D IP64 trunking sections

The IP64 trunking sections are made of hot-dip galvanized steel with a white powder coating. They are available in lengths of 1, 2 and 3 electrical units 36 W and 58 W. Special seals between the sections and waterproof trunking end-pieces are used (to be ordered separately).

A flat ribbon cable (5 or 7 wires) is integrated in the trunking and guarantees (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling. The 7-wire cable is used to integrate light regulation or emergency lighting for those electrical units that are equipped with emergency battery packs. Hence, no extra contact blocks or wiring need to be installed.

For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory). On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.

The IP64 trunking can be equipped with special IP64 electrical units and different reflectors.

The outstanding stability of the sections and coupling pieces allows suspension intervals of 3.4 to 4.8 m.

**Maxos TL-D
IP64 Trunking
(to be used with IP64 electrical unit only)**

Type	4MX056
Length	1 x, 2 x and 3 x length of electrical unit 36 and 58 W
Wiring (1.5 or 2.5 mm ²)	Standard 5 pole (5x1.5 or 2.5) Standard 7 pole for dimming (7x1.5 or 2.5)
Option	Double wiring (for additional functionality)

Material	Hot-dip galvanized steel, coated white (WH)
Accessory	Trunking end pieces and mains connection set (9MX056 EP IP64 SET), gasket between trunkings (9MX056 GK IP64), blind cover (9MX056 BC36/58 IP64), PC protection tube
Remarks	Not for permanent wet conditions, corrosion possible over time

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Maxos 4MX056 TL-D IP64 trunking section



Two trunking end caps including 1 electrical connector



Blind cover IP64, white



Gasket between trunking sections

Maxos TL-D IP64 electrical units

The IP64 electrical units are designed for quick and reliable mounting in Maxos IP64 trunking sections. They are made of steel with a white powder finish.

The high IP classification is possible due to special seals between the trunking sections and to lamp holders with gasketed screw rings on the IP64 electrical units. Maxos IP by is not designed for applications in regular humid environments.

A connector block is mounted for electrical connection to the trunking. The electrical units are equipped with electronic ballasts (including dimmable and DALI) or low-loss conventional ballasts. The conventional ballasts are available as parallel compensated (IC) or

inductive (I). The units can hold 1 or 2 TL-D lamps.

Dimmable versions are delivered with HF-R electronic ballast, allowing the light output of the TL-D lamps to be regulated from 3 to 100%. HF-R and HF-DALI units must be mounted to 7-wire trunking sections.

The electrical units can be combined with dedicated IP64 trapeze reflectors and a selection of aluminum reflectors. These aluminum reflectors offer a choice of narrow-beam, asymmetrical-beam and very-narrow-beam light distributions for 1 x 58 W. Units which comply with the FF rules (limited surface temperature) are available on request. Special electrical units equipped with an emergency battery pack for 1 or 3 hours (EL1/EL3) are available. These units must be used with 7-wire trunking sections.

**Maxos TL-D
IP64 Electrical units
(to be used with IP64 trunking only)**

Type	4MX091
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)

Material	Sheet steel in white (WH)
Accessory	Protection tube
Remarks	Not for permanent wet conditions, corrosion possible over time To be used with standard trapeze reflectors (1-lamp) or dedicated IP64 trapeze reflectors (2-lamp) or dedicated aluminum reflectors (on request)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Maxos 4MX091 TL-D IP64 1-lamp electrical unit



Maxos 4MX091 TL-D IP64 2-lamp electrical unit

Maxos TL-D IP63 closed reflector units

Maxos IP63 closed reflector units are ready-to-install dedicated luminaires for the Maxos trunking system. They are designed for industrial applications requiring good protection of reflectors against dust, in particular the automotive industry and food industry. The unit can be easily cleaned with a wet cloth.

The housing is made of steel with a white coating, while the cover is made of tempered glass or, optionally, polycarbonate (PC); the inner reflector is made of aluminum.

Maxos IP63 closed reflector units combine the functions of Maxos electrical units, reflectors and covers. They are designed for reliable mounting on Maxos trunking sections in TL-D lengths. A connector block is mounted on top of the units for electrical connection to the trunking. Mechanical connection is realized by means of a safe bracket with knee-lever clasp around the trunking. IP63 classification is valid

for the complete lamp, optical and ballast compartment; however, the classification for the total system including IP20 trunking sections is IP20.

The standard range is 1-lamp and 2-lamp TL-D 58 W with HF or conventional ballast and TL5 80 W with HF ballast, all to be mounted on the TL-D Maxos trunking system, optionally with EL3 emergency lighting.

The units come with inner aluminum reflectors for wide-beam (WB) or asymmetrical-beam (A) light distribution. White louvers (4MX093 1/2 58 L-IP63-unit WH) are available as accessories.

Please note that Maxos is not designed for application in regular humid environments.

Maxos TL-D IP63 Reflector unit	
Type	4MX014
	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 58 W or 1 x or 2x TL5 80 W
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Reflector	Wide beam (-WB) Asymmetric (-A)
Option	Emergency lighting: 3 hours (EL3)

Material	Housing: steel, white coated Cover: tempered glass (GT) or polycarbonate (PC) (optional)
Accessory	Steel, white inlay louver (4MX093 1/2/58 L-IP63-unit WH)
Remarks	The electrical connection to the trunking is realized via a pre-mounted connector block, the mechanical connection via a bracket with knee-lever clasp around the trunking IP63 for optical compartment inclusive lamp- and ballast compartment only, can be used with regular IP20 flat ribbon trunkings
Main applications	Industry: automotive and food (cleanable front screen)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



Maxos 4MX014 IP63 closed reflector unit



Maxos 4MX014 IP63 closed reflector unit with louver



Accessories



Bracket for direct ceiling mounting; available in white or silver



Chain bracket, adjustable; white or silver



Chain bracket, fixed; white, silver or galvanized



Profile bracket for exposed T-profiles; available in white or silver



Mounting bracket including suspension tube, 1250 mm; available in white or silver



Mounting bracket for suspension wire; available in white or silver



Mounting bracket including suspension wire, 1250/3000 mm; available in white or silver (MB-SW-L1250/MB-SW-L3000)



Suspension wire, diameter 2 mm; per meter



Ceiling cover and suspension wire, 1250 mm; available in white or silver

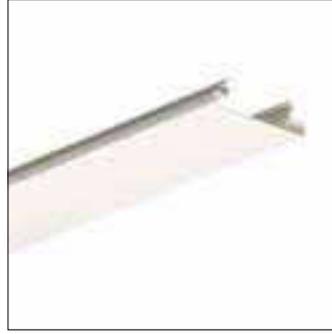


Ceiling fixation with steel wire, 1250 mm; white, silver or zinc

Accessories



Flexible coupling joint; coupling piece to connect flexible coupling joint to the trunking



Blind cover; used to close the spaces in the trunking where no electrical units are mounted; available in white or silver



End-piece set for trunking with mains supply; available in white or silver



Electrical supply connector; 7-pole; 10 pieces



Coupling piece for trunking; available in white or silver



Internal coupling piece for surface-mounted trunking



IP40 set to upgrade TL-D electrical units (1-lamp) from IP20 to IP40



IP40 set to upgrade TL-D electrical units (2-lamps) from IP20 to IP40

TTX400



TTX400 – the value of lighting

Good lighting contributes to our sense of well-being. In typical industrial environments, the cost-effective TTX400 light-line system helps to increase productivity, improve quality and safety, and reduce fatigue.

The experience of lighting

The TTX400 light-line system enhances the shopping experience by ensuring a perfect light distribution in a host of design configurations, keeping the customers' attention fully focused on the merchandise.

www.philips.com/lighting

TTX400 offers a wide choice in terms of mounting and decorative accessories.
For details, see the dedicated TTX400 brochure, the CD-ROM application or visit our website.

Ultra-narrow beam reflector TL5



White lamella louver for medium beam and wide beam reflectors TL5



Narrow beam reflector TL-D



Multi-purpose white reflector TL-D





1



2

Main applications

1 Retail

In retail outlets such as hypermarkets, the TTX400 light-line system with TL5 lamps delivers high lighting levels, focusing attention on the merchandise and creating a bright, stimulating shopping atmosphere.

2 Logistics

To increase operating efficiency in logistics facilities such as distribution centers and groupage warehouses, the TTX400 light-line system delivers high horizontal illuminances in open receipt and dispatch areas and high vertical illuminances on the racks, enhancing the visibility of the whole rack, from floor to ceiling

3 Industry

The TTX400 light-line system helps to boost operating efficiency in industrial facilities by delivering high lighting levels – which help workers to focus better on the task in hand and improve safety – while reducing energy consumption and maintenance.

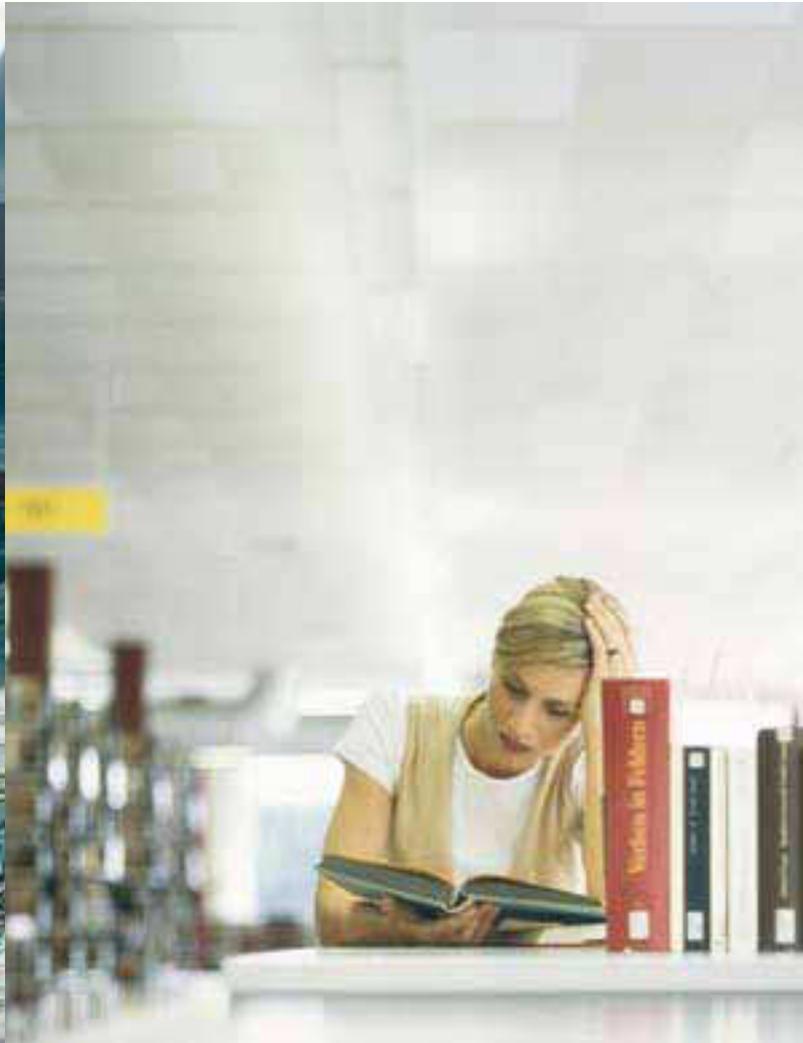
4 Public areas

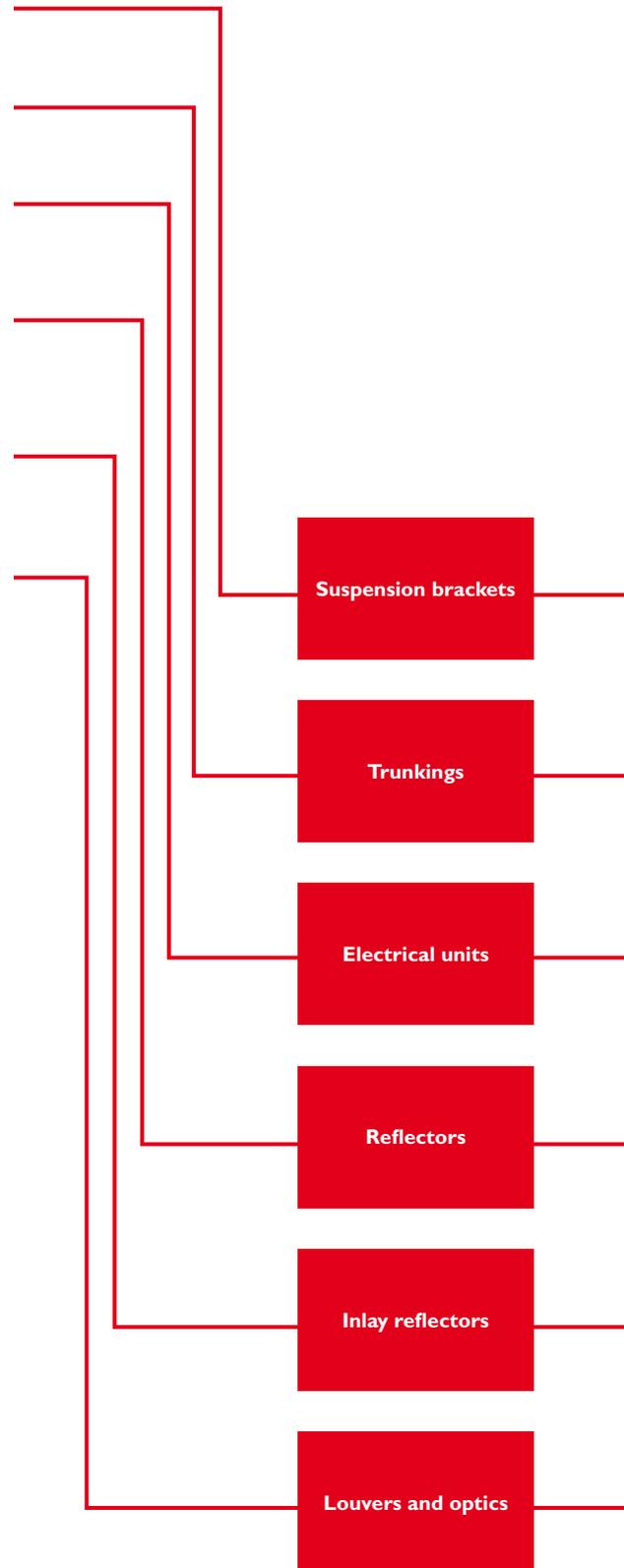
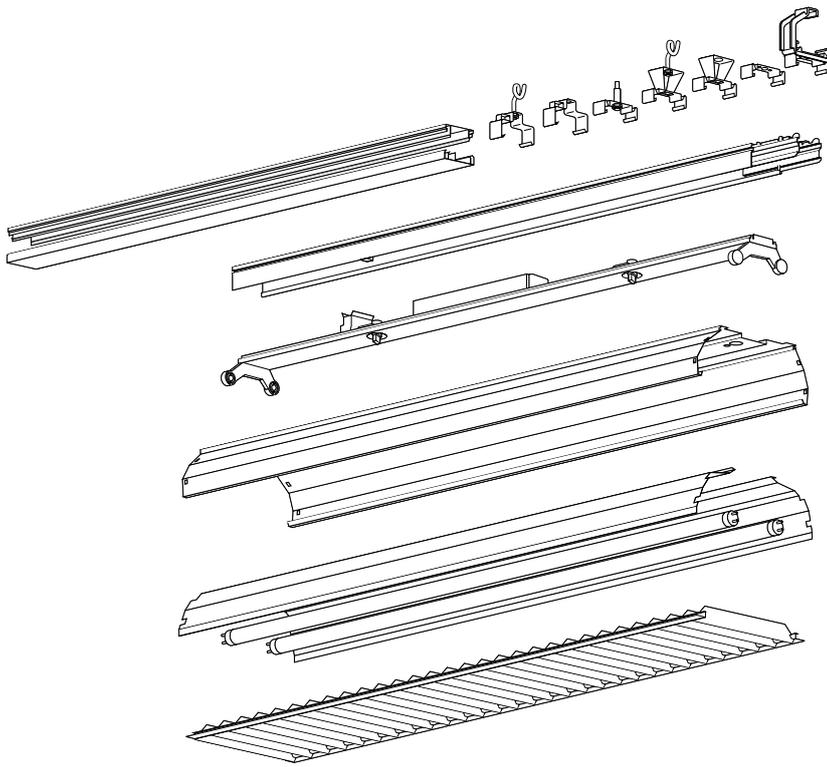
In public areas, e.g. libraries, the TTX400 light-line system with TL5 lamps delivers high lighting levels, combined with low glare. This creates a bright, stimulating ambience that minimizes visual fatigue.

3



4







* see new alternative with TMX400 C-2R onto TTX400 7

Just 5 clicks

TTX400 is installed with just 5 click-in actions.
No tools, no screws and no additional movements.
Fast, easy and secure.



Click 1
The trunking is mounted on the various suspension brackets.



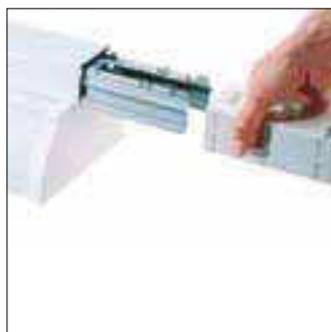
Click 2
Trunkings are connected, mechanically and electrically in one movement.



Click 3
Electrical unit is mounted.



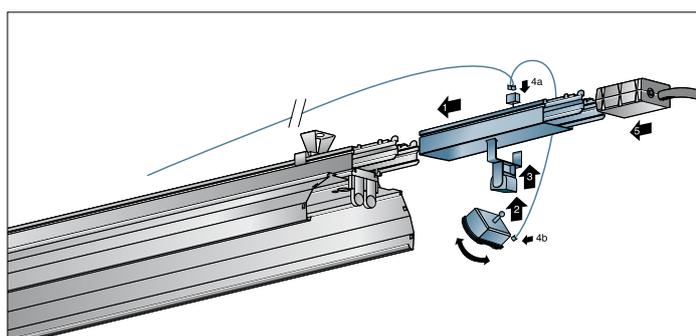
Click 4
Reflector is mounted on the electrical unit.



Click 5
Connection unit with the power supply is installed at the beginning of the line.

Linesense

With Linesense, TTX400 and controls are combined in one. The speed and ease of installation of TTX400 remains when Linesense is used. In addition, substantial energy savings up to 75% can be achieved. Linesense has been developed for industrial applications like warehouses.

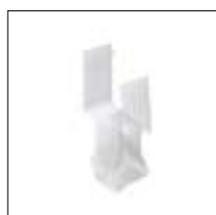


Installation clicks only

- 1 ZTX400 MDU control unit clicks onto the trunking.
- 2 Movement detector clicks on the bracket.
- 3 ZTX400 MB-MDU bracket clicks on the trunking.
- 4 Telejack cables click the detector and control unit together.
- 5 ZTX400 CU mains connection clicks on the control unit.



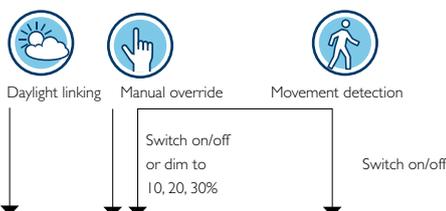
ZTX400 MDU
Pre-wired Linesense unit with integrated control function



ZTX400 MB-MDU
Mounting bracket for movement detector LRM8117/00



LRM8117/00
High-bay passive infrared movement detector
Mounting height up to 15 m



	Best performance	Best economy
	ZTX400 MDU HFD	ZTX400 MDU HFP
Movement detection (detector LRM8117)	✓	✓
Minimum light level without presence	0, 10, 20, or 30%	0
Maximum number of presence detectors per control unit	4	2*
Maximum cable length for movement detector	300 m	125 m
Daylight linking (light sensor LRL8102)	✓	-
Number of light sensors per control unit	1	-
Manual control (on, off and override)	✓	-
Type of ballast	HFD***	HFP
Maximum number of ballasts per line	64	**
TTX400 system	7 wire	5 wire

Linesense consists of a 618 mm piece of trunking, which is fully pre-equipped and wired to be added to the trunking. The control function is integrated into this extra unit, and can easily be clicked between the light line and the electrical connection unit. High bay movement detectors are connected with standard RJ-12 cables and mounted at the right location with the use of dedicated brackets. Linesense is equipped as standard with a telejack splitter to easily connect the detectors to the light line.

* 2 presence detectors or 3 with LED disabled
 ** any number of luminaires allowed by the TTX400 light line system
 *** HFD=HFR-DALI

TTX400 aluminum reflectors

These aluminum one-piece reflectors for both TL5 and TL-D lamps are available in hammered, matt and glossy versions. The TL5 ones are smaller due to the smaller lamps, resulting in easier handling and less space needed. TTX400 aluminum reflectors are specially designed for applications where a wide beam, narrow beam, very narrow beam or ultra- narrow beam is required e.g. distribution centers and warehouses. Installation is via a simple click-in action to the electrical units TMX400. The high efficiencies of these reflectors ensure a highly

cost effective solution. Reflector overlapping and mechanical clips delivered with the reflectors enable proper alignment in the event of continuous lines. All aluminum reflectors are available for 49 W and 54 W lengths.

TTX400 TL5 Aluminum reflectors	
Type	GMX565, GMX566, GMX567, GMX570
Suitable electrical unit	For 1 and 2 TL5 35/49/80 W and 54/28 W versions
Material and light distribution	GMX565: matt aluminum, narrow beam (M-NB) high-gloss hammer-bow aluminum, narrow beam (HB-NB) GMX566: matt aluminum, wide beam (M-WB) high-gloss hammer-bow aluminum, wide beam (HB-WB) high-gloss hammer-bow aluminum, asymmetric beam (HB-A) GMX567: matt aluminum, asymmetric beam (M-A) GMX570: high-gloss aluminum, ultra narrow beam (C-NB) high-gloss hammer-bow aluminum, ultra narrow beam (HB-NB)
Installation	One click-in action to electrical unit
Remarks	All reflectors are in one piece Reflectors are suitable for 1- and 2 lamp versions, GMX566 M-WB and HB-A for 49 W version only
Main applications	Retail (e.g. food, fashion), industry, warehouses

TTX400 TL-D Aluminum reflectors	
Type	GMX440, GMX460, GMX465, GMX466, GMX467, GMX470
Suitable electrical unit	For 1 and/or 2 TL-D 36 and 58 W versions
Material and light distribution	GMX440: matt aluminum, for general lighting, both 1- and 2-lamp 36 and 58 W version* GMX460: high-gloss aluminum, narrow beam (C-NB), 1-lamp 58 W version* GMX465: high-gloss hammer-bow aluminum, narrow beam (HB-NB), 1- and 2-lamp 58 W version* matt aluminum, narrow beam (M-NB), 1- and 2-lamp 58 W version* GMX466: high-gloss hammer-bow aluminum, asymmetrical (wall washer) beam (HB-A), 1-lamp 58 W version* high-gloss hammer-bow aluminum, wide beam (HB-WB), 2-lamp 58 W version matt aluminum, wide beam (M-WB), 2-lamp 58 W version GMX467: matt aluminum, asymmetrical beam (M-A), 1-lamp 36 and 58 W version* GMX470: high-gloss aluminum, very narrow beam (C-NB), 1-lamp 58 W version* * Also for TMX400 electrical unit, 2-lamp version with F32 lampholder
Installation	One click-in action to electrical unit
Remarks	All reflectors are of one piece
Main applications	Retail (e.g. food, fashion), industry, warehouses

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



GMX565 one-piece narrow beam reflector made from matt aluminum



GMX565 one-piece narrow-beam reflector made of hammered aluminum (HB-NB)



GMX566 one-piece wide-beam reflector made of matt aluminum (M-WB)



GMX566 one-piece wide beam reflector made of hammered aluminum (HB-WB)



GMX566 one-piece asymmetrical reflector made of high-gloss hammered aluminum



GMX567 one-piece asymmetrical reflector made of matt aluminum (M-A)



GMX570 one-piece narrow beam reflector made of high-gloss aluminum (C-NB)



GMX570 one-piece narrow-beam reflector made of hammered aluminum (HB-NB)

TL-D



GMX440 one-piece general-lighting reflector made from matt aluminum



GMX460 one-piece narrow beam reflector made from high-gloss aluminum



GMX465 one-piece narrow beam reflector made from matt aluminum



GMX465 one-piece narrow beam reflector made from high-gloss hammered aluminum



GMX466 one-piece wide-beam reflector made from high-gloss hammered aluminum (HB-WB)



GMX466 one-piece wide-beam reflector made from matt aluminum



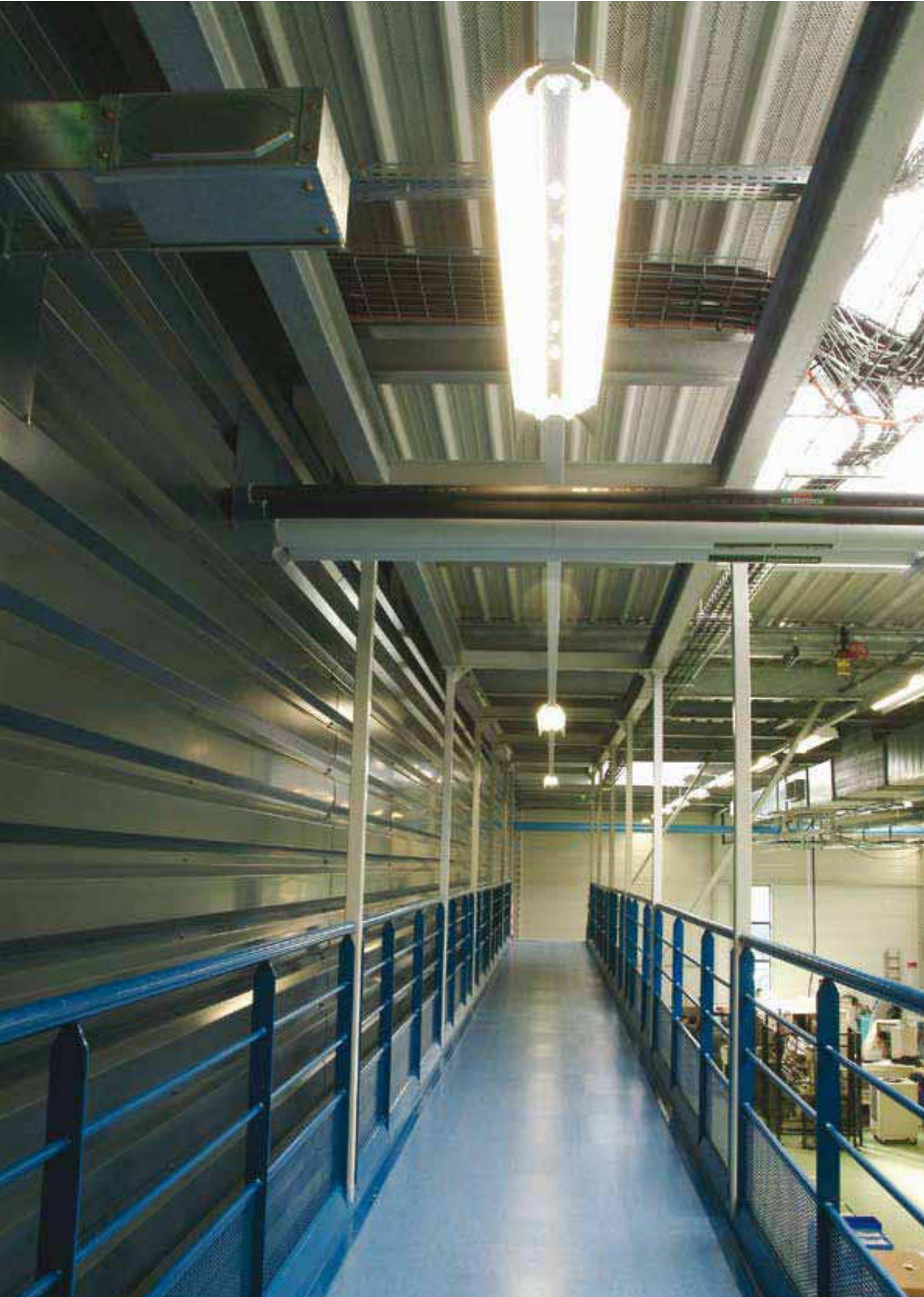
GMX466 one-piece wall-washer reflector made from high-gloss hammered aluminum (HB-A)



GMX467 one-piece asymmetric beam reflector made from matt aluminum



GMX470 one-piece narrow-beam reflector made from high-gloss aluminum (C-NB)



TTX400 multi-purpose reflectors

These multifunctional one-piece reflectors for TL5 and TL-D lamps are designed for applications requiring high technical lighting quality and design. They can be extended by the addition of various optics, mirrors and attachments. Installation is done via a simple click-in on the electrical units.

TTX400 TL5	
Multi-purpose reflectors	
Type	GMX555
Suitable electrical unit	For 1 and 2 TL5 35 / 49 / 80 W and 28 / 54 W versions
Material and light distribution	Steel, pre-lacquered white, wide beam (-WB) Steel, pre-lacquered white, medium beam (-MB) Steel, pre-lacquered white, perforated, medium beam (RP-MB)
Installation	One click-in action to electrical unit
Accessory	Coupling pieces, end plates
Remarks	All reflectors are in one piece Reflectors can be equipped with various optics, mirrors and attachments
Main applications	Retail (e.g. food, fashion), industry

TTX400 TL-D	
Multipurpose reflectors	
Type	GMX450
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Steel, pre-lacquered white Steel, pre-lacquered white, perforated (RP) Steel, pre-lacquered white, slotted (RS)
Installation	One click-in action to electrical unit
Accessory	Coupling pieces (white or transparent for perforated reflectors), end plates
Remarks	Reflectors can be equipped with various optics, mirror inserts and attachments
Main applications	Retail (e.g. food, fashion), industry

TTX400 TL5	
Mirror inserts	
Type	GMX555
Suitable reflectors	Multi-purpose reflectors GMX555 MB, 35 / 49 / 80 W and 28 / 54 W versions
Material and light distribution	High-gloss aluminum, medium beam, bi-directional, max at 20° (MB C-BD20 SET) High-gloss aluminum, medium beam, bi-directional, max at 40° (MB C-BD40 SET) High-gloss aluminum, medium beam, bi-directional, max at 50° (MB C-BD50 SET) High-gloss aluminum, asymmetrical beam, max at 20° (MB C-A20 SET) High-gloss aluminum, asymmetrical beam, max at 40° (MB C-A40 SET) Semi-high-gloss aluminum, medium beam, bi-directional, max at 20° (MB D-BD20 SET)
Installation	Clicking into reflector
Remarks	Mirror inserts delivered mounted in reflector (GMX555 MB SET) or as spare parts (GGX555 C-BD/A as universal piece for both beams 20° and 40°)
Main applications	Retail (e.g. food, fashion)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



GMX555 TL5 multi-purpose reflector(s) for wide beam light distribution



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB)



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 20° (C-BD20)



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss asymmetrical optic, 20° (C-A20)



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss asymmetrical optic, 40° (C-A40)



GMX555 TL5 perforated multi-purpose reflector(s), for medium-beam light distribution (RP-MB)



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 50° (C-BD50)



GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 40° (C-BD40)

TL-D



GMX450 TL-D multi-purpose reflector(s) standard version

TTX400 TL-D basic reflectors

This basic one-piece white reflector is designed for applications not requiring optics, mirrors or attachments. It is an efficient and economical solution.

Installation is done via a simple click-in on the electrical units.

TTX400 TL-D	
Basic reflectors	
Type	GMX430
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Steel, prelacquered white
Installation	One click-in action to electrical unit
Accessory	Coupling pieces, end plates
Remarks	To be used when optics, mirrors and attachments are not needed Reflector is of one piece TMX400 F32 can be fitted with 1-lamp reflector
Main applications	Industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



GMX430 TL-D basic reflector(s)



TTX400 louvers and optics

A wide range of different louvers and optics can be mounted in the multifunctional reflector GMX555/GMX450 for TL5 and TL-D lamps respectively. These attachments offer many possibilities to shield the lamps and therefore improve comfort. Each attachment is available in 1-lamp and 2-lamp versions. Changing the lamp remains simple and quick as the attachments are hinged.

The attachments, optics and mirror inserts can only be used in combination with the respective functional reflector.

TTX400 TL5 Louvers and optics		TTX400 TL-D Louvers and optics	
Type	GGX555	Type	GGX450
Suitable reflectors	Multi-purpose reflectors GMX555, 35 / 49 / 80 W and 28 / 54 W versions	Suitable reflectors	Multi-purpose reflectors GMX450, 36 and 58 W versions
Material and light distribution	High-gloss aluminum, double parabolic, closed (C6) High-gloss aluminum, double parabolic, closed (C6), with top reflector (T) Matt aluminum, double parabolic louvers, closed (M6) Matt aluminum, ribbed cross louvers (M2) Lamellae louvers, white (L) Universal insert, beam 20 or 40° (C-BD/A)	Material and light distribution	High-gloss aluminum, double parabolic, closed (C6) Semi-high-gloss aluminum, double parabolic (D6) Matt aluminum, parabolic lamellae (M5) Matt aluminum, ribbed cross louvers (M2) Lamellae louvers, white (L) Lamellae louvers, perforated, white (LP) Mesh louver; square mesh cover; white (ML) Prismatic cover (P)
Remarks	C6 and M6 can only be mounted in GMX555 MB L and M2 can be mounted in both GMX555 MB and WB Inserts can be mounted only in GMX555 MB	Main applications	Retail (e.g. food, fashion), industry
Main applications	Retail (e.g. food, fashion), industry		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC high-gloss high-quality aluminum optic with 3D lamellae louver (C6)



GMX555 TL5 multi-purpose reflector(s) and GGX555 white lamella louver (L)



GMX555 TL5 multi-purpose reflector(s) and GGX555 matt high-quality aluminum optic with profiled lamellae louver (M2)



GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC matt high-quality aluminum optic with 3D lamellae louver (M6)

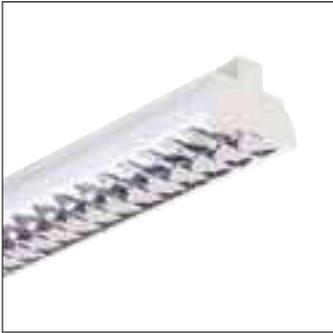


GMX555 TL5 multi-purpose reflector(s) and GGX555 high-gloss bi-directional/asymmetrical optic (C-BD/A), beam 20 or 40°



GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC high-gloss high-quality aluminum optic with 3D lamellae louver and top reflector (C6T)

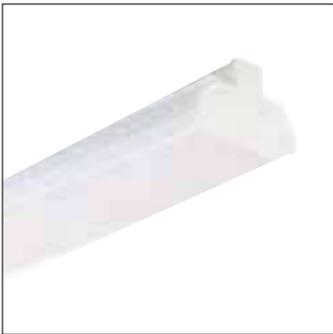
TL-D



GMX450 TL-D multi-purpose reflector(s) and GGX450 OLC high-gloss high-quality aluminum optic with 3D lamellae louver (C6)



GMX450 TL-D multi-purpose reflector(s) and GGX450 standard-quality aluminum profiled cross-lamellae louver (M2)



GMX450 TL-D multi-purpose reflector(s) and GGX450 OLC semi-high-gloss high-quality aluminum optic with 3D lamellae louver (D6)



GMX450 TL-D multi-purpose reflector(s) and GGX450 white lamellae louver (L)



GMX450 TL-D multi-purpose reflector(s) and GGX450 matt standard-quality aluminum parabolic cross-lamellae louver (M5)

TTX400 TL-D mirror inserts

Mirror inserts improve the distribution of light. They are especially suitable for applications where directed beams are needed. Installing mirror inserts is as easy as all other components: they are laid into the edge profile of the multifunctional reflector (GMX450).

TTX400 offers various types of mirror insert (narrow, wide and asymmetrical beam).

TTX400 TL-D	
Mirror inserts	
Type	GGX451, GGX452 (to be mounted in GMX450 1-lamp version) GGX453, GGX454 (to be mounted in GMX450 2-lamp version)
Suitable reflectors	Multipurpose reflectors GMX450, 36 and 58 W versions
Material and light distribution	GGX451: matt aluminum, narrow beam (M-NB), 1-lamp 36 and 58 W version GGX452: matt aluminum, wide beam (M-WB), 1-lamp 36 and 58 W version GGX453: matt aluminum, wide beam (M-WB), 2-lamp 36 and 58 W version GGX454: high-gloss aluminum, bi-directional beam (C-BD), 2-lamp 58 W version
Installation	Clicking into reflector
Remarks	Reflector GGX451 is of one piece, other ones of two pieces Mirror inserts delivered separately
Main applications	Retail (e.g. food, fashion), industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



GMX450 TL-D 1-lamp multipurpose reflector(s) and GGX452 wide-beam mirror insert made from matt aluminum (M-WB)



GMX450 TL-D 2-lamps multipurpose reflector(s) and GGX453 wide-beam mirror insert made from matt aluminum (M-WB)

TTX400 electrical units

These electrical units are designed for quick-click mounting in TTX400 trunking sections. They are for use with one or two TL5 or TL-D lamps, with electronic (dimming) ballast (or conventional ballast in the case of TL-D), and are available in emergency lighting versions and in versions for the mounting of projectors. They contain all the necessary electrical and mechanical functions. All components are screwed onto the electrical unit. The units can be combined with any type of reflector and are made of white sheet steel.

TMX400 is delivered with electronic ballast HFP. The dimmable version of the TMX400 is delivered with the electronic ballast HFR, allowing the light output of the TL5 lamps to be regulated from 3 to 100 %. This

	TTX400 TL5 Electrical units
Type	TMX400
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; DALI and Touch (HFR-TD)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Master/Slave: 1 master + 1 slave (M/S), both master and slave (M-S) HFR/HFR-TD with emergency lighting; TMX400 9 for trunking 9 wires or preferably TMX400 2-CR to be used with TTX400 7-wires (thereby in case of non-continuous lightline, to order throughwiring ZTX400 C1300-2 or C1600-2 as accessory)
Material	Sheet steel, white
Installation	Click-in fixation (both mechanical and electrical connection) on trunking TTX400 with 5- or 7-wire ribbon cable
Accessory	Blind covers (BC) Throughwiring set to be used in combination with TMX400 C2R onto TTX400 7, in the case of non-continuous lightline (ZTX400 C1300-2 for 1 section 28/54 W; ZTX400 C1600 for 1 section 35/49/80 W).



unit is ideal for (day)light-dependent control and must be mounted to the prewired TTX400 section with 7-wire ribbon cable. The TMX400 units with conventional ballasts are supplied with an electrical connector, starters, any necessary capacitor and lampholders. For more control options the TMX400 can be equipped with DALI ballasts. Especially in combination with Linesense controls DALI solutions offer even greater control and energy savings.

TMX400 is deliverable in versions with in-built 3-hour or 1-hour emergency lighting. For configuration of both emergency lighting and regulation or DALI, TTX400 9-wires is to be used with TMX400 9. The new solution of standard TTX400 7-wires with new units TMX400 C-2R is recommended.

	TTX400 TL-D Electrical units
Type	TMX400
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Inductive (I) Inductive with possible mounting of capacitor in parallel (IKP) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; DALI and Touch (HFR-TD)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Master/Slave: 1 master + 1 slave (M/S) both master and slave (M-S) 2-lamps lampholder with small width (F32) HFR/HFR-TD with emergency lighting; TMX400 9 for trunking 9 wires or preferably TMX400 C-2R to be used with TTX400 7-wires (thereby in case of non-continuous lightline, to order throughwiring / ZTX400 C1300-2 or C1600-2 as accessory)
Material	Sheet steel, white
Installation	Click-in fixation (both mechanical and electrical connection) on trunking TTX400 with 5- or 7-wire ribbon cable
Accessory	Blind covers Throughwiring set to be used in combination with TMX400 C-2R onto TTX400 7, in the case of non-continuous lightline (ZTX400 C1300-2 for 1 section 28/54 W; ZTX400 C1600 for 1 section 35/49/80 W)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5



1-lamp TL5 electrical unit



TMX400 2-lamps TL5 electrical unit

TL-D



TMX400 1-lamp TL-D electrical unit



TMX400 2-lamps TL-D electrical unit



TMX400 1-lamp TL-D F32 electrical unit

TTX400 trunking sections

This trunking system for TL5 and TL-D lamps comprises prewired sections (TTX400) and optional unwired sections (TTX410). The sections can be easily clicked together using the integrated electrical/mechanical coupling pieces. The trunking is available with a complete range of interchangeable components to offer outstanding flexibility. All the trunking sections are made of white prelaquered steel. Round edges reduce the risk of injury. Flat-ribbon cable (5 or 7 wires), an integrated phase-selection switch and contact blocks with click connection make electrical and mains connection quick, simple and safe (if 3 phases are used equalised, the maximum current is 16 A). The rigidity of the sections and coupling pieces limits the number of mounting brackets needed (max. 3 meters when using 493 trunking sections). The electrical unit is simply clicked into the trunking for both mechanical and electrical connection.

The prewired section TTX400 is equipped standard with a 5- or 7-wire 2.5 or 1.5 mm² flat ribbon cable. The 7-wire flat ribbon cable is used especially for the integration of light regulation or emergency lighting functions. Hence, no extra contact blocks or wiring need to be installed. TTX400 is available in lengths of 1, 2 and 3 electrical units of TL5 28/54 W, 35/49/80 W and TL-D 36 W and 58 W. It is also available in 9 wires (7-wire flat-ribbon plus 2 additional low-voltage cables for dimming) for the integration of light regulation and emergency lighting functions. The new optimized and recommended solution, instead of TTX400 9, consists of the standard TTX400 7-wire flat-ribbon and the new electrical units TMX400 C-2R.

TTX400 is also available with a 5-wire 1.5 mm² ribbon cable, in the same lengths as mentioned before; to be used in combination with HFP units.

	TTX400 TL5 Standard trunkings
Type	TTX400 (prewired)
Length	1 x, 2 x or 3 x length of electrical unit 49 (491, 492 or 493), also applicable for 80 and 35 W electrical unit 1 x, 2 x or 3 x length of electrical unit 54 (541, 542 or 543), also applicable for 28 W electrical unit
Electrical circuit option	TTX400 5: 1 x flat ribbon cable, 5 wires, 1.5 and 2.5 mm ² 5-wire: standard flat ribbon cable (5) TTX400 7: 1 x flat ribbon cable, 7 wires, 2.5 mm ² 7-wire: standard flat ribbon cable (7) TTX400 9: 9-wires 7-wire standard flat ribbon cable + 2 hardcore cables 1 mm ² (9) 7-wire standard flat ribbon cable + 2 cables 1 mm ² for communication purpose (9T) Alternative to TTX/TMX400 9 : TTX400 7 + TMX400 C-2R Phase selection switch and contact blocks with click connection are integrated
Connection	Connection box ZTX400 CU or ZTX400 CM Trunking piece TTX400 CU7 (to be completed with ZTX400 EP-CU) Universal TTX400 CM-CU for cable entry at the beginning of light-line or in the middle
Material	Steel, prelacquered white
Accessory	Suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

	TTX400 TL-D Standard trunkings
Type	TTX400 (prewired)
Length	1 x, 2 x or 3 x length of electrical unit 36 or 58 W (361, 362 or 363 resp 581, 582 or 583)
Electrical circuit option	TTX400 5: 1 x flat ribbon cable, 5 wires, 1.5 and 2.5 mm ² 5-wire: standard flat ribbon cable (5) TTX400 7: 1 x flat ribbon cable, 7 wires, 2.5 mm ² 7-wire: standard flat ribbon cable (7) TTX400 9: 9-wires 7-wire standard flat ribbon cable + 2 hardcore cables 1 mm ² (9) 7-wire standard flat ribbon cable + 2 cables 1 mm ² for communication purposes (9T) Alternative to TTX/TMX400 9 : TTX400 7 + TMX400 C-2R Option: 1, 2, 3 section prewired trunking with 2 circuits flat ribbon 5 wires (2C5) 1, 2, 3 section prewired trunking with 2 circuits flat ribbon 7 wires (2C7)
Connection	Phase selection switch and contact blocks with click connection are integrated
Connection	Connection box ZTX400 CU or ZTX400 CM Trunking piece TTX400 CU7 (to be completed with ZTX400 EP-CU) Universal TTX400 CM-CU for cable entry at the beginning of light-line or in the middle
Material	Steel, prelacquered white
Accessory	Suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5/TL-D

Pre-wired TTX400 trunking with 5-wire ribbon cable



Pre-wired TTX400 trunking with 7-wire ribbon cable

TTX410 (optional)

TTX410 is the unwired trunking section that allows the electrical units to be mounted in any desired position. On the upper part of the trunking section, special knock-out openings enable cable entry. The mains connection can be made with the 7-pole connector ZTX410 TC. Electrical connection to the electrical unit can be made with a 5-pole contact block with insert contacts (ZTX400 DC). These connection blocks can be installed at any place inside the trunking sections. The required wiring can be fixed inside the trunking section by using internal cable clips (ZTX410 IC). When electrical units are used with conventional or low-loss ballasts, H07GU (I 10 °C) cables should be

used. When electronic ballasts are used, H07VU (70 °C) cables are sufficient. The TTX410 unwired trunking sections are delivered with the mechanical coupling piece. This unwired system is also well suited to mounting waterproof or surface-mounted luminaires.

TTX400 CM-CU

TTX400 491 7 CM-CU-PI is a I-length 58 W trunking section with a 7-pole connector. It is a universal and flexible piece for mains supply entry at the beginning or middle of the light-line. It is an alternative to ZTX400 CU, TTX400 CU7 or ZTX400 CM.

TTX400 TL-D**Standard trunkings**

Type	TTX410 (unwired)
Length	2 x or 3 x length of electrical unit 58 W (582 or 583)
Material	Steel, prelacquered white
Accessory	Connection units, suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

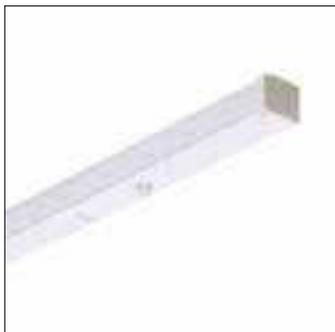


Unwired TTX410 trunking

TTX400 units for projectors

Increasingly, accent lighting is integrated in functional and general lighting systems, especially in applications like shops, showrooms and public buildings such as museums. The TTX400 light-line system can be equipped with different types of projector to meet these lighting needs. Thanks to its modular concept, TTX400 offers great

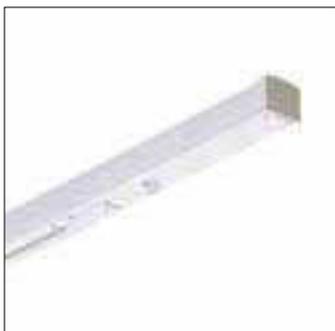
flexibility in the installation of projectors. For example, a change in the configuration of the shop floor lay-out can be easily followed by changing the positions of the projectors on the light-line.



Electrical unit with 2 connection points for projectors with e.g. CDM-T or SDW-T lamps. The projectors are mounted with the spot bracket on the trunking section



Electrical unit with 4 Express connection points for low-voltage halogen spots. This unit has 2 built-in 12 V / 105 W transformers



Electrical unit with an integrated 3-circuit rail. Standard projectors can be mounted in the rail. The maximum weight of the mounted projectors is 9 kg. Alternative now available with surface-mounted rail





TTX400/410 suspension-/mounting brackets

The TTX400 suspension-/mounting brackets have been designed to allow maximum ease and speed in installation and to provide the greatest possible flexibility in use. All brackets are simply clicked on the trunking. They are suitable for direct fixation or with chains, threaded rods and steel cables for suspension fixation. Distance between the brackets is up to 3 meters (when using the 583 trunking sections),

resulting in faster installation and lower costs. All mounting and suspension brackets are constructed from galvanised stainless steel, painted white.

Suspension-/mounting brackets



Chain bracket cable duct for suspending the TTX400/410 sections with the plastic cable duct ZTX400 582/583 CD from chains or steel cables; includes adjustable suspension hook



Profile bracket for mounting TTX400/410 sections onto system ceilings with visible 24 mm T-profiles



Universal bracket for suspending TTX400 section including unwired section TTX410, which then serves as a cable duct



Adjustable suspension hook with 2 brass nuts for use with ZTX400 UB, ZTX400 UCD or ZTX400 CDB



Ceiling mounting bracket (8 mm diameter hole) for mounting TTX400/410 sections directly onto the ceiling



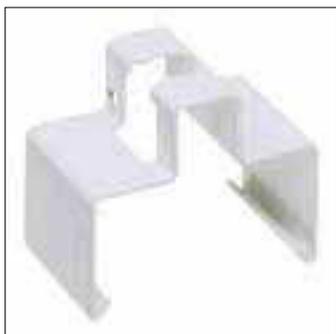
Cable suspension bracket for suspending the TTX400/410 sections from steel cable M 1.8. Integrated clasp mechanism allows easy, tool-less adjustment of the mounting height. Steel cable can be ordered separately with accessory ZTX400 SW1.8-10000



Universal bracket for suspending TTX400/410 sections with threaded rods or M13 internally threaded suspension tubes



Chain bracket for suspending TTX400/410 sections from chains or steel cables; includes adjustable suspension hook



Universal bracket for suspending TTX400/410 sections, including plastic cable duct ZTX400 CD 582/583, with threaded rods or M13 internally threaded suspension tubes

Accessories



Bracket for projectors. This bracket can be installed on TTX400 with reflector and louver, so no interruption of the continuous light-line



Connection unit consisting of a 7-pole contact block with 2.5 mm² contacts and mains connection strain-relief for use at the beginning of a light-line. The same connection unit is used for the TTX400 with either the internal 5- or 7-wire flat ribbon cable



Mounting bracket for waterproof luminaire



Mounting bracket for surface mounted luminaire



ZTX400 end caps for GMX450TL-D multi-purpose reflector(s) (EPI-450/EP2-450)



ZTX400 coupling piece for GMX450 TL-D multi-purpose reflector(s)



ZTX400 end caps for GMX430TL-D basic reflector(s)



ZTX400 coupling piece for GMX430 TL-D basic reflector(s)



ZTX400 end caps for GMX555 TL5 multi-purpose reflector(s)



ZTX400 coupling piece for GMX555 TL5 multi-purpose reflector(s)



ZTX400 transparent coupling piece for GMX450 TL-D perforated multi-purpose reflector(s)



White plastic end plate to cover the trunking; includes a knock-out hole of 20 mm, Philips-branded (PHL)



Blind cover; used to close the spaces in the trunking where no electrical units are mounted. Also available in length of 36, 49 or 58 W.



ZTX400 coupling piece for GMX555 TL5 multi-purpose reflector(s)



Structure parts with fixed angles, for use with prewired TTX400 light-line. This structure part is delivered with integrated coupling piece and internal through-wiring. Can be used for X-, T- and L configurations



Cable duct, for installing on the trunking, in white plastic, with a length of 2 or 3 electrical units. Can be closed with blind cover strips. To be used in combination with the suspension brackets ZTX400 UCD/CCD. Also available in length of 49, 54 W.



Steel wire, diameter 1.8 mm², length 10 m



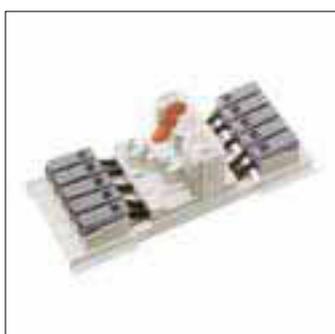
Internal coupling piece



Through-wiring connector



Electrical connector for attaching waterproof and surface-mounted luminaires to the prewired trunking TTX400. This electrical connector can be clicked on the connection block as mounted standard in the TTX400 light-line (also ZTX400 DC). The electrical connector comprises insert contacts and a strain reliever



A 5-pole connection block for connecting the electrical unit when using the unwired TTX410 profiles. The same connection block is used as an additional block for the pre-wired TTX400 when connecting to emergency lighting or light regulation. The connector is clicked inside the trunking and allows through-



The continuous-line connection unit is used at the end of a light-line when a through-connection is needed to pass an interruption of the light-line. It comprises a 7-pole screw connection block. The same continuous-line connector is used for the TTX400 with either the internal 5- or 7-wire flat ribbon cable. Not to be used for



The middle-of-line connection unit enables the mains connection to be made in the middle of a light-line. The unit comprises two 7-pole connection blocks for mains connection. To be used in the middle of a light-line when very long lines are used, to restart mains supply in both directions. The same middle-of-line connection unit is

Cable clips for guiding and easy-click fixing of wires in both TTX400 and TTX410 trunking sections

TTX400 Linesense

TTX400 with Lighting Controls

Applying Lighting Controls in industry contributes to efficient and effective lighting solutions. For TTX400 applications, Philips Lighting offers various standard trunking system based controls solutions, included in the Linesense range. These solutions offer an intelligent light-line, which remains easy-to-install.

With Linesense, TTX400 and lighting controls are combined in one, creating an intelligent light-line which is still easy to install. It allows substantial energy savings of up to 75%. Developed for industrial applications like warehouses,

Linesense consists of a 618 mm section of trunking, which is fully pre-equipped and wired for addition to the trunking. The control function is integrated into this extra unit and can easily be clicked between the light-line and the electrical connection unit. Movement detectors are connected with standard RJ-12 cables and mounted at the right location with the use of dedicated brackets. Linesense is equipped as standard with a telejack splitter to easily connect the detectors to the light-line.



Fully assembled TTX400 Linesense unit

Accessories



ZTX400 MDU-D Linesense unit suitable for movement detection (dimming or switching off), daylight linking and manual control; works with HFR DALI ballasts



The ZTX400 MB-MDU is a Linesense mounting bracket for clicking movement detector LRM 8115/00 or LRM 8117/00 to the trunking section. The right tilt angle can be adjusted manually and is to be checked by a walk test. The same tilt angle can be easily reproduced on more sensors thanks to a click graduation on the bracket



Light sensor intended for high-bay mounting (approx. 7.5 m high). Intended for use with the Linesense control (ZTX400 MDU-D). An installation bracket is included. The sensor is connected to the control unit with a modular plug-in (RJ-12) connector cable



High-bay passive infrared movement detector (mounting height up to 15 m), equipped with an adjustable delay timer (up to 35 minutes). Can be used with all MDU control units. A dedicated mounting bracket (ZTX400 MB-MDU) is available, into which the movement detector can be clicked



Tetrix



Tetrix TTX150 – a simple solution

Tetrix TTX150 is a compact light-line characterized by simplicity. It comes with everything in one box and installation is tool-less. Tetrix is available in 1.5 or 3 m lengths with a pre-mounted mechanical coupling and through-wiring connector, TL-D or TL5 lamps, reflector, suspension bracket and snap-on finishing pieces. A starter kit is required to start the light-line. Tetrix is supplied with a white in-laid reflector to cover most standard applications. Conventional and HF versions are available. Dedicated 1.5 m trunkings can be equipped with emergency lighting. Maintenance is carried out from below, enabling the system to be used as a surface-mounted solution. The recommended maximum installation height is 6m.

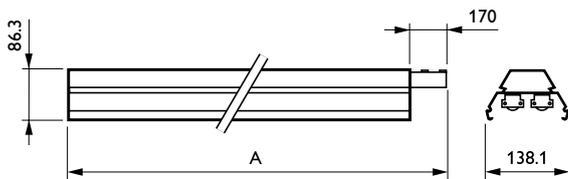
www.philips.com/lighting

Tetrix	
Type	TTX150
Length	1 x or 2 x length of 58 W (581 or 582)
Light source	Fluorescent 1 x or 2 x MASTER TL-D / G13 / 58 W
Lamp included	Yes (lamp color 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) Electronic Included (EI) Electronic Included, pre-heat (EI-PH)
Option	Lamp; fluorescent TL5 Separate switching of lamps in line (left/right) (DS), in 2-lamp version only Emergency lighting: 3 hours (EL3), in 581 versions Pre-wired ribbon cable, 7-wire, 2.5 mm ² , (7x2.5)

Material	Aluminum, white
Installation	Suspended; pre-mounted mechanical coupling and through-wiring connector
Accessory	Reflectors for electronic and conventional gear; lamellae louver; acrylic cover (1500 mm)
Remarks	Standard equipped with 5-wire, 2.5 mm ² through-wiring Starter kit required to start the light line Suspension brackets and end caps are included in packaging Empty through-wiring units available (5x2.5)
Main applications	Retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TTX150

	A
2x	1530
2x2x	3060



Tetrix TTX150 light-line with TL-D fluorescent lamp(s)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TTX150 581 1xTL-D58W/840 IC	4.30	124803 00
TTX150 582 2x2xTL-D58W/840 IC	10.50	124919 00
TTX150 581 2xTL-D58W/840 IC EL3	5.70	125282 00
TTX150 491 2xTL5-49W/840 HFP	3.50	130385 00

Please contact your local Philips representative for additional configurations

Accessories



Starter kit containing suspension bracket, electrical connector and end caps

Product ID	EOC
ZTX150 MB-EC-2xEP	124445 99



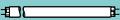
Starter kit containing suspension bracket, electrical connector (separate switching functionality) and end caps

Product ID	EOC
ZTX150 MB-2xEP EC-DS	125350 99





Selection guide – Battens

Luminaire family	Page	LED	Lamps		Diffusers/Reflectors			
			Fluorescent		Steel	Aluminum	Acrylic	Polycarbonate
			TL5	TL-D				
								
iW Profile g²	9.4	•						•
eW Profile Powercore	9.6	•						
Pentura mini	9.8		•					•
Pentura mini CC	9.10		•					•
Medison	9.12			•			•	
Pentura	9.14		•			•		•
TMX204	9.18		•	•	compatible with full range of TTX400 trunking reflectors			
Lineco	9.22			•	top fixing	front fixing		
TMS028	9.26			•	supplied as standard	•		
Oiva	9.30		•		•	•		
Instra	9.34			•	•	•		

Luminaire family	Light distribution				Protection IP class	Surface mounting	Emergency lighting	Lighting control	Wiring			
	Narrow beam	Wide beam	Assym- metric	Surround					Terminal block	Through- wired	BESA fixing	Quick
												
iW Profile g²	•	•	•		IP50	•		iW Scene controller		•		
eW Profile Powercore		•			IP50	•		dimming		•		
Pentura mini				•	IP20	•			•	•		
Pentura mini CC				•	IP20	•		on/off switch standard		•		plug/socket
Medison				•	IP40	•		on/off switch	•			
Pentura		•	•	•	IP20 IP22	•		dimming	•	•		plug/socket GST18
TMX204	•	•	•	•	IP20	•	•	dimming	•			•
Lineco	UK only	•	•	•	IP20	•		dimming	•			repositionable terminal block
TMS028		•			IP20	•			•			
Oiva		narrow - medium - wide + optional louvers			IP23	•	•		•	•		IP23 plug/socket enstonet plug
Instra		narrow - medium - wide + optional louvers			IP23	•	•		•	•		IP23 plug/socket enstonet plug

iW Profile g²



iW Profile g² – compact and impressive

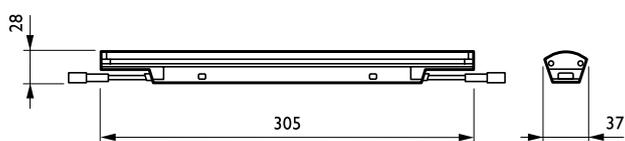
iW Profile g² – a low-profile, linear system that is well suited for interior display, exhibit, undercabinet, task and medium-luminance alcove lighting; the color temperature of white is tuneable from 3000-6500 K by means of an easy-to-use controller.

The IntelliWhite (iW) series for applications of LED-based white light allows the simple customization of environments with color temperature control – whether to mimic changes in daylight or to alter displays without re-lamping existing luminaires.

www.philips.com/lighting

iW Profile g ²			
Type	BCX420	Material	Housing: aluminum with enamel finish
Light source	10 x LED-HB	Installation	Surface mounted Optional tracks allow for a light aim perpendicular to the mounting surface, angled at 60° from center, or angled at 45° from center
Light color	Tunable white 3 000 - 6 500 K	Remarks	Power/data supply, cables and controls needed for proper functioning; to be ordered separately
Power supply	24V DC	Lifetime	50 000 hours (70% lumen maintenance at Ta=25° C)
Power consumption	15 W	Main applications	Indoor (office, retail, hospitality)
Controls (optional)	iW scene controller		
Optic / cover	10° x 110° 50° x 50° 20° x 40° x 100° (asymmetric)		
Operating temperature	-20°C > Ta > 50°C		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX420

BCX420 iW Profile g²

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX420 10xLED-HB/WH-3000-6500 24V 50 ALU	0.433	711752 99
BCX420 10xLED-HB/WH-3000-6500 24V 10 ALU	0.433	711769 99
BCX420 10xLED-HB/WH-3000-6500 24V A ALU	0.433	711776 99

Please contact your local Philips representative for additional configurations
At the time of going to press, not all data were available

Accessories

Product ID	Description	EOC
ZCX420 C15250FL	Leader cable, length 1525 mm, flying leads	710717 99
ZCX420 C305P-M-F	Jumper cable, 305 mm, male-female	710724 99
ZCX420 C1220P-M-F	Jumper cable, 1220 mm, male-female	710731 99
ZCX420 C2440P-M-F	Jumper cable, 2440 mm, male-female	710748 99
ZCX420 RA L1677 A45	Mounting rail, length 1677 mm, 45°	711738 99
ZCX420 RA L1677 A60	Mounting rail, length 1677 mm, 60°	711745 99

eW Profile Powercore



eW Profile Powercore – sustainable and compact

eW Profile Powercore – a low-profile, linear, white-light LED lighting luminaire offering a choice of color temperature (2700 and 4000 K); it is ideally suited to illuminate work surfaces such as kitchen counter-tops (e.g. under kitchen cabinets), work stations (e.g. desktops in offices, hospitals and other commercial locations) and work benches (e.g. laboratories in commercial, research or academic settings); it also provides excellent light for display cases, showcases and under-shelf applications, e.g. for merchandising, exhibits and bars.

eW Profile Powercore uses Powercore® technology, which is engineered to efficiently and accurately control power output to LED-based systems directly from line voltage, eliminating the need for an external power supply. It increases efficiency, lowers the overall cost, and eases installation of LED-lighting systems. eW Profile Powercore uses DIMand™ technology to enable dimming with commercially available ELV-type dimmers.

www.philips.com/lighting

eW Profile Powercore	
Type	BCX411
Light source	LED-HB
Light color	Warm white: 2700 K Neutral white: 4000 K
Power supply	230 V AC
Power consumption	BCX411 20 x LED-HB: 26 W max. at startup; 20 W max. steady state BCX411 10 x LED-HB: 13 W max. at startup; 10 W max. steady state BCX411 5 x LED-HB: 6 W max. at startup; 4.5 W max. steady state
Controls (optional)	Line switches or ELV (electronic low voltage) commercially available trailing edge or phase control dimmers

Optic / cover	120° x 120°
Operating temperature	-20°C > Ta > 50°C
Material	Housing: powder coated aluminum
Installation	Surface mounted
Remarks	Leader cable needed for proper functioning, to be ordered separately
Lifetime	50 000 hours (70% lumen maintenance at Ta=25° C)
Main applications	Indoor (office, retail, hospitality)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



BCX411



BCX411 eW Profile Powercore

	A
BCX411 20 x LED	997
BCX411 10 x LED	489
BCX411 5 x LED	286

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
BCX411 20xLED-HB/WW-2700 230V	0.73	714241 99
BCX411 20xLED-HB/NW-4000 230V	0.73	714272 99
BCX411 10xLED-HB/WW-2700 230V	0.37	714234 99
BCX411 10xLED-HB/NW-4000 230V	0.37	714265 99
BCX411 5xLED-HB/WW-2700 230V	0.19	714227 99
BCX411 5xLED-HB/NW-4000 230V	0.19	714258 99

Please contact your local Philips representative for additional configurations

Accessories

Product ID	Description	EOC
ZCX411 C3050P CE	Leader cable, length 3 050 mm, white, flying leads	714678 99
ZCX411 C152P-M-FWH CE	Jumper cable, length 152 mm, male-female, white	714685 99
ZCX411 C305P-M-FWH CE	Jumper cable, length 305 mm, male-female, white	714692 99
ZCX411 C457P-M-FWH CE	Jumper cable, length 457 mm, male-female, white	714708 99
ZCX411 C1525P-M-FWH CE	Jumper cable, length 1 525 mm, male-female, white	714715 99
ZCX411 RA L254	Mounting rail, length 254 mm	
ZCX411 RA L559	Mounting rail, length 559 mm	
ZCX411 RA L1118	Mounting rail, length 1 118 mm	

At the time of going to press, not all data were available

Pentura Mini



Pentura Mini – ultra-slim decorative batten

Pentura Mini TCH128 is an ultra-slim decorative batten for domestic applications. A cost-effective, ready-to-install mini fluorescent solution.

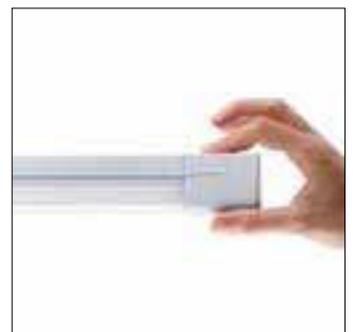
Pentura Mini TCH128 offers the energy-saving benefits of miniature fluorescent lamp technology coupled with lightweight electronics and a patented internal reflector for improved lighting performance.

The batten is easy to install e.g. over worktops and workstations in the home, home office and recreational environments, etc.; it provides bright light where needed even where installation space is limited.

Pentura Mini TCH128 battens are fitted with lamp, tough polycarbonate diffuser and all fixing accessories, reducing installation time to a minimum. The battens are through-wired with removeable end-caps at both ends covering the push-button connection blocks for simple connection and through-wiring.

www.philips.com/lighting

Ultra-slim batten

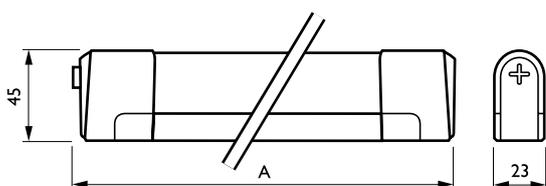


Pentura Mini	
Type	TCH128
Light source	Fluorescent: 1 x TL5-Essential 8, 14, 21, 28 W
Lamp included	Yes (lamp color 830 or 840, 8 W version is 827)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF)

Material	Housing and end caps: polycarbonate, white Cover: polycarbonate, transparent
Installation	Individual or in-line; screw mounting
Remarks	All installation accessories included; ready to install
Main applications	Home, undershelf, task lighting



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A
8W	365
14W	623
21W	923
28W	1223

TCH128



Pentura Mini TCH128 batten

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCH128 1xTL5-14W/830 HF	0.36	148526 99
TCH128 1xTL5-21W/840 HF	0.43	148533 99
TCH128 1xTL5-21W/830 HF	0.43	148540 99
TCH128 1xTL5-28W/840 HF	0.50	148557 99
TCH128 1xTL5-28W/830 HF	0.50	148564 99

Please contact your local Philips representative for additional configurations

Individual battens can be connected to form lines of light



All installation accessories are included



Pentura Mini CC



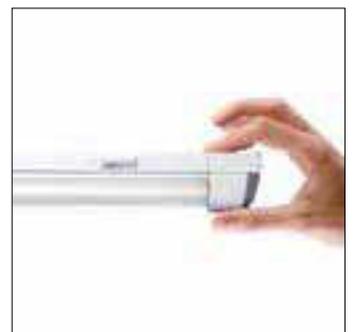
Pentura Mini CC – brighten your workload

Pentura Mini CCTCH129 is an ultra-slim decorative batten for domestic applications. This cost-effective, ready-to-install solution offers the energy-saving benefits of miniature fluorescent lamp technology coupled with lightweight electronics and a patented internal reflector for improved lighting performance.

Pentura Mini CCTCH129 is fitted with plug-and-socket connections and an on/off switch for individual operation over worktops and workstations in the home, home office and recreational environments.

www.philips.com/lighting

Ultra-slim batten



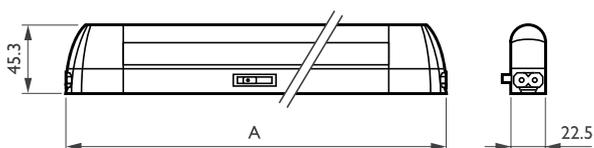
Pentura Mini CC

Type	TCH129
Light source	Fluorescent: 1 x TL5 Essential 8, 14, 21, 28 W
Lamp included	Yes (lamp color 830 or 840, 8 W version is 827)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency (HF)

Material	Housing and end caps: polycarbonate, white Cover: polycarbonate, transparent
Installation	Individual or in-line; screw mounting
Remarks	All installation accessories included; ready to install
Main applications	Home, undershelf, task lighting



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A
14W	605
21W	905
28W	1205

TCH129



Pentura Mini CCTCH129 batten

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCH129 1xTL5-14W/840 HF	0.48	008738 99
TCH129 1xTL5-21W/840 HF	0.55	008752 99
TCH129 1xTL5-21W/830 HF	0.55	008769 99
TCH129 1xTL5-28W/840 HF	0.62	008776 99
TCH129 1xTL5-28W/830 HF	0.62	008783 99

Please contact your local Philips representative for additional configurations

Interlinking cables



Medison



Medison – easy maintenance

Medison TCS054 is an economical general-purpose batten with a TL-D fluorescent lamp and a choice of prismatic or opal diffuser. Delivered with lamp and built-in switch, it is suitable for surface and wall-mounting, as well as light-line installation. The diffuser can be detached without tools for ease of maintenance.

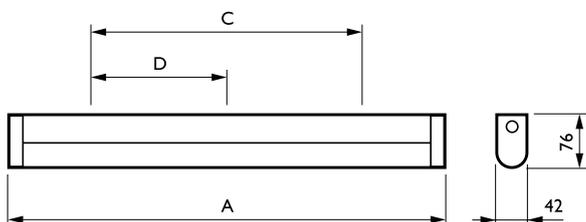
www.philips.com/lighting

	Medison
Type	TCS054
Light source	Fluorescent: 1 x MASTER TL-D / G13 / 15, 18, 30, 36, 58 W
Lamp included	No Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: Electronic Included (EI)

Optical cover	Opal cover (O) Prismatic cover (P)
Material	Housing: sheet steel, white End caps: plastic Cover: acrylic
Installation	Individual or in line; screw mounting
Remarks	Luminaires are available with and without on/off switch
Main applications	Industry, retail



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B	C	D	H
15W	486	42	350	267	76
18W	638	42	500	312	76
30W	943	42	600	474	76
36W	1248	42	900	450	76
58W	1548	42	1200	600	76

TCS054



Medison TCS054 batten with prismatic refractor (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS054 1xTL-D15W/830 I P SW	1.01	118871 99
TCS054 1xTL-D18W/830 I P SW	1.16	118895 99
TCS054 1xTL-D30W/830 I P SW	1.42	118918 99
TCS054 1xTL-D36W/830 I P SW	1.82	118932 99

Please contact your local Philips representative for additional configurations



Medison TCS054 batten with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCS054 1xTL-D15W/830 I O SW	1.01	118864 99
TCS054 1xTL-D18W/830 I O SW	1.16	118888 99
TCS054 1xTL-D30W/830 I O SW	1.42	118901 99
TCS054 1xTL-D36W/830 I O SW	1.82	118925 99
TCS054 1xTL-D58W I O	2.30	133119 99

Please contact your local Philips representative for additional configurations

Pentura



Pentura – effective quality

Pentura TMS122 is a high-quality batten for a single TL5 fluorescent lamp. It is integrated with the slim HF electronic ballast for compactness. This batten is suitable for both direct and indirect lighting applications. It is mounted on a baseplate containing all the electrical and mechanical components for easy fixing to the ceiling.

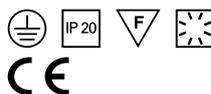
www.philips.com/lighting

Also available with through-wiring for quick and easy installation

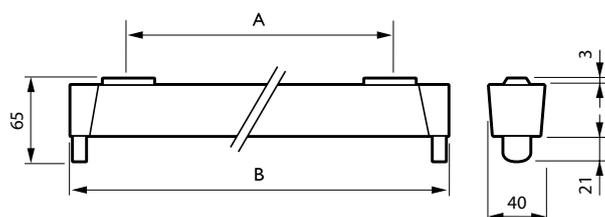


Pentura	
Type	TMS122
Light source	Fluorescent: 1 x MASTER TL5 / G5 / 14, 21, 24, 28, 35, 39, 49, 54 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Feed-through wiring	1 phase (TW1)

Material	Pre-lacquered steel, white
Installation	Individual; screw mounting
Accessory	Polycarbonate cover; symmetrical and asymmetrical reflectors, connection blocks
Main applications	Office, retail, industry, under shelves, coves



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
14W, 24W	463	571
21W, 39W	600	871
28W, 54W	900	1171
35W, 49W	900	1471

TMS122



Pentura TMS122 batten for one TL5 fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS122 1xTL5-14W/830 HFR	0.80	471020 99
TMS122 1xTL5-28W/830 HFR	1.20	471341 99
TMS122 1xTL5-21W/830 HFP	1.08	798646 99
TMS122 1xTL5-28W/830 HFP	1.36	798660 99
TMS122 1xTL5-54W/840 HFP	1.36	798783 99

Please contact your local Philips representative for additional configurations



Connection block for quick connection facility (10 pieces per bag)

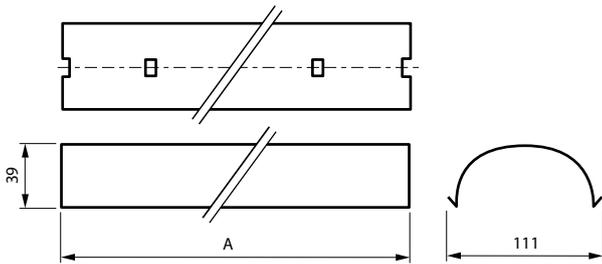
Product ID	EOC
ZMS122 EC (10PCS)	643953 00

Accessories



Matt aluminum symmetric reflector

Product ID	EOC
GMSI22 14/24 R	471105 99
GMSI22 28/54 R	471129 99
GMSI22 35-80 R	471143 99
GMSI22 21/39 R	471167 99



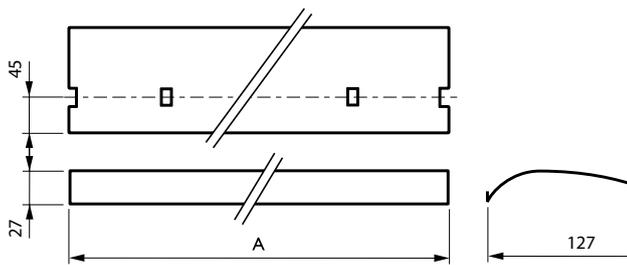
	A
14/24	570
21/39	870
28/54	1170
35-80	1470

TMSI22 + GMSI22 R



Matt aluminum asymmetric reflector

Product ID	EOC
GMSI22 14/24 R-A	471181 99
GMSI22 28/54 R-A	471204 99
GMSI22 35-80 R-A	471228 99
GMSI22 21/39 R-A	471242 99



	A
14/24	570
21/39	870
28/54	1170
35-80	1470

TMSI22 + GMSI22 R-A

Product ID	Description	EOC
GMSI22 14/24 P	Prismatic cover	799056 99
GMSI22 21/39 P	Prismatic cover	799063 99
GMSI22 28/54 P	Prismatic cover	799070 99
GMSI22 35-80 P	Prismatic cover	799087 99



TMX204



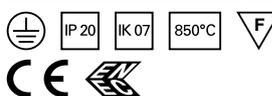
TMX204 LS – slender and versatile

TMX204 LS is a functional batten for TL-D and TL5 fluorescent lamps for general lighting. A wide range of reflectors and attachments from the TTX400 series can be fitted to enhance system efficiency and versatility, making it suitable for a variety of applications. This batten can be suspended or surface-mounted. Thanks to its slim design, it is also well suited for build-in applications and coves.

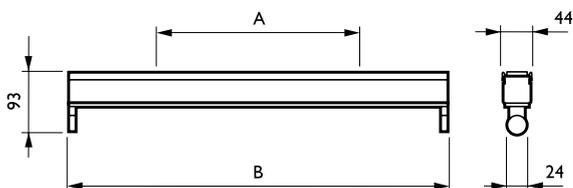
www.philips.com/lighting

TMX204 LS	
Type	TMX204
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49, 54, 80 W 1 x or 2 x MASTER TL-D / G13 / 14, 18, 36, 58 W
Lamp included	No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch, DALI interface (HFR-TD)
Connection	Mains supply screw connection and automatic connection of body to top-plate; additional screw connection (SI) Floating connector (CFL)

Option	Gear: electro magnetic 240V / 50 Hz Emergency lighting: 1 hour (EL1), 3 hours (EL3) Fuse (FU) (in NF-AEAS types) Master/Slave (M/S)
Material	Pre-lacquered sheet steel, white
Installation	Individual Fixation with ceiling mounting rail, suspended or direct ceiling mounting Feed-through wiring possible
Accessory	All reflectors and attachments of TTX400 trunking series and reflector fixation screws
Remarks	Well-suited for build-in applications and covers
Main applications	Retail, industry

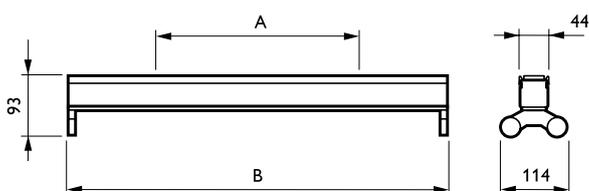


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



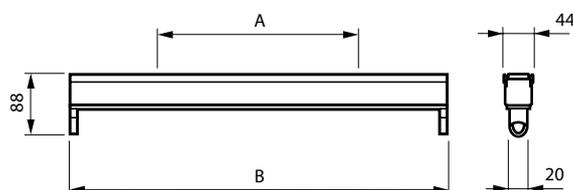
TMX204 1xTL-D

	A	B
18W	370	616
36W	650	1226
58W	650	1526



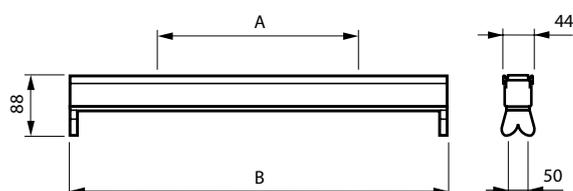
TMX204 2xTL-D

	A	B
18W	370	616
36W	650	1226
58W	650	1526



TMX204 1xTL5

	A	B
14W	370	576
28W, 54W	650	1176
35W, 49W, 80W	650	1476



TMX204 2xTL5

	A	B
14W	370	576
28W, 54W	650	1176
35W, 49W, 80W	650	1476



TMX204 LS batten for 1xTL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMX204 1xTL-D36W IC	1.77	100081 99
TMX204 1xTL-D58W IC	2.40	100180 99
TMX204 1xTL-D36W HFP	1.89	100500 99
TMX204 1xTL-D58W HFR	2.15	100685 99

Please contact your local Philips representative for additional configurations



TMX204 LS batten for 2xTL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMX204 2xTL-D36W IC	2.41	100289 99
TMX204 2xTL-D58W IC	3.16	100364 99
TMX204 2xTL-D36W HFP	1.91	100524 99
TMX204 2xTL-D58W HFR	2.18	100708 99

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMX204 1xTL5-49W HFP	1.65	689517 99
TMX204 1xTL5-54W HFP	1.25	689647 99
TMX204 1xTL5-35W HFR	1.47	689845 99
TMX204 2xTL5-14W HFR CFL	1.07	689920 99
TMX204 2xTL5-35W HFR	1.76	689968 99
TMX204 2xTL5-49W HFP ELI	2.25	690155 00

Please contact your local Philips representative for additional configurations

Accessories



TMX204 with a twin lamp wire guard

Product ID	EOC
ZMX204 2 36 WG	295237 00
ZMX204 2 58 WG	295244 00



One set of thumbscrews needed for mounting of one individual reflector

Product ID	EOC
ZMX204 SR (2PCS)	108117 99

Product ID	Description	EOC
ZMX204 NBWR-36	Mounting rail for electrical unit (36 W)	163451 99
ZMX204 NBWR-58	Mounting rail for electrical unit (58 W)	163468 99



Lineco



Lineco – an economical choice

Lineco TMS022 is a functional and economical surface-mounted batten for 1 or 2 TL-D fluorescent lamps. It offers a choice of two optics, for symmetrical and asymmetrical lighting. Installation is quick and tool-less and can be carried out single-handedly. The repositionable contact block enables flexible connection (with cable entry centrally or via the end caps). A wide range of snap-on attachments is available.

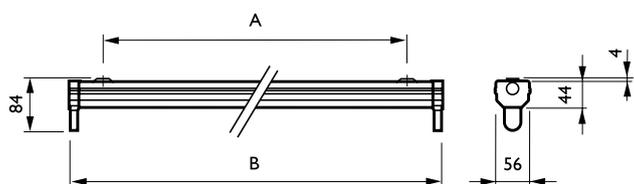
www.philips.com/lighting

	Lineco
Type	TMS022
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13/ 15, 18, 30, 36, 58 W
Lamp included	No Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) Electronic Included (EI)
Connection	Push-in connector (PI)

Option	Through-wiring; 1-phase (TW1) Dedicated batten with fixing points for C-reflectors only (SH)
Material	Sheet steel, white
Installation	Individual; screw mounting Possibility to reposition the contact block (2-lamp version)
Accessory	White one-piece symmetrical reflector (for 1- and 2-lamp versions), asymmetrical reflector (for 1-lamp version), C-aluminum trough reflector used with -SH type battens
Main applications	Retail, industry

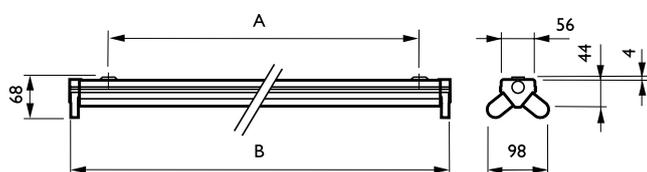


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TMS022 1xTL-D

	A	B
15W	300	462
18W	500	615
30W, 36W	900	1225
58W	900	1525
70W	1500	1787



TMS022 2xTL-D

	A	B
18W	500	615
36W	900	1225
58W	900	1525



Lineco TMS022 batten for 1xTL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS022 1xTL-D36W EI	1.27	121338 99
TMS022 1xTL-D36W HFP	1.20	135564 99
TMS022 1xTL-D58W HFP	1.41	135588 99
TMS022 1xTL-D36W IC	1.50	207834 99
TMS022 1xTL-D58W IC	2.11	207896 99

Please contact your local Philips representative for additional configurations



Lineco TMS022 batten for 2xTL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS022 2xTL-D36W EI	1.17	121352 99
TMS022 2xTL-D36W HFP	1.18	135601 99
TMS022 2xTL-D58W HFP	1.55	135625 99
TMS022 2xTL-D18W IC	1.08	207810 99
TMS022 2xTL-D58W IC	3.08	207926 99

Please contact your local Philips representative for additional configurations

Accessories



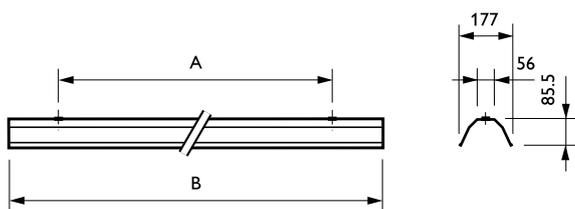
Lineco TMS022 batten for 2x TL-D fluorescent lamps with GMS022 high-gloss reflector

Product ID	EOC
GMS022 1/2 58 C	123882 99
GMS022 1/2 36 C	124209 99



Lineco TMS022 batten for 2x TL-D fluorescent lamps with GMS022 reflector

Product ID	EOC
GMS022 1/2 58 R	207360 99
GMS022 1/2 18 R	207957 99
GMS022 1/2 36 R	207964 99



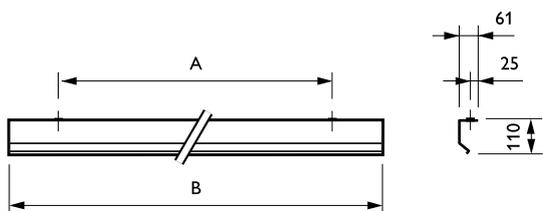
TMS022 + GMS022 R

	A	B
18	500	613
36	900	1223
58	1200	1523



Lineco TMS022 batten for 1x TL-D fluorescent lamp with GMS022 angled reflector

Product ID	EOC
GMS022 1 18 R-A	207971 99
GMS022 1 36 R-A	207988 99
GMS022 1 58 R-A	207995 99



TMS022 + GMS022 R-A

	A	B
18	500	613
36	900	1223
58	1200	1523

Product ID	Description	EOC
ZMS022 LPH	One-lamp lampholder	117751 99



TMS028



TMS028 – functional and flexible

TMS028 is a basic batten for 1 or 2 TL-D fluorescent lamps and includes optics for general lighting. It can be suspended or surface-mounted. A lamellae louver, end caps and inline couplers are available as accessories. The repositionable contact block enables flexible connection (with cable entry centrally or via the end caps).

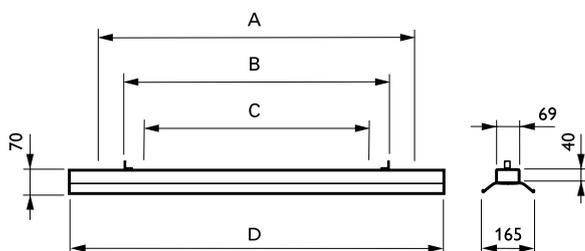
www.philips.com/lighting

TMS028	
Type	TMS028
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W
Lamp included	No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) Electronic Included (EI)
Optic	High-gloss mirror
Connection	Push-in connector
Option	Feed-through wiring: 1-phase (TW1)

Material	Housing: lacquered steel, white Optic: aluminum or lacquered steel, white
Installation	Individual; screw fixing or suspension by chains or threaded rods Possibility to reposition the contact block (2 lamps version)
Accessory	Lamellea louver; coupling piece, end caps, spacers for suspension
Remark	Optional pre-equipped for mounting on Telemécanique power supply systems
Main applications	Retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TMS028

	A	B	C	D
36W	1100	960	800	1232
58W	1400	1260	1100	1532



TMS028 white reflector batten for 1 x TL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS028 1xTL-D36W IC	2.00	203003 00
TMS028 1xTL-D58W IC	2.60	203010 00
TMS028 1xTL-D36W EI	2.00	301914 00
TMS028 1xTL-D58W EI	2.10	301938 00

Please contact your local Philips representative for additional configurations



TMS028 white reflector batten for 2 x TL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS028 2xTL-D36W IC	2.60	203027 00
TMS028 2xTL-D58W IC	3.50	203034 00
TMS028 2xTL-D36W EI	2.00	301921 00
TMS028 2xTL-D58W EI	2.20	301945 00

Please contact your local Philips representative for additional configurations



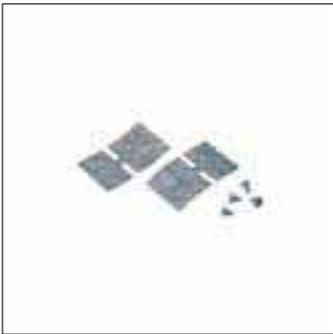
TMS028 specular aluminum reflector batten for 2 x TL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMS028 2xTL-D36W IC P15 SPA	2.10	130620 00
TMS028 2xTL-D58W IC P15 SPA	2.90	130637 00

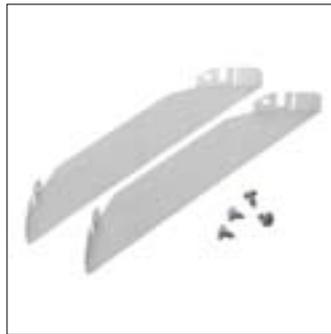
Please contact your local Philips representative for additional configurations

Accessories



Coupling plates set

Product ID	EOC
ZMS028 CP (2PCS)	208282 99



End plates set/white

Product ID	EOC
ZMS028 EP (2PCS)	208275 99



TMS028 with GMS028 L white lamellae louver

Product ID	EOC
GMS028 1/2 36 L	208251 99
GMS028 1/2 58 L	208268 99



Oiva



Oiva TL5 luminaire range – productivity, economy and reliability

Featuring TL5 lamp technology, the highly versatile Oiva luminaire range combines top-quality lighting performance, an excellent utilization factor and outstanding glare control to increase alertness and improve productivity in the workplace. Its energy efficiency, operational reliability and durability make for very favorable cost of ownership.

Thanks to Oiva's innovative packaging and its mounting and connection properties, installation – in-line, surface-mounted, suspended or wall-mounted – can be carried out swiftly and with minimal waste.

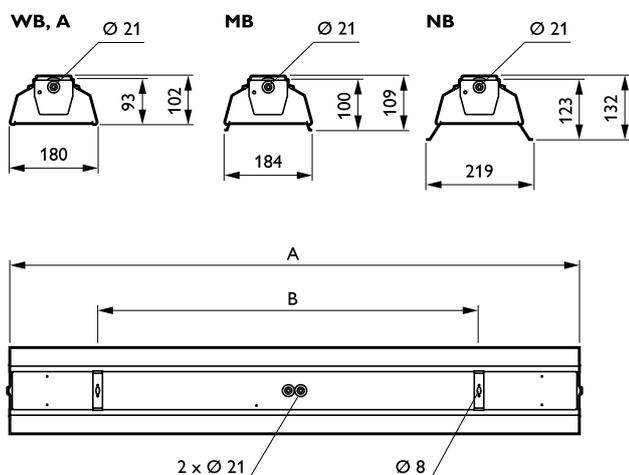
www.philips.com/lighting

Oiva	
Type	470TMS, 471TMS, 475TMS
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Lamp included	No Yes (lamp color 830 or 840)
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optic	White reflector, without lamellae (WR) Narrow beam (NB) Medium beam (MB) Wide beam (WB) Asymmetrical beam (A)
Connection	Screw connection block (SI) Push-in connector (PI)

Option	Emergency lighting: 3 hours (EL3) Separate swithcing of the lamps (SW), for 475TMS Feed-through wiring (TW3) Connection: Cable with CEE plug (CCE) Cable with EnstoNet plug (CEN) Cable, 2 m length, without plug (C2K)
Material	Housing: hot-dipped galvanized steel, white Optic: galvanized steel Reflector: galvanized steel, white
Installation	Individual or in-line; clicking the luminaire into pre-screwed ceiling brackets* or suspended with horizontal wire, suspension wires or rods * free spacing of fixing brackets
Accessory	White and aluminum louvers, mounting brackets, suspension wires, connection cables
Main applications	Retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
28W, 54W	1202	800
35W, 49W, 80W	1502	1100

470/471/475TMS



Oiva 470TMS/471TMS/475TMS batten with wide-beam light distribution

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
471TMS 2xTL5-28W HFP WB CI	2.70	321157 00
471TMS 2xTL5-35W HFP WB CI	3.20	321164 00
471TMS 2xTL5-49W HFP WB CI	2.67	321171 00
471TMS 2xTL5-54W HFP WB CI	2.70	321188 00
471TMS 2xTL5-80W HFP WB CI	3.60	321195 00

Please contact your local Philips representative for additional configurations



Oiva 470TMS/471TMS/475TMS batten with white reflector without lamellae

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
475TMS 2xTL5-28W HFP WR CI	1.80	322208 00
475TMS 2xTL5-35W HFP WR CI	2.10	322215 00
475TMS 2xTL5-49W HFP WR CI	2.10	322222 00
475TMS 2xTL5-54W HFP WR CI	1.80	322239 00
475TMS 2xTL5-80W HFP WR CI	2.50	322246 00

Please contact your local Philips representative for additional configurations

Accessories



Wall-mounting bracket (470ZMS)

Product ID	EOC
470ZMS MBW (2PCS)	220955 99



Oiva 470TMS/471TMS/475TMS batten with medium-beam reflector (470GMS R-MB)

Product ID	EOC
470GMS 1/2 28/54 R-MB	320402 99
470GMS 1/2 35-80 R-MB	320419 99



Instra



Instra – corrosion-resistant

Instra 460TMS is a corrosion-resistant basic luminaire for TL-D fluorescent lamps that is suitable for both dry and wet applications. A comprehensive range of reflectors are available including wide, medium and narrow-beam versions, which can be fixed without the use of tools.

Spill shields are available for the Instra 460TMS luminaire (WB/RW) in industrial and retail applications. 460GMS L1 is a white-painted, hot-galvanized-steel cross-blade louver for general use. 460GMS L2 is a matt-aluminum folded cross-blade louver with axial cross-blades for demanding lighting applications. Spill shields are easy to fit, without accessories, even after initial installation.

Thanks to fast-action brackets, Instra luminaires are easy to install on ceilings or suspension rails; they can also be suspended.

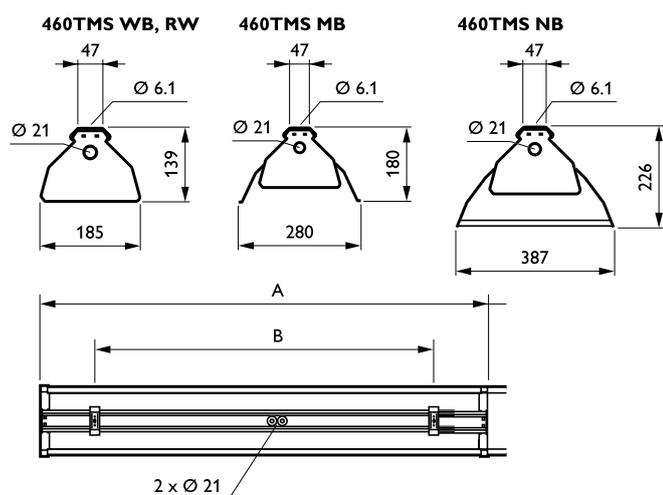
www.philips.com/lighting

Instra	
Type	460TMS
Light source	Fluorescent: 1 x, 2 x or 3 x MASTER TL-D / G13 / 36, 58 W
Lamp included	No Yes (lamp color 827, 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator, DALI (HFD) High Frequency Regulator (HFR)
Optic	Narrow beam (NB) Medium beam (MB) Wide beam (WB)
Connection	Push-in connector

Option	Emergency lighting: 3 hours (EL3) Separate switching of the lamps (SW) Feed-through wiring (TW3) Connection: Cable with CEE plug (CCE) Cable with EnstoNet plug (CEN) Cable, 2 m length, without plug (C2K)
Material	Housing: heat-galvanized steel, white Reflector: anodized aluminum
Installation	Individual or in-line; clicking the luminaire into pre-screwed ceiling brackets or suspended with horizontal wire, suspension wires or rods
Remarks	Mounting brackets are included
Accessory	Reflectors, louvers
Main applications	Retail, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
18W	634	
36W	1244	600
58W	1544	740

460TMS



Instra 460TMS batten with wide-beam optic (WB)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
460TMS 2xTL-D36W IC WB TW3	5.00	467085 00
460TMS 2xTL-D58W IC WB TW3	5.16	467092 00
460TMS 2xTL-D36W HFP WB TW3	2.92	468662 00
460TMS 2xTL-D58W HFP WB TW3	3.63	468679 00
460TMS 2xTL-D36W IC WB TW3	5.00	315781 00
460TMS 2xTL-D36W HFP WB TW3	5.20	336175 00

Please contact your local Philips representative for additional configurations



Instra 460TMS batten with white reflector without lamellae

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
460TMS 2xTL-D36W IC WR TW3	4.80	467023 00
460TMS 2xTL-D58W IC WR TW3	4.90	467030 00
460TMS 2xTL-D36W HFP WRTW3	5.00	468525 00
460TMS 2xTL-D58W HFP WRTW3	5.90	468532 00
460TMS 2xTL-D58W IC WR TW3	4.94	315705 00
460TMS 2xTL-D36W HFP WRTW3	4.75	336274 00
460TMS 2xTL-D58W HFP WRTW3	5.80	336281 00

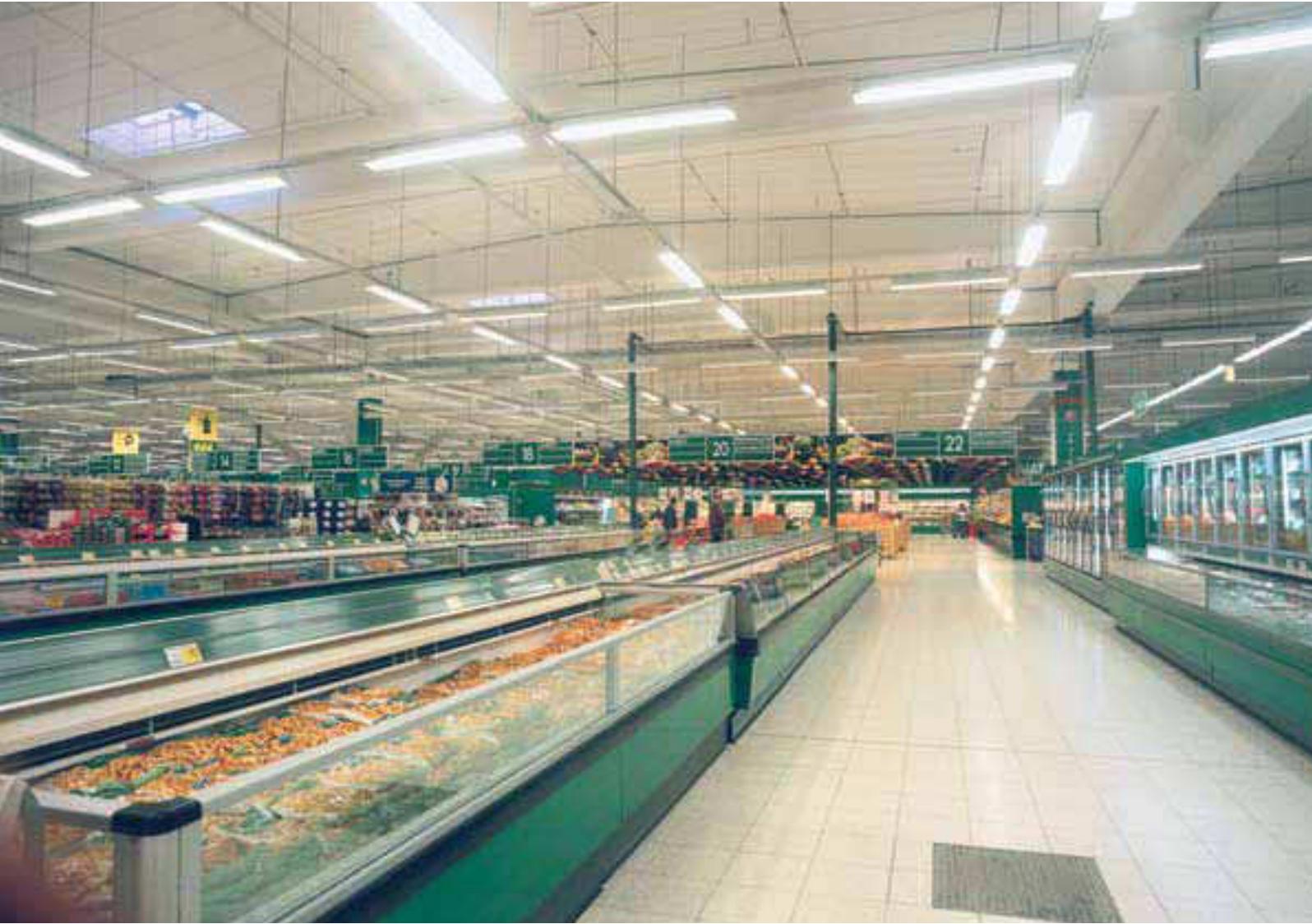
Please contact your local Philips representative for additional configurations

Accessories



Instra 460TMS batten with white painted aluminum optic with flat lamellae (460GMS LI) for wide, medium or narrow-beam light distribution

Product ID	EOC
460GMS 36 LI	338001 99
460GMS 58 LI	338018 99
460GMS 28/54 LI	338025 99
460GMS 49 LI	338032 99





1

49

246
247

222

Waterproof and cleanroom luminaires

Selection guide – Waterproof and cleanroom luminaires

Luminaire family	Page	Lamps			Protection IP class	Shock resistance IK class 	Special ambient temperatures	Surface mounting	
		Fluorescent		Compact fluorescent				F 	D 
		TL5 	TL-D 	PL-L 					

Waterproof luminaires

Isolux M



10.6		•			IP65	IK06		•	
------	--	---	--	--	------	------	--	---	--

Isolux P



10.12		•			IP65	IK09 for PC cover		•	
-------	--	---	--	--	------	----------------------	--	---	--

Pacific TCW216



10.18	•	•			IP66	IK08	coldstore -30°C	•	•
-------	---	---	--	--	------	------	-----------------	---	---

Pacific TCW215



10.22	•	•			IP66	IK02		•	
-------	---	---	--	--	------	------	--	---	--

Pacific TCW596



10.24	•	•			IP66	IK08	high temp +50°C coldstore -30°C	•	•
-------	---	---	--	--	------	------	------------------------------------	---	---

Pacific FCW196



10.26			•		IP65	IK08		•	
-------	--	--	---	--	------	------	--	---	--

Twig



10.28	•	•			IP44			•	
-------	---	---	--	--	------	--	--	---	--

Twinny



10.32	•	•			IP44			•	
-------	---	---	--	--	------	--	--	---	--

TMW065



10.36		•			IP65	IK02/08		•	
-------	--	---	--	--	------	---------	--	---	--

Cleanroom luminaires

TBS324/326



10.40	•	•			IP65	IK05			
-------	---	---	--	--	------	------	--	--	--

NB = Narrow beam

WB = Wide beam

A = Asymmetric

Luminaire family	Reflectors		Cover			Light distribution				Wiring			Control options	Emergency lighting
	Steel geartray	Aluminum	Acrylic	Polycarbonate	Glass	NB	WB	A	Specific optics	Hardwire	Through-wired	Quick installation other		
														

Waterproof luminaires

Isolux M

				multidirectional adjustable sealed reflectors								connection block accessible from outside		
--	--	--	--	---	--	--	--	--	--	--	--	--	--	--

Isolux P

			•	•			•				•			
--	--	--	---	---	--	--	---	--	--	--	---	--	--	--

Pacific TCW216

	•	•		•		•	•	•		•	•	Waterproof External Connection	dimming	•
--	---	---	--	---	--	---	---	---	--	---	---	--------------------------------	---------	---

Pacific TCW215

	•		•							•	•	Waterproof External Connection	dimming	
--	---	--	---	--	--	--	--	--	--	---	---	--------------------------------	---------	--

Pacific TCW596

		•		•		•	•	•		•	•		dimming	•
--	--	---	--	---	--	---	---	---	--	---	---	--	---------	---

Pacific FCW196

	•			•			•			•				UK only
--	---	--	--	---	--	--	---	--	--	---	--	--	--	---------

Twigl

			•	on request						•	•			
--	--	--	---	------------	--	--	--	--	--	---	---	--	--	--

Twinny

	•	•	•	on request		•	•	•		•	•		dimming	
--	---	---	---	------------	--	---	---	---	--	---	---	--	---------	--

TMW065

				overtubes			•			•	•			
--	--	--	--	-----------	--	--	---	--	--	---	---	--	--	--

Cleanroom luminaires

TBS 324/326

	•	•			opal transparent								dimming	•
--	---	---	--	--	------------------	--	--	--	--	--	--	--	---------	---



Philips Xtra and Xtreme lamps – reliable, longlife and cost-efficient

Stopping assembly lines or closing down tunnels to change a prematurely failed lamp can cause unnecessary hassle, unsafe situations and high costs. By using long-lasting products that 'keep their promise', replacement can be planned in advance, virtually eliminating the unpleasant consequences of having to spot-replace premature failures.

Philips Xtra and Xtreme lamps are reliable, long-life lamps that offer the opportunity to extend maintenance cycles and reduce maintenance costs. Once in place, you don't have to worry about them for years to come. This allows the planning of group replacement at the optimum moment, avoiding expensive spot replacement.

Thinking about the environment

Philips Xtra and Xtreme lamps offer maximum lighting quality with minimum impact on the environment. They contain industry-leading low levels of mercury: for instance, as little as 3 mg in MASTER TL-D Xtra and Xtreme. In terms of energy efficiency, they are A- or B-class, depending on product type, which translates to lowest CO₂ emissions and maximum energy savings. Lastly, their long lifetime means less waste and reduced end-of-life costs.





Philips MASTER TL-D Xtra

Recommended for medium-high ceilings or non-stop working areas

- Lifetime of 54,000 hours*
- Improved reliability throughout extra long service life
- Same light quality as MASTER TL-D Super 80 lamps



Philips MASTER TL-D Xtreme

Recommended for areas with high ceilings, where replacement is very difficult or disruption costs are very high

- Lifetime of 75,000 hours*
- Improved reliability throughout extremely long service life
- Same light quality as MASTER TL-D Super 80 lamps



Philips Secura version

Recommended for areas where contamination resulting from lamp breakage should be prevented (e.g. all applications related to the food and beverage industry)

- Protective coating keeps glass and lamp components together in case of accidental breakage; allowing use in open luminaires
- Compliant with HACCP regulations and supports HACCP certification
- Available in Xtra and Xtreme version with corresponding lifetime



Philips Polar version

Recommended for areas with cold ambient temperatures

- High lighting level in low ambient temperature applications compared to other fluorescent tubes
- Fully temperature-resistant in all conditions, no temperature-related re-lamping problems
- Available in Xtra and Xtreme version with corresponding lifetime



Philips MASTER PL-T Xtra

Recommended for areas where costs of disturbance are high, e.g. shopping malls, offices, hypermarkets, airports

- Lifetime of 25,000 hours*
- Reliability throughout extra long service life
- Same light quality as MASTER PL-T lamps



Philips MASTER PL-C Xtra

Recommended for areas where costs of disturbance are high, e.g. shopping malls, offices, hypermarkets, airports

- Lifetime of 25,000 hours*
- Reliability throughout extra long service life
- Same light quality as MASTER PL-C lamps



Philips MASTER TL5 Xtra Lamps

Recommended for areas where lamp replacement is costly or disruptive

- Extra long, reliable life
- Lamp and new HF-P Xtreme ballast for TL5 are designed for each other for maximum performance

* based on 10% failures, electronic gear and 12-hour switching cycle



Philips MASTER PL-L Xtra

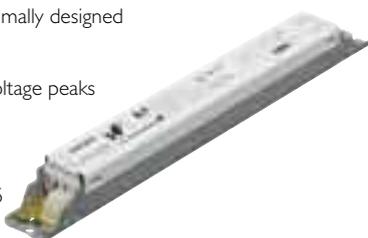
Recommended for areas where costs of disturbance are high, e.g. shopping malls, offices, hypermarkets, airports

- Lifetime of 32,000 hours*
- Reliability throughout extra long service life
- Same light quality as MASTER PL-L lamps

Philips HF-P Xtreme gear

Recommended for areas with high ceilings, where replacement is very difficult or disruption costs are very high

- Extreme long-life of 100,000 hours (10% failure rate, at a Tcase max 75 °C and maximum ambient temperature of 60 °C) and optimally designed to increase lamp life
- Extreme robustness, protected against excessive voltage peaks
- 25% energy savings compared to electromagnetic gear
- HF-P Xtreme gear available for both TLD and TL5



Philips MASTER QL Xtreme

Recommended for areas with high ceilings, where replacement is very difficult or disruption costs are very high

- Lifetime of 60,000 hours*
- Reliability throughout extreme long service life
- Pleasing light with high visual comfort



* based on 10% failures, electronic gear and 12 hr: switching cycle

www.philips.com/long-life

Isolux-M



Isolux-M – waterproof elegance

Isolux-M 4ISI 10 is an elegant high-quality waterproof batten for architectural and industrial applications. Its distinctive fuselage-style matt aluminum housing can accommodate 1 or 2 lamps and is through-wired as standard. Polycarbonate overtubes or linear-adjustable sealed oval reflectors in polycarbonate or acrylic are available as an option. Installation, either individually or in line, is straightforward.

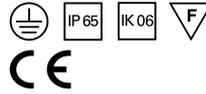
www.philips.com/lighting

Isolux-M

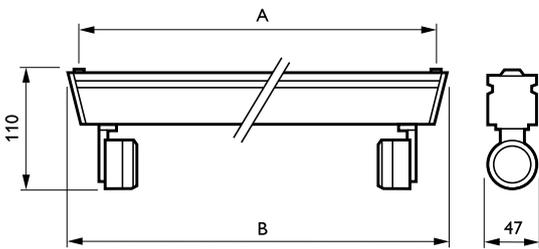


Isolux-M	
Type	4ISI 10
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	No
Gear	Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Connection	Push-in connector
Option	Emergency lighting: 3 hours (EL3) Through-wiring: 3-phase, 5 x 1.5 mm ² (TW3) Lamp protection tubes Luminaire version with holders for oval adjustable reflector tube, 1 and 2 lamps (RH)

Material	Matt aluminum extrusion
Installation	Individual or in-line; screw mounting or suspended mounting
Accessory	Lamp protection tubes, oval reflector tubes and mounting accessories
Main applications	Industry

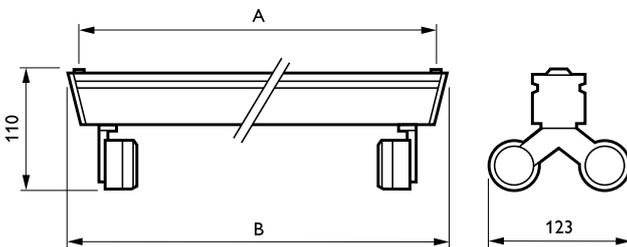


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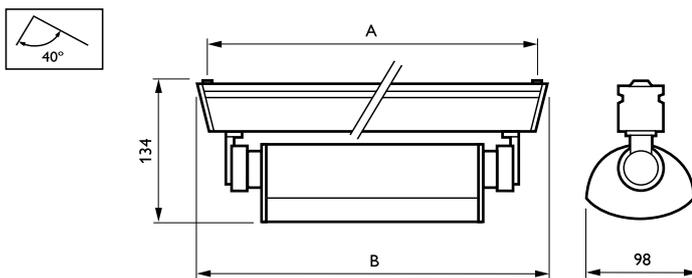
4ISI 10 1xTL-D

	A	B
18W	610	690
36W	1220	1292
58W	1520	1592



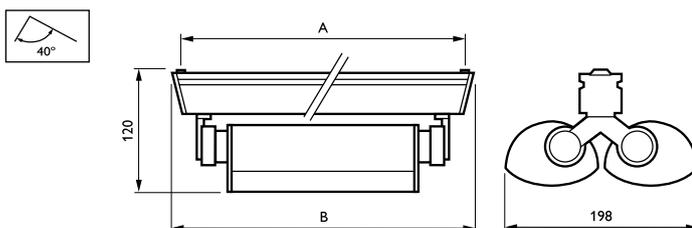
4ISI 10 2xTL-D

	A	B
36W	1220	1292
58W	1520	1592



4ISI 10 1xTL-D RH

	A	B
36W	1220	1292
58W	1520	1592



4ISI 10 2xTL-D RH

	A	B
36W	1220	1292
58W	1520	1592



Isolux-M 4IS1 I0 waterproof luminaire with TL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS1 I0 1xTL-D36W HFP TW3	1.92	225903 00
4IS1 I0 1xTL-D58W HFP TW3	2.28	225927 00

Please contact your local Philips representative for additional configurations



Isolux-M 4IS1 I0 waterproof luminaire with TL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS1 I0 2xTL-D36W HFP TW3	2.05	225910 00
4IS1 I0 2xTL-D58W HFP TW3	3.36	225934 00

Please contact your local Philips representative for additional configurations



Isolux-M 4IS1 I0 waterproof luminaire with lamp holder for oval adjustable reflector tube. The reflector tube has to be ordered separately.

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS1 I0 1xTL-D36W HFP TW3 RH	1.78	225989 00
4IS1 I0 1xTL-D58W HFP TW3 RH	2.32	226009 00

Please contact your local Philips representative for additional configurations



Isolux-M 4IS1 I0 waterproof luminaire with lamp holders for oval adjustable reflector tube. The reflector tubes have to be ordered separately.

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS1 I0 2xTL-D36W HFP TW3 RH	2.08	225996 00
4IS1 I0 2xTL-D58W HFP TW3 RH	2.08	226016 00

Please contact your local Philips representative for additional configurations

Accessories



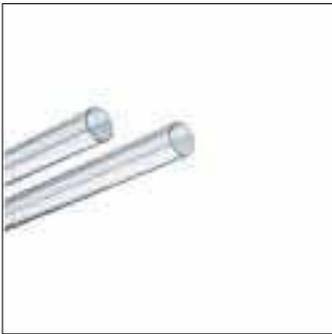
Mounting bracket for ceiling mounting, with safety screw

Product ID	EOC
9IS110 MB SET	514830 00



Chain bracket for suspended mounting, with safety screw

Product ID	EOC
9IS110 CB	528226 00



Protection tube
screw rings 9IS110 LTR to be ordered separately

Product ID	EOC
9IS110 PT36	531691 99
9IS110 PT58	531707 99



Coupling piece

Product ID	EOC
9IS110 CP	048533 00

Product ID	Description	EOC
9IS110 LTR	Screw rings for protection tubes	063796 00
9IS110 C100	Connection cable, 100 mm	074204 00
9IS110 36 R-PC	Oval adjustable reflector tube, polycarbonate	637478 00
9IS110 58 R-PC	Oval adjustable reflector tube, polycarbonate	636204 00



Isolux-P



Isolux-P – for arduous environments

Isolux-P 4IS120 is a tough IP65 waterproof luminaire for 1 or 2 lamps, which is designed for long-term reliable operation in exacting industrial environments. It features an impact-resistant diffuser with reinforced polyester lockers. With its Class II electrical protection, Isolux-P 4IS120 ensures safety in damp environments where earthing is unavailable.

A coldstore version with double overtubes for temperatures as low as -40°C is also available.

www.philips.com/lighting

Isolux-P

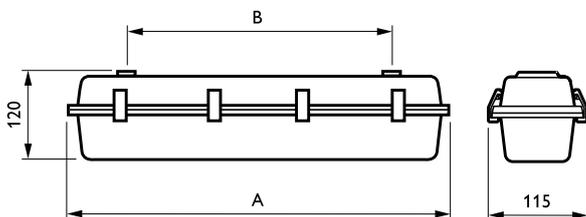


Isolux-P	
Type	4IS120
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	No
Gear	Electro magnetic (low loss), 230 / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Connection	Push-in connector
Optical cover	Acrylic cover (AC) Polycarbonate cover (PC)

Option	Through-wiring: 3-phase, 4 x 1.5 mm ² (TW3)
Material	Housing: polyester Reflector: sheet-steel, white Optical cover: PMMA or polycarbonate
Installation	Individual; screw mounting to ceiling or suspended mounting
Accessory	Mounting accessories
Main applications	Industry

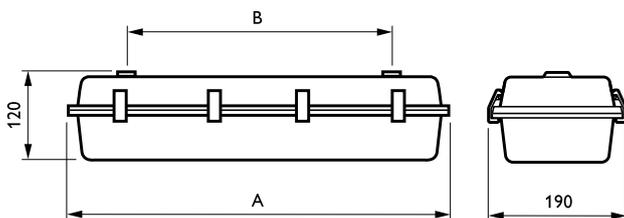


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



4IS120 1xTL-D

	A	B
18W	670	370
36W	1280	980
58W	1580	1280



4IS120 2xTL-D

	A	B
36W	1280	980
58W	1580	1280



Isolux-P 4IS120 waterproof luminaire with TL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS120 1xTL-D58W IC PCTW3	4.46	522514 99
4IS120 1xTL-D58W IC ACTW3	4.63	569441 99
4IS120 1xTL-D58W HFP ACTW3	3.48	630837 99
4IS120 1xTL-D58W HFP PCTW3	3.62	630875 99

Please contact your local Philips representative for additional configurations



Isolux-P 4IS120 waterproof luminaire with TL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
4IS120 2xTL-D58W IC PCTW3	7.47	522569 99
4IS120 2xTL-D58W IC ACTW3	7.47	569465 99
4IS120 2xTL-D58W HFP ACTW3	4.88	630844 99
4IS120 2xTL-D58W HFP PCTW3	5.04	630882 99

Please contact your local Philips representative for additional configurations



Pacific



Pacific – functional and flexible

Designed for application in demanding operating environments, Pacific is a range of dust-, jet- and shock-proof luminaires for TL-D and TL5 (16 mm) fluorescent lamps, as well as PL-L compact fluorescent lamps.

The range also includes dedicated versions for high temperatures (+50°C) and cold stores (-30°C), while yet another version is designed specifically for paint inspection workshops.

Pacific offers flexibility and ease of installation. Most luminaires can be mounted individually or in-line with a simple 'click', and can also be suspended from Philips TTX410 light-line systems.

www.philips.com/lighting

Pacific TCW596



Pacific TCW216



Pacific TCW215



Pacific FCW196



Pacific KIT with WEC

The original 'Waterproof External Connector' offers a complete, ready-to-install luminaire with an external wiring system that requires no special connectors or luminaire assembly. Installation takes a fraction of the time required for a standard luminaire, thus reducing labor costs and site disruption time.

Pacific TL5

Pacific TL5 consumes less energy than equivalent TL-D luminaires and also offers a variety of power options within the same dimensions, ensuring consistency of style and versatility. Whether it is high energy efficiency or high/very high output that is required, Pacific TL5 offers the right power choice for every project. It is also ideal for retrofit installations where improved lighting levels are required.

Pacific offers multiple lamps in 'slim' versions: 2 x 49 W and 3 x 49 W deliver light in an environmentally friendly, efficient and compact package.

Internal reflectors

Pacific offers 3 internal reflectors, which ensure improved optical performance. Standard types consist of 1 x 49 and 58 W in a 140 mm-wide housing with HF-Performer electronic gear and are fitted as standard with either wide, narrow or asymmetric reflectors. TL5 very-high-output lamp versions (up to 1 x 80 W) are available for high mounting heights.

Pacific with Philips Xtreme and Xtra

Pacific also offers the ideal combination of a durable luminaire concept and the highly successful Xtreme/Xtra long-life lamp/gear family – securing a full 8-year installation guarantee, in normal or standard working conditions, or an improved maintenance cycle (see dedicated lamp page).

All lamps are pre-fitted, so it makes sense to opt for a WEC waterproof external connector to ensure maximum savings.

Performance at cold temperatures

It is possible to realize cost-effective performance at temperatures as low as -30°C. The combination of Pacific with twin POLAR Xtreme lamps and starters delivers more than double the light output of standard luminaires at low temperatures with a shorter run-up time.

The highly successful
Xtreme/Xtra long-life lamp

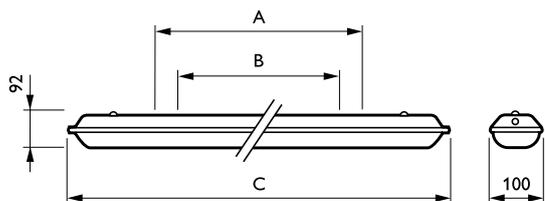


Pacific KIT with WEC

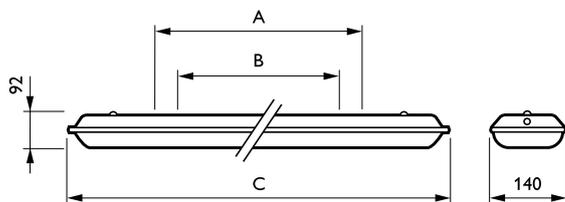


Pacific			
Type	TCW216	Material	Housing: fibre-glass reinforced polyester; grey Cover: polycarbonate Ceiling fixation clips: stainless steel
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 28, 49, 80 W 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W 1 x or 2 x MASTER TL-D Xtra or Xtreme / G13 / 36, 58 W 1 x or 2 x Polar TL-D / G13 / 58 W	Installation	Individual or in line; clicking the luminaire into pre-screwed ceiling brackets Cable entry pre-mounted Variable fixation centres and different cable entries
Lamp included	Yes (lamp color 830, 835 or 840) (835 optional) No	Accessory	Suspension hooks, BESA box caps and seals, cable gland, vandal-resistant lockers and brackets, through-wiring sets, brackets to mount to TTX400 light-line (ZTX400 MB-WAPR (2PCS))
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Inductive with possible mounting of capacitor in parallel (IKP) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch, DALI interface (HFR-TD) (optional) Electronic Included (EI)	Remarks	Dedicated ready-to-install versions available with lamp(s) and Waterproof External Connector facility (KIT) Through-wiring luminaire types available on request 1-lamp versions in 2-lamp housing (H2L), 2-lamp versions in 1-lamp housing (H1L) and 3-lamp versions in 2-lamp housing (H2L)
Connection	Push-in connector (PI) Screw connection block (SI) KIT version systematically with push-in connection block Cable, length 1500 cm, with push-in connection (C1500PI) (optional)	Main applications	Industry, indoor working conditions, parkings, cold store -25 °C / -30 °C (XAP)
Option	Long-life system Xtrem (lamp and gear) Emergency lighting: 1 hour (EL1), 3 hours (EL3) Fuse (FU) included Through-wiring: 1-phase, 10 A (TW1-10A), in KIT version 3-phase, 5 x 1.5 mm ² (TW3) Double entry membrane (DE) Explosion hazardous: Zone 2 and 22, gas group 3C, temperature class T6 (Z2/22-3C-T6) Plastic adapter piece for introduction of flexible cable through cable entry in KIT version (KIT AD) Compact version 2 x 49 W in 1-lamp housing (H1L) and 3 x 49 W in 2-lamp housing (H2L) in KIT version 1-lamp versions with reflector; narrow-beam (NR), wide-beam (WB) asymmetrical (A) in 2-lamp housing (H2L) in KIT version Fluorescent Polar TL-D lamps in KIT version	  except for EL1/EL3	

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCW216 1xTL5 / TL-D



TCW216 2xTL5 / TL-D



Pacific TCW216 shock-, vandal-, dust- and jetproof luminaire for TL-D or TL5 fluorescent lamp



Pacific TCW216 shock-, vandal-, dust- and jetproof luminaire for TL-D or TL5 fluorescent lamps

	A	B	C
18W	500	320	690
49W, 58W	925	600	1600
36W	925	600	1300

	A	B	C
18W	500	320	690
49W, 58W	925	600	1600
36W	925	600	1300

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW216 1xTL-D36W IC PI	2.12	291451 00
TCW216 1xTL-D18W I PI	1.39	291499 00
TCW216 1xTL5-49W HFP PI	2.20	293059 00
TCW216 1xTL-D58W/840 IC PI KIT	3.14	309989 00
TCW216 1xTL-D36W/840 HFP PI KIT	2.05	682297 00
TCW216 1xTL-D58W HFP PI Z2/22-3C-T6	2.20	692272 00

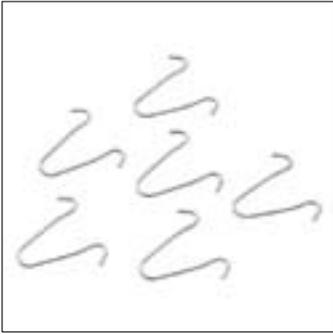
Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW216 2xTL-D36W IC PI	3.10	291468 00
TCW216 2xTL5-49W HFP PI	2.60	293066 00
TCW216 2xTL-D36W EI PI	2.38	299860 00
TCW216 2xTL5-49W HFP EL3 PI	2.20	303949 00
TCW216 2xTL-D58W/840 IC PI KIT	4.77	682020 00

Please contact your local Philips representative for additional configurations

Accessories



Bag of 20 suspension hooks

Product ID	EOC
ZCW216 HS (20PCS)	293974 99



Through-wiring set

Product ID	EOC
ZCW216 18TW1-HF I6A CLI	294117 99
ZCW216 18TW3-HF I6A CLI	294131 99
ZCW216 36TW1-HF I6A CLI	294155 99
ZCW216 36TW3-HF I6A CLI	294179 99
ZCW216 58TW1-HF I6A CLI	294193 99
ZCW216 58TW3-HF I6A CLI	294216 99



Bag of caps with seals for BESA box (to equip 1 luminaire)

Product ID	EOC
ZCW215 BESA	294032 99



Vandal-resistant lockers (6 pcs)

Product ID	EOC
ZCW216 LOC-VP (6PCS)	293950 99



Mounting bracket for waterproof luminaire onto trunking TTX400

Product ID	EOC
ZTX400 MB-WAPR (2PCS)	094434 99



Grommet

Product ID	EOC
ZCW216 GRM (20PCS)	683720 99



Ceiling fixation clip inox for 2-lamp luminaires

Product ID	EOC
ZCW216 CFC-T (10PCS)	294094 99

Product ID	Description	EOC
ZCW216 CFC-S (10PCS)	Ceiling fixation clip inox for 1-lamp luminaires	294070 99
ZCW216 PG13-DE (5PCS)	Cable entry gland diameter 13 version double entry (5pcs)	294018 99
ZCW216 PG13 (5PCS)	Cable entry gland diameter 13 (5 pcs)	293998 99

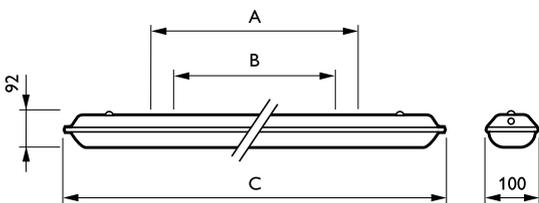


Pacific	
Type	TCW215
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 28, 49, 54, 80 W (optional) 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W 1 x or 2 x MASTER TL-D Xtra or Xtreme / G13 / 36, 58 W (optional)
Lamp included	Yes (lamp color 835 and 840) (835 optional) No
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Inductive with possible mounting of capacitor in parallel (IKP) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch, DALI interface (HFR-TD) (optional) Electronic Included (EI)
Connection	Push-in connector (PI) Screw connection block (SI) KIT version systematically with push-in connection block Cable, length 1500 mm, with push-in connection (C1500PI) (optional)
Option	Long-life system Xtreme, lamp and gear Fuse (FU) included Through-wiring: 1-phase, 10 A (TW1-10A) 3-phase, 5 x 1.5 mm ² (TW3) Double entry membrane (DE) Plastic adapter piece for introduction of flexible cable through cable entry in KIT version (KIT AD)

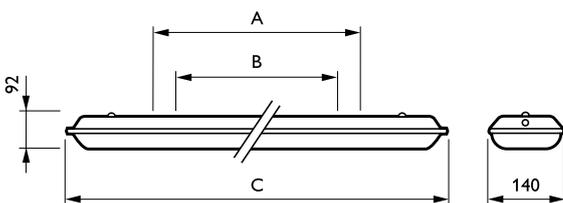
Material	Housing: fibre-glass reinforced polyester; grey Cover: acrylic Ceiling fixation clips: stainless steel
Installation	Individual or in line; clicking the luminaire into pre-screwed ceiling brackets Cable entry pre-mounted Variable fixation centres and different cable entries
Accessory	Suspension hooks, BESA box caps and seals, cable gland, vandal-resistant lockers and brackets, through-wiring sets, brackets to mount to TTX400 light-line (ZTX400 MB-WAPR (2PCS))
Remarks	Dedicated ready-to-install versions available with lamps and Waterproof External Connector facility (KIT) Through-wiring luminaire types available on request
Main applications	Industry, indoor working conditions



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCW215 1xTL-D



TCW215 2xTL-D

	A	B	C
18W	500	320	690
36W	925	600	1300
58W	925	600	1600

	A	B	C
18W	500	320	690
36W	925	600	1300
58W	925	600	1600



Pacific TCW215 dust- and jetproof luminaire for TL-D fluorescent lamp

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW215 1xTL-D18W I PI	1.41	291376 00
TCW215 1xTL-D36W IC PI	2.07	291338 00
TCW215 1xTL-D36W HFP PI	1.79	291734 00
TCW215 1xTL-D58W IC PI	2.81	291352 00
TCW215 1xTL-D58W HFP PI	2.13	291758 00

Please contact your local Philips representative for additional configurations



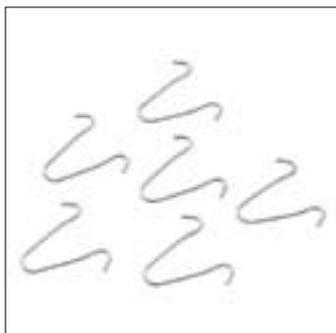
Pacific TCW215 dust- and jetproof luminaire for TL-D fluorescent lamps

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW215 2xTL-D18W IC PI	1.65	291321 00
TCW215 2xTL-D36W IC PI	3.03	291345 00
TCW215 2xTL-D36W HFP PI	2.31	291741 00
TCW215 2xTL-D36W EI PI	2.31	300092 00
TCW215 2xTL-D36W/840 IC PI KIT	3.49	682204 00
TCW215 2xTL-D58W IC PI	4.20	291369 00

Please contact your local Philips representative for additional configurations

Accessories



Bag of 20 suspension hooks

Product ID	EOC
ZCW216 HS (20PCS)	293974 99



Through-wiring set

Product ID	EOC
ZCW216 18TW1-HF I6A CLI	294117 99
ZCW216 18TW3-HF I6A CLI	294131 99
ZCW216 36TW1-HF I6A CLI	294155 99
ZCW216 36TW3-HF I6A CLI	294179 99
ZCW216 58TW1-HF I6A CLI	294193 99
ZCW216 58TW3-HF I6A CLI	294216 99



Bag of caps with seals for BESA box (to equip 1 luminaire)

Product ID	EOC
ZCW215 BESA	294032 99



Vandal-resistant lockers (6 pcs)

Product ID	EOC
ZCW216 LOC-VP (6PCS)	293950 99



Mounting bracket for waterproof luminaire onto trunking TTX400

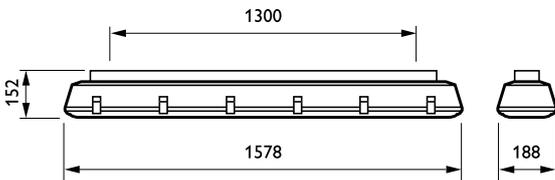
Product ID	EOC
ZTX400 MB-WAPR (2PCS)	094434 99

Pacific	
Type	TCW596
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 35, 49 W 1 x or 2 x MASTER TL-D / G13 / 58 W
Lamp included	No Yes (lamp color 830 or 840) (optional)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive with additional connection block for capacitor in parallel (IKP) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optic	Semi-high-gloss optic, double parabolic (D6) Reflector (R) White reflector and opal cover (RO)
Optical cover	Transparent or opal (RO)

Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Ambient temperature: Cold storage version, -30 °C (CS) High temperature version, + 35 °C or + 50 °C (HT)
Material	Housing: fibre-glass reinforced polyester, grey Optical cover: polycarbonate
Installation	Individual or line; clicking the luminaire into pre-screwed ceiling brackets
Accessory	Through-wiring set, suspension hooks, stainless-steel lockers, suspension brackets for mounting on TTX400 light-line
Remarks	Through-wiring luminaire types available on request Electronic starter in Cold-store type (EST)
Main applications	Industry, cold store -30 °C (CS version), paint inspection (RO version)



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TCW596



Pacific TCW596 shock-, dust- and jetproof luminaire for TL-D or TL5 fluorescent lamp(s), with reflector (R)



Pacific TCW596 shock-, dust- and jetproof luminaire for TL-D or TL5 fluorescent lamp(s), with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (D6)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW596 1xTL-D58W IC LW R	6.60	184258 00
TCW596 1xTL-D58W HFP R	6.10	184296 00
TCW596 2xTL-D58W HFP R	7.20	184302 00
TCW596 1xTL-D58W I LW R HT	6.60	184326 00
TCW596 2xTL-D58W IC R EST CS	9.31	684376 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW596 1xTL-D58W IC LW D6	6.90	184005 00
TCW596 2xTL-D58W IC LW D6	9.00	184203 00
TCW596 1xTL-D58W HFP D6	6.40	201443 00
TCW596 2xTL-D58W HFP D6	5.70	201467 00

Please contact your local Philips representative for additional configurations



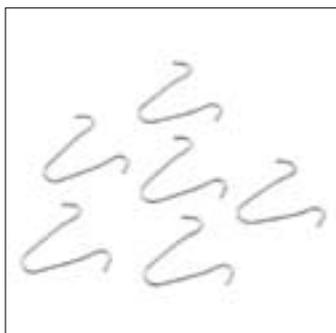
Pacific TCW596 shock-, dust- and jetproof luminaire for TL-D or TL5 fluorescent lamp(s), with white painted aluminum reflector and opal cover (RO)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TCW596 1xTL-D58W HFR RO	6.20	082677 00

Please contact your local Philips representative for additional configurations

Accessories



Bag of 20 suspension hooks

Product ID	EOC
ZCW216 HS (20PCS)	293974 99



Through-wiring set, 5 x 2.5 mm², 10A, from luminaire to luminaire

Product ID	EOC
ZCW596 58TW3-HF-10A CLI	162645 99



Set of 12 stainless-steel lockers

Product ID	EOC
ZCW596 LOC-SS (12PCS)	162638 99



Mounting bracket for waterproof luminaire onto trunking TTX400

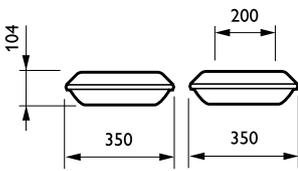
Product ID	EOC
ZTX400 MB-WAPR (2PCS)	094434 99

Pacific	
Type	FCW196
Light source	Compact fluorescent: 2 x MASTER PL-L 4 Pin / 2G11 / 18 W
Lamp included	No Yes (lamp color 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC)
Optical cover	Opal cover (O) Prismatic cover (P)

Material	Housing: polycarbonate, grey
Installation	Individual; screw mounting Closure of the luminaire by 4 internal clips (opal cover) or 4 corner screws plus internal clips (prismatic cover)
Main applications	Industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



FCW196



Pacific FCW196 shock-, vandal-, dust- and jetproof luminaire for compact fluorescent lamps, with opal cover (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FCW196 2xPL-L18W I O	2.10	183831 00
FCW196 2xPL-L18W/840 IC 240V O	2.10	185606 00
FCW196 2xPL-L18W/840 IC O	2.10	186092 00

Please contact your local Philips representative for additional configurations



Pacific FCW196 shock-, vandal-, dust- and jetproof luminaire for compact fluorescent lamps, with pearled cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
FCW196 2xPL-L18W I P	2.10	183848 00
FCW196 2xPL-L18W/840 IC 240V P	2.10	185613 00
FCW196 2xPL-L18W/840 IC P	2.10	186108 00

Please contact your local Philips representative for additional configurations



Twig



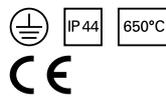
Twigi – for wet spaces

Twigi 320/321 TSW is a sealed basic luminaire incorporating TL-D and TL5 fluorescent lamps for general lighting and spotlighting in wet spaces to IP44. Offering a choice of symmetrical (wide or narrow beam) or asymmetrical light distributions, it can be installed on ceilings or walls or via suspension rails and it can also be partially recessed.

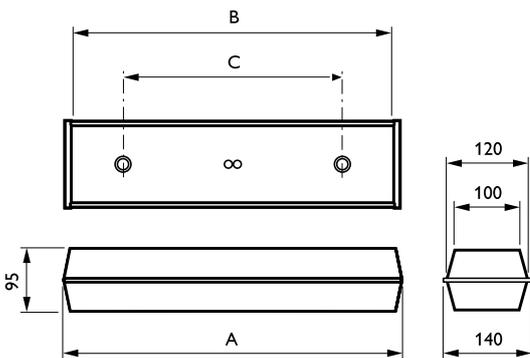
www.philips.com/lighting

Twigl	
Type	320TSW (1 and 2-lamp version) 321TSW (1 and 2-lamp version)
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54 W 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	No Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)
Optical cover	Opal cover (O) Prismatic cover (P)
Connection	Push-in connector

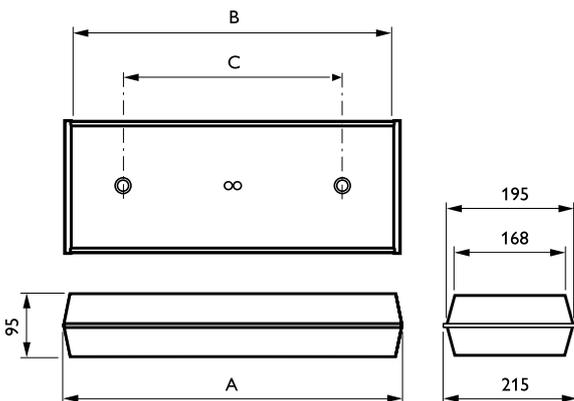
Option	Emergency lighting: 3 hours (EL3) Through-wiring: 3-phase, 5 x 1.5 mm ² (TW3) Connection: Cable with CEE plug (CCE) Cable with EnstoNet plug (CEN) Cable, 2 m length, without plug (C2K)
Material	Housing: hot-galvanised steel, white Cover: acrylic
Installation	Individual; screw mounting on ceiling or wall, on track or semi-recessed (with accessory)
Accessory	Horizontal wire bracket, ceiling/wall bracket
Remarks	Dedicated ready to install versions available (KIT)
Main applications	Education, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



321/320TSW 1xTL5/TL-D



321/320TSW 2xTL5/TL-D

	A	B	C
28W	1220	1200	1000
49W	1520	1500	1000
18W	685	670	430
36W	1295	1280	1000
58W	1595	1580	1000

	A	B	C
28W	1220	1200	1000
49W	1520	1500	1000
18W	685	665	430
36W	1295	1275	1000
58W	1595	1575	1000



Twigy waterproof luminaire with TL5 or TL-D fluorescent lamp and opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
320TSW 1xTL-D18W IC O	2.07	352106 00
320TSW 1xTL-D58W HFP O TW3	3.08	352465 00
321TSW 1xTL-D58W IC O TW3	4.52	352854 00
320TSW 1xTL5-49W HFP O	3.20	354339 00
320TSW 1xTL5-49W HFP O TW3	2.96	354346 00

Please contact your local Philips representative for additional configurations



Twigy waterproof luminaire with TL5 or TL-D fluorescent lamp and prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
320TSW 1xTL-D18W IC P	1.78	352151 00
321TSW 1xTL-D58W IC P TW3	5.40	352892 00
320TSW 1xTL-D58W HFP P TW3	3.36	354087 00
320TSW 1xTL5-28W HFP P TW3	2.79	354421 00
320TSW 1xTL5-49W HFP P TW3	3.40	354445 00

Please contact your local Philips representative for additional configurations



Twigy waterproof luminaire with TL5 or TL-D fluorescent lamps and opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
321TSW 2xTL-D58W HFP O TW3	4.47	352489 00
321TSW 2xTL-D18W IC O	2.33	352519 00
321TSW 2xTL-D58W IC O TW3	6.15	352533 00
321TSW 2xTL5-49W HFP O	4.19	354384 00
321TSW 2xTL5-49W HFP O TW3	4.32	354391 00

Please contact your local Philips representative for additional configurations



Twigy waterproof luminaire with TL5 or TL-D fluorescent lamp and prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
321TSW 2xTL-D18W IC P	2.28	352564 00
321TSW 2xTL-D58W IC P TW3	6.40	352588 00
321TSW 2xTL-D58W HFP P TW3	4.44	354230 00
321TSW 2xTL5-28W HFP P TW3	3.80	354476 00
321TSW 2xTL5-49W HFP P TW3	4.40	354490 00

Please contact your local Philips representative for additional configurations

Accessories



Horizontal wire bracket

Product ID	EOC
320ZSW CAB	354568 99



Ceiling/wall bracket, available in brown (BN) and zinc coated (ZC)

Product ID	EOC
600ZCW MBW BN	351000 99

Twinny



Twinny – discreet waterproof lighting

Twinny is a versatile enclosed luminaire for surface or semi-recessed mounting in areas requiring IP44 protection. It has a slim, clean design with translucent edges to create an impression of brightness. Twinny is available in 1- and 2-lamp TL-D and TL5 versions with prismatic or opal cover and optional internal reflectors (wide-beam, narrow-beam and asymmetric) for improved performance. It offers easy access for maintenance.

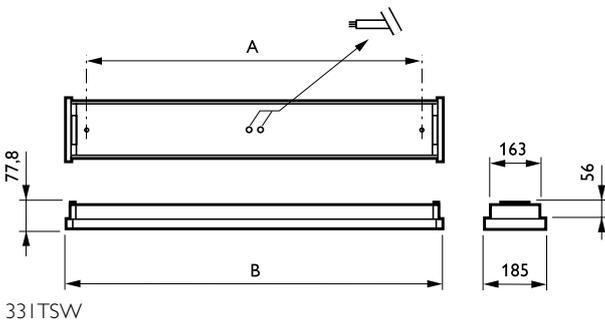
www.philips.com/lighting

Twinny	
Type	331TSW (TL-D version) 332TSW (TL5 version)
Light source	Fluorescent: 1 x or 2 x MASTER TL5 / G5 / 14, 24, 28, 35, 49 W 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	Yes (lamp color 830 or 840)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) High Frequency Regulator; touch-switch (HFR-T) Low-loss (LW)
Reflector	Narrow beam (NB) Wide beam (WB) Asymmetrical beam (A)
Optical cover	Opal cover (O) Prismatic cover (P)
Connection	Push-in connector; inside housing

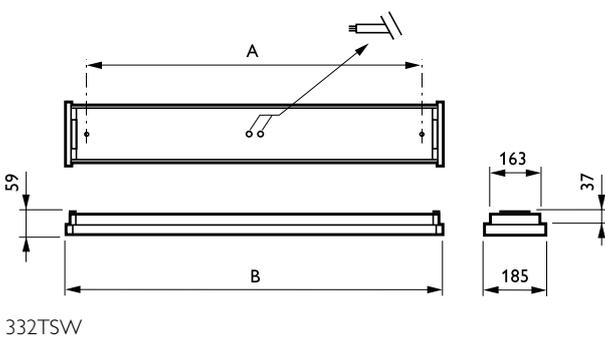
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3) Through-wiring: 3-phase, 5 x 1.5 mm ² (TW3) Connection: Cable with CEE 7 plug, 3-pole (CCE) Cable with EnstoNet plug, 3-pole (CEN) Cable with Wieland plug (CW)
Material	Housing: hot-galvanised steel, white Cover: PMMA (opal cover), polycarbonate (prismatic cover) End plates: polycarbonate (translucent edges)
Installation	Individual; screw mounting, directly onto surface, semi-recessed On catenary wire or adjustable wall brackets
Accessory	Catenary and wall brackets
Main applications	Education, industry



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



	A	B
36W	1178	1271
58W	1478	1571



	A	B
28W	1121	1212
35W, 49W	1421	1512



Twinny 331TSW luminaire with TL-D fluorescent lamp(s) and opal reflector (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
331TSW 2xTL-D58W/830 IC O	6.10	034026 00
331TSW 2xTL-D18W/840 IC O	3.40	041031 00
331TSW 1xTL-D36W/830 IC O	4.20	051665 00
331TSW 2xTL-D36W/840 HFP O	3.40	340004 00
331TSW 2xTL-D58W/840 HFP O	4.70	340011 00

Please contact your local Philips representative for additional configurations



Twinny 331TSW luminaire with TL-D lamp(s) and prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
331TSW 2xTL-D36W/830 IC P	4.40	034033 00
331TSW 2xTL-D18W/830 IC P	3.40	041048 00
331TSW 1xTL-D58W/840 HFP PTW3	4.70	041857 00
331TSW 1xTL-D36W/830 IC P	4.20	051672 00
331TSW 2xTL-D36W/840 HFP P	3.40	340028 00

Please contact your local Philips representative for additional configurations



Twinny 332TSW luminaire with TL5 lamp(s) and opal reflector (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
332TSW 2xTL5-14W/830 HFP O	3.40	034170 00
332TSW 1xTL5-49W/830 HFP OTW3	3.60	041192 00
332TSW 2xTL5-49W/830 HFP OTW3	3.70	041253 00
332TSW 2xTL5-35W/830 HFP O	3.70	051610 00
332TSW 1xTL5-14W/830 HFP O	3.40	051702 00

Please contact your local Philips representative for additional configurations



Twinny 332TSW luminaire with TL5 fluorescent lamp(s) and prismatic cover (P)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
332TSW 2xTL5-28W/830 HFP P	3.10	034200 00
332TSW 2xTL5-35W/830 HFP P	3.70	038369 00
332TSW 2xTL5-49W/840 HFP PTW3	3.70	041222 00
332TSW 1xTL5-49W/840 HFP P	3.60	041796 00
332TSW 1xTL5-14W/830 HFP P	3.40	051719 00

Please contact your local Philips representative for additional configurations

TMW065



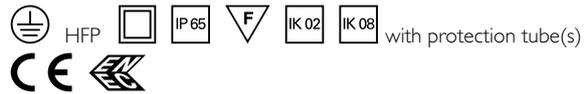
TMW065 – compact and functional

TMW065 is a compact dust- and jetproof batten for 1 or 2 TL-D fluorescent lamps, designed to allow all-round air circulation. Upon request it can be supplied with a narrow-beam reflector. TMW065 can be mounted individually or in line. Accessories include mirror reflectors, protective devices and suspension brackets for mounting on TTX400 light-line systems.

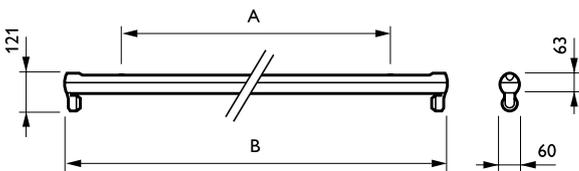
www.philips.com/lighting

TMW065	
Type	TMW065
Light source	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 18, 36, 58 W
Lamp included	No Yes (lamp color 840 or 865)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator; DALI (HFD) High Frequency Regulator (HFR) Electronic Included (EI)
Option	Emergency lighting: 3 hours (EL3) Fuse (FU) included Through-wiring, 3 phase, 5 x 1.5 mm ² (TW3)

Material	Fibre-glass reinforced polyester; grey
Installation	Individual or in-line; screw mounting
Accessory	850 °C protection tubes, mirror reflectors, through-wiring set Class I (for HF electronic types) coupling devices, protection grids and suspension brackets for mounting on TTX400 light-line system
Main applications	Industry

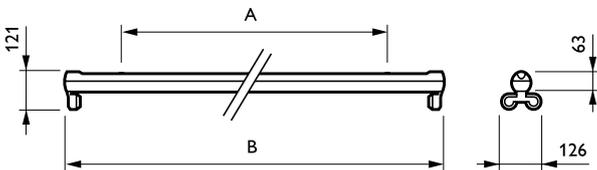


Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TMW065 1xTL-D

	A	B
18W	300	660
36W	900	1270
58W	1200	1570



TMW065 2xTL-D

	A	B
18W	300	660
36W	900	1270
58W	1200	1570



TMW065 dust- and jetproof batten for TL-D fluorescent lamp(s)



TMW065 dust- and jetproof batten for TL-D fluorescent lamp(s)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMW065 1xTL-D36W IC	1.50	204263 00
TMW065 1xTL-D58W IC	2.40	827356 00
TMW065 1xTL-D58W HFP CLI	2.40	187013 00
TMW065 1xTL-D18W I CLII	1.40	422183 00
TMW065 1xTL-D36W I CLII	2.00	422381 00

Please contact your local Philips representative for additional configurations

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TMW065 2xTL-D58W EI CLI	2.60	825581 00
TMW065 2xTL-D58W IC CLII	2.40	825642 00
TMW065 2xTL-D58W HFP CLI	2.60	187037 00
TMW065 2xTL-D18W I CLII	1.60	422602 00
TMW065 2xTL-D36W I CLII	2.55	422749 00

Please contact your local Philips representative for additional configurations

Accessories



Aluminum reflector to concentrate the lighting downwards (narrow beam distribution)

Product ID	EOC
GMW065 2 18 R	826106 99
GMW065 1 18 R	826113 99
GMW065 1 36 R	428871 99
GMW065 1 58 R	428895 99
GMW065 2 36 R	428918 99
GMW065 2 58 R	428932 99



Polycarbonate protection tube incl. I starter SIS IO

Product ID	EOC
GMW065 PT36 850/5	263031 99
GMW065 PT58 850/5	263048 99
GMW065 PT18 850/5	264281 99
GMW065 PT58 850/5	270527 99
GMW065 PT36 850/5	163086 99
GMW065 PT18 850/5	163093 99



Protection grid of yellow zinc-coated steel for 1-lamp battens

Product ID	EOC
ZMW065 36 WVG	270398 99
ZMW065 58 WVG	270534 99



Coupling device of zinc coated sheet steel

Product ID	EOC
ZMW065 CP	270541 99



Through-wiring set, 5 x 2.5 mm² Class I for internal through-wiring in battens 58 W HFP

Product ID	EOC
ZMW065 TW3-58 CLI	270558 99



Lampholder set for 1-lamp battens

Product ID	EOC
ZMW065 LPH-S SET	162447 99



Lampholder set for 2-lamp battens

Product ID	EOC
ZMW065 LPH-T SET	270565 99



Mounting bracket for surface mounted luminaire

Product ID	EOC
ZTX400 MB-SURF (2PCS)	094458 99

TBS324/326



TBS324/326 – a functional cleanroom luminaire

TBS324/326 is a luminaire range that can be applied in hospital and industrial environments requiring light fixtures with an extra level of protection. The TBS324/326 luminaires are available in multiple IP ratings in order to fulfill the different ISO classifications of cleanrooms.

The highly flexible TBS324/326 range offers both modular and non-modular versions and a wide choice of lamps and accessories. The luminaires come in 2- and 4-lamp versions with both glass and opal covers.

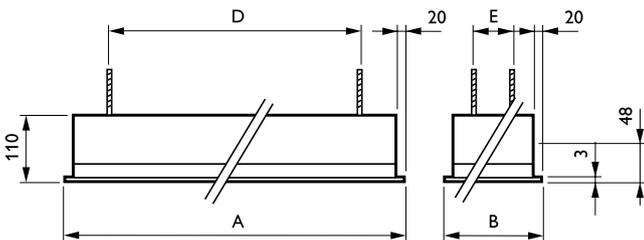
www.philips.com/lighting

Cleanroom	
Type	TBS324 (non-modular version) TBS326 (modular version)
Ceiling grid	Module size: 300 x 1200, 312,5 x 1250, 600 x 600, 625 x 625 mm Exposed tee ceiling
Light source	Fluorescent: 2 x MASTER TL5 / G5 / 28, 54 W 4 x MASTER TL5 / G5 / 14, 24 W 2 x MASTER TL-D / G13 / 36, 58 W 4 x MASTER TL-D / G13 / 18 W
Lamp included	Yes (lamp color 830)
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) Electronic Included (EI)
Optic	High-gloss optic, double parabolic (C5)
Optical cover	Opal glass tempered (O), with steel reflector Transparent glass, tempered (GT)

Connection	Push-in, inside housing
Option	Gear: HFRegulator (HFR), HFRegulator, DALI (HFD) Emergency lighting: 1 hour (EL1), 3 hours (EL3) Connector (Wieland) Separate switching of lamps (SW) Safety cable (SC) Access from top side for lamp replacement Suspension brackets to mount into a concealed ceiling system
Material	Housing: steel Optic: aluminum or steel
Installation	Individual; lay-in in exposed ceiling grids or with ceiling brackets in concealed ceiling grids
Main applications	Industry, hospitals



Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.



TBS324 2 x TL5/TL-D

	A	B	D	E
TL5	1212	312	800	170
TL-D36W	1320	356	800	215
TL-D58W	1620	356	1200	215



TBS324 luminaire for TL5 or TL-D lamps, with high-gloss high-quality aluminum optic with parabolic lamellae (C5)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS324 2xTL5-28W/830 HFP C5 GT IP65	12.25	805320 00
TBS324 2xTL5-54W/830 HFP C5 GT IP65	12.30	805382 00
TBS324 2xTL-D36W/830 HFP C5 GT IP65	14.50	805443 00
TBS324 2xTL-D36W/830 IC C5 GT IP65	13.20	805863 00
TBS324 2xTL-D58W/830 IC C5 GT IP65	20.10	805924 00

Please contact your local Philips representative for additional configurations

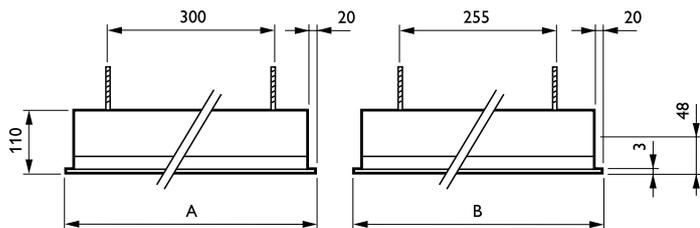


TBS324 luminaire for TL5 lamps, with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS324 2xTL5-28W/830 HFP O IP65	14.20	805740 00
TBS324 2xTL5-28W/830 HFP O IP54	14.20	805757 00
TBS324 2xTL5-54W/830 HFP O IP65	14.20	805801 00
TBS324 2xTL5-54W/830 HFP O IP54	13.20	805818 00

Please contact your local Philips representative for additional configurations



TBS324 4 x TL5/TL-D

	A	B
TL5	612	612
TL-D	662	646



TBS324 luminaire for TL5 or TL-D lamps, with high-gloss high-quality aluminum optic with parabolic lamellae (C5)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS324 4xTL5-14W/830 HFP C5 GT IP65	12.20	805566 00
TBS324 4xTL5-14W/830 HFP C5 GT IP54	12.20	805573 00
TBS324 4xTL5-24W/830 HFP C5 GT IP65	12.20	805627 00
TBS324 4xTL5-24W/830 HFP C5 GT IP54	12.20	805634 00
TBS324 4xTL-D18W/830 HFP C5 GT IP65	13.00	805689 00

Please contact your local Philips representative for additional configurations

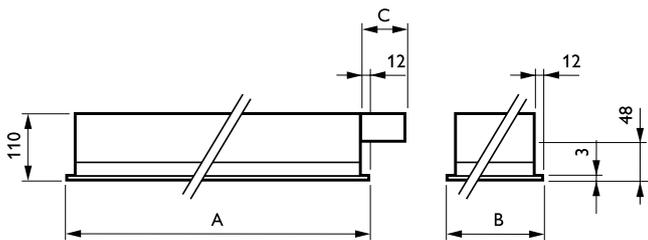


TBS324 luminaire for TL5 lamps, with opal diffuser (O)

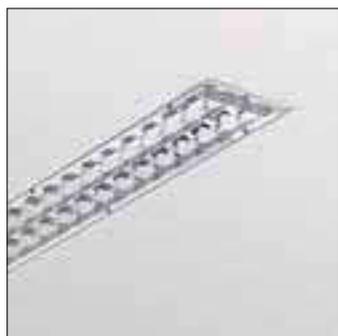
Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS324 4xTL5-14W/830 HFP O IP65	13.10	806044 00
TBS324 4xTL5-14W/830 HFP O IP54	13.10	806051 00
TBS324 4xTL5-24W/830 HFP O IP65	13.10	806105 00
TBS324 4xTL5-24W/830 HFP O IP54	13.10	806112 00

Please contact your local Philips representative for additional configurations



TBS326 2 x TL-D



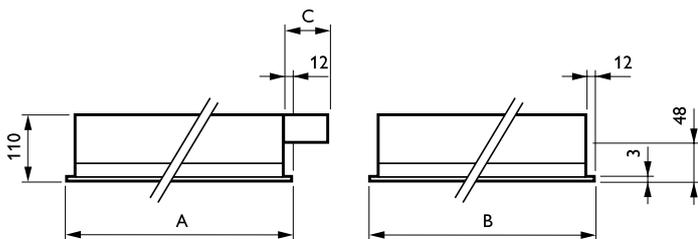
TBS326 luminaire for TL5 or TL-D lamps, with high-gloss high-quality aluminum optic with parabolic lamellae (C5)

	A	B	C
36W IP54/20	1196	296	50
36W IP54, 36W IP65	1196	296	90
58W IP54/20	1496	296	50
58W IP54, 58W IP65	1496	296	90

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS326 2xTL5-28W/830 HFP C5 GT IP65	12.25	805351 00
TBS326 2xTL5-54W/830 HFP C5 GT IP65	12.25	805412 00
TBS326 2xTL-D36W/830 HFP C5 GT IP65	12.25	805474 00
TBS326 2xTL-D58W/830 HFP C5 GT IP65	16.00	805535 00
TBS326 2xTL-D58W/830 IC C5 GT IP65	17.50	805955 00

Please contact your local Philips representative for additional configurations



TBS326 4 x TL-D



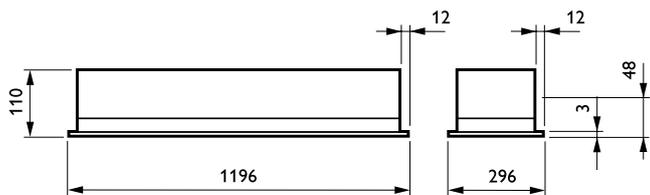
TBS326 luminaire for TL5 or TL-D lamps, with high-gloss high-quality aluminum optic with parabolic lamellae (C5)

	A	B	C
IP54/20	596	596	50
IP54, IP65	596	596	80

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS326 4xTL5-14W/830 HFP C5 GT IP65	12.20	805597 00
TBS326 4xTL5-14W/830 HFP C5 GT IP54	12.20	805603 00
TBS326 4xTL5-24W/830 HFP C5 GT IP65	12.20	805658 00
TBS326 4xTL5-24W/830 HFP C5 GT IP54	12.20	805665 00
TBS326 4xTL-D18W/830 HFP C5 GT IP65	12.80	805719 00

Please contact your local Philips representative for additional configurations



TBS326 2 x TL5

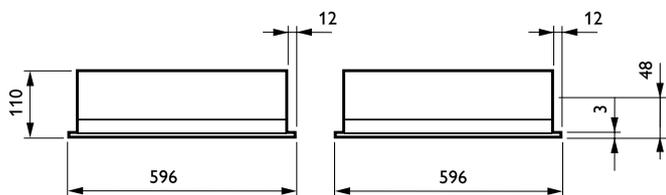


TBS326 luminaire for TL5 lamps, with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS326 2xTL5-28W/830 HFP O IP65	14.20	805771 00
TBS326 2xTL5-28W/830 HFP O IP54	13.20	805788 00
TBS326 2xTL5-54W/830 HFP O IP65	14.20	805832 00
TBS326 2xTL5-54W/830 HFP O IP54	14.20	805849 00

Please contact your local Philips representative for additional configurations



TBS326 4 x TL5



TBS326 luminaire for TL5 lamps, with opal diffuser (O)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TBS326 4xTL5-14W/830 HFP O IP65	13.10	806075 00
TBS326 4xTL5-14W/830 HFP O IP54	13.10	806082 00
TBS326 4xTL5-24W/830 HFP O IP65	13.10	806136 00
TBS326 4xTL5-24W/830 HFP O IP54	13.10	806143 00

Please contact your local Philips representative for additional configurations

TBS324/326 luminaires are available in multiple IP ratings.







Lighting controls, get the best out of artificial light

Lighting controls play a major role in all new lighting trends. From color-changing to energy-saving solutions, from Light & Health to lighting as an integral part of building automation, lighting controls are the enabler for a comprehensive project approach. In this catalog, therefore, you will find dedicated solutions to meet the challenges of a state-of-the-art project. We provide solutions for TCO (total cost of ownership) applications as well as for creating various atmospheres with lighting. The solutions we offer range from luminaire-based products to a networked approach for a complete building.

Total Cost of Ownership:

Fast, easy installation, energy savings up to 50%, flexibility and reliability will ensure an exceptional TCO throughout the life cycle of your installation.

Comfort and emotion:

Lighting plays a very important role in people's lives. With our solutions all users will enjoy great comfort and pleasure.

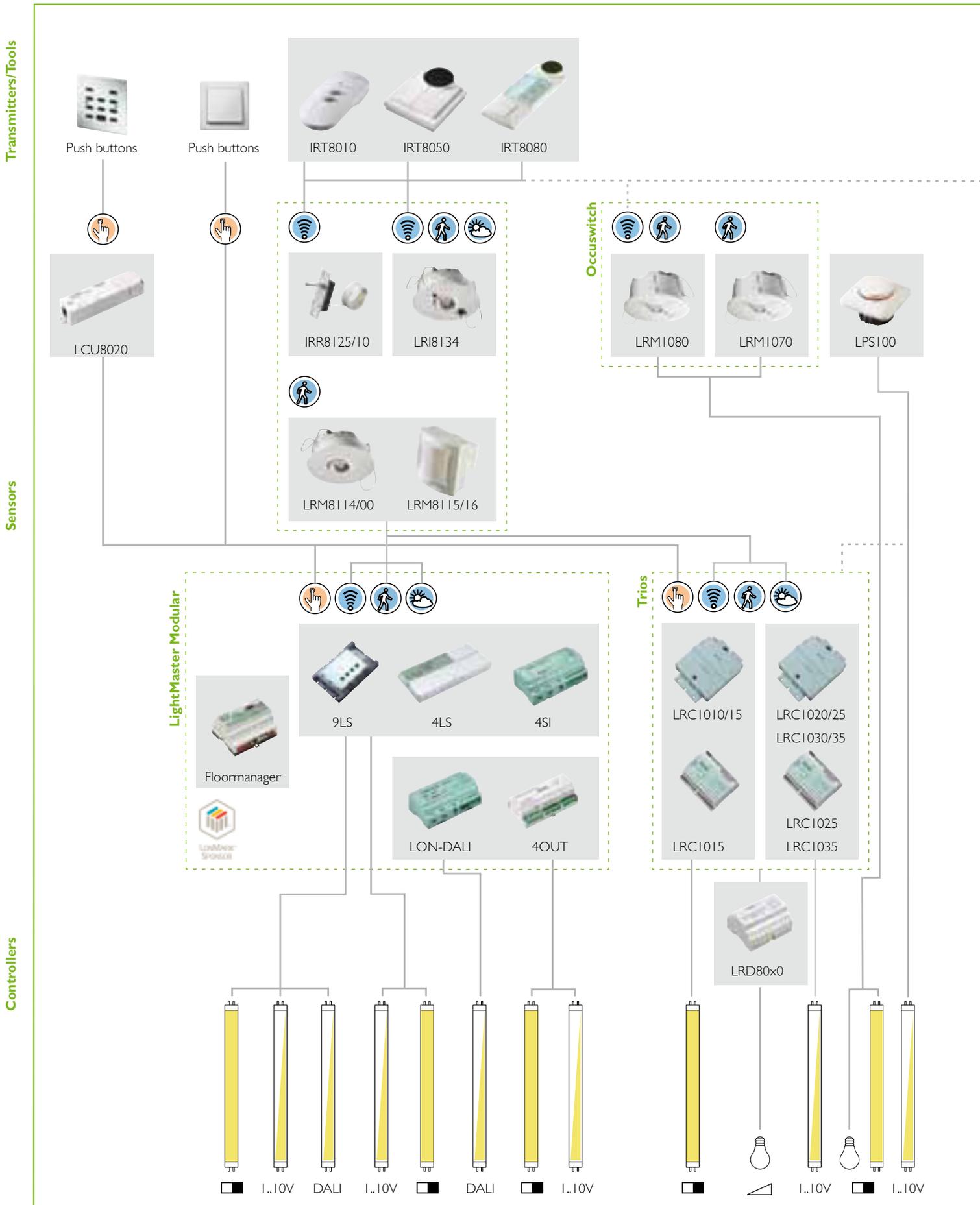
Technology:

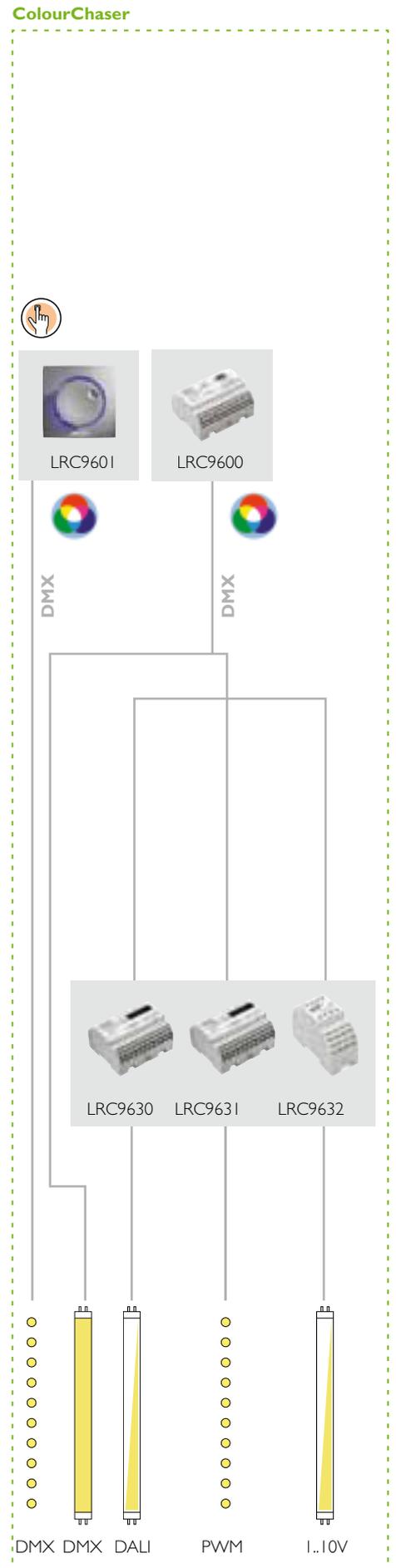
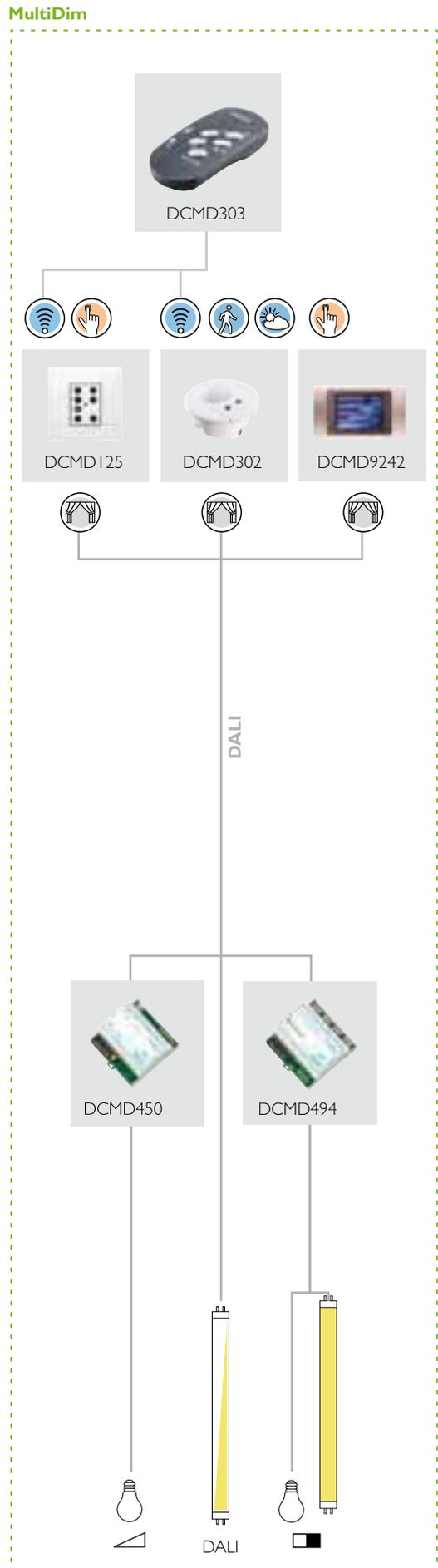
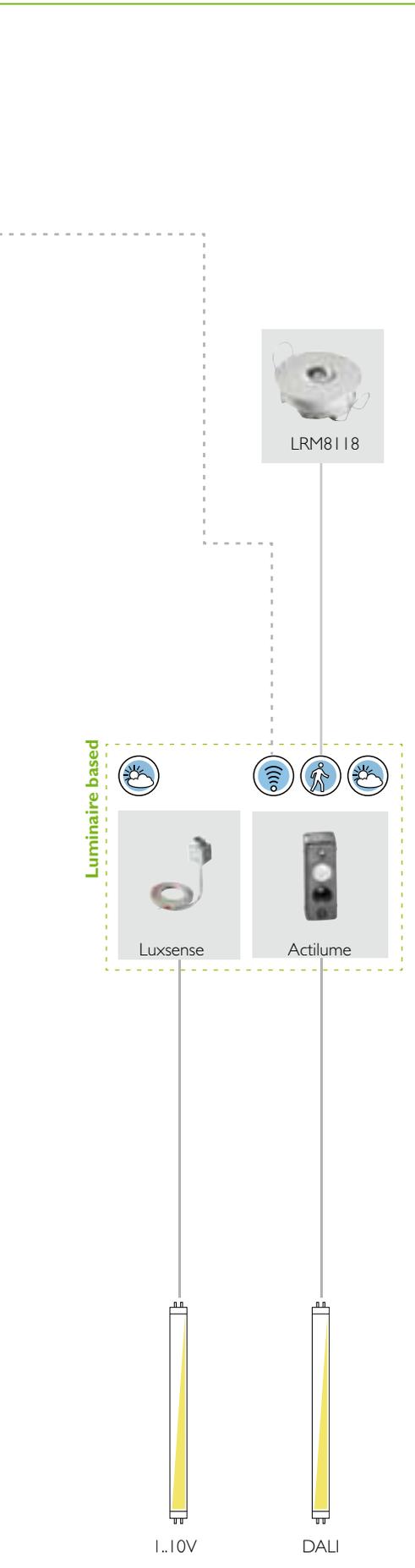
DALI, LON, DMX, RDM, TCP/IP, RF, Power Line communications are technologies we have adopted and which are used according to the application.

Project planning, realization and support:

Our people and partners are all committed to working in close cooperation with you and to ensuring that the project deliveries will meet your expectations. Please contact your local sales representative.

System Selection Matrix	LMM Building Solution	LMM – Ready to use	DynamicAmbience Kit	TRIOS	Occuswitch	ActiLume	Personal Light	Luxsense	Linesense	ColourChaser DMX	ColourWheel	MultiDim	DMX – DALI Converter	DMX – PWM Converter	PWM – 1-10V Converter
See page:	11.7	11.7	11.11	11.11	11.12	11.15	11.15	11.15	11.15	11.38	11.38	11.28	11.38	11.38	11.38
Dimming only								•							
Analog dimming control (1 – 10V)	•	•		•				•							•
Digital dimming control (DSI)	•	•													
Digital dimming control (DALI)	•	•	•			•			•			•	•		
Leading-edge/trailing-edge phase control dimming	•			•											
DMX control										•	•		•	•	
Connection of pushbuttons or switches	•	•	•	•		•			•	•		•			
Manual control of light or color	•	•		•	•	•	•		•		•	•			
Infrared remote control	•	•		•	•	•	•					•			
Presence detection (movement detection)	•	•	•	•	•	•			•	•		•			
Daylight-dependent control / switching	•				•							•			
Daylight-dependent control / dimming	•	•		•		•		•	•			•			
Dynamic Lighting	•		•				•								
Corridor linking	•											•			
Time programs	•											•			
Building modes	•					•									
Emergency lighting testing	•														
Static lighting scenes	•			•	•	•				•	•	•			
Number of static lighting scenes	8			4	4	4				4	1	16			
Dynamic lighting rhythms	•		•							•	•				
Number of dynamic lighting rhythms	4		4							4	1				
Integrated with building automation (LON)	•														
Programming via a remote control					•	•						(•)			
Programming via PC interface	•			•						•		•			
Grouping of luminaires										•		•			
Color mixing										•	•	(•)			
Color temperature control												•			
Sequencing										•	•				







Indoor lighting management system

LightMaster Modular is designed to meet the requirements of modern buildings, with the focus on the total cost of ownership (TCO). Costs are reduced by minimizing energy consumption and maximizing flexibility. This makes LightMaster Modular the future-proof solution, complying with the latest regulations.

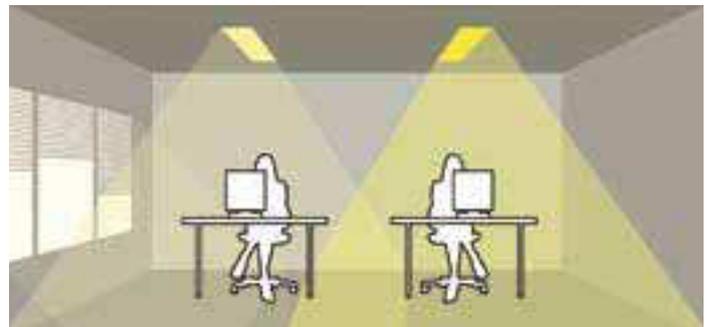
Energy savings

Awareness of the need to save energy is increasing rapidly throughout the world. Focusing on the applications with the highest possible savings, lighting is certainly one of the most promising options - 19% of the world's energy consumption is used for lighting. Philips has therefore positioned itself at the forefront of this movement with its Green Switch campaign.



Lights on when needed

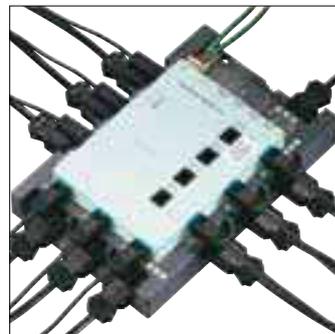
With our LightMaster Modular system we have chosen the most obvious method of saving energy, which is also the most efficient one: we adjust the light level to the actual requirements. This means switching off lights when they are not needed (presence detection) and reducing the light level when sufficient daylight is available (daylight linking). When both techniques are implemented energy consumption is reduced by 30-50%.



Perfect regulation for every area

Flexibility

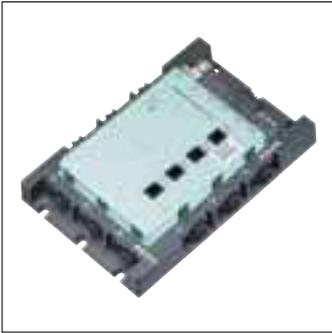
We have also recognized the market need for flexible and easy-to-use products, resulting in state-of-the-art connection technologies (Wieland) and modular system architecture, which offers the right solution for every application. With the highly flexible LightMaster Modular, the office layout can easily be adapted to the requirements of new tenants. Wiring can easily be changed, and functionality can be adjusted using intuitive PC software.



Integration

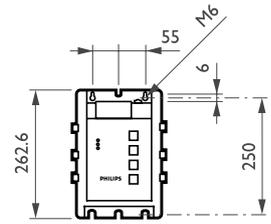
LightMaster Modular is based on LonWorks technology, so all products can be integrated seamlessly into building automation networks. Our components have been shown to be interoperable with the products of all major suppliers in the field of building automation.





A range of Lighting Control Modules (LCM) with 9 outputs, 4 sensor interfaces (light sensors, movement detectors and infrared [IR] receivers) and 4 inputs for standard wall switches and emergency test sensors. All inputs and outputs and network connections are plug-and-socket for easy and secure installation. The outputs are fused: one fuse (5 A) to each of the three sides.

The LCMs use Wieland GST connectors, either 3 pole or 4 pole with a permanent supply for emergency luminaires. The LCMs are upgradeable from non-dimming to dimming by exchanging the logic module. This can be done while the power module remains installed. The LRC5944 has three outputs that can be configured to either DALI/DSI or (mains) switching only.



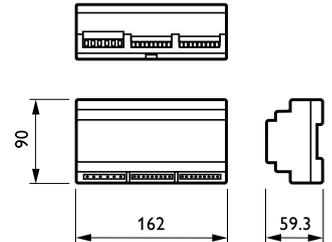
LRC5913

Product ID	Description	EOC
LRC5913/10 CONTR 9x4 PLUG 3 SW	GST-conn: 3 pole, EM-test: no, Dimming: no	731032 99
LRC5914/10 CONTR 9x4 PLUG 4 SW	GST-conn: 4 pole, EM-test: no, Dimming: no	731049 99
LRC5923/10 CONTR 9x4 PLUG 3 SW&RE	GST-conn: 3 pole, EM-test: no, Dimming: 1-10V	731056 99
LRC5924/10 CONTR 9x4 PLUG 4 SW&RE	GST-conn: 3 pole, EM-test: yes, Dimming: 1-10V	731063 99
LRC5933/10 CONTR 9x4 PLUG 3 DIG	GST-conn: 3 pole, EM-test: no, Dimming: DALI/DSI	731070 99
LRC5934/10 CONTR 9x4 PLUG 4 DIG	GST-conn: 4 pole, EM-test: yes, Dimming: DALI/DSI	731087 99
LRC5944/10 CONTR 9x4 PLUG 4 DIGSW	GST-conn: 4 pole, EM-test: yes, Dimming: DALI/DSI	731124 99



DIN-rail unit with 4 separate outputs (Switching & Regulating [1-10V]) able to switch a load of 5 A each to control luminaires directly or via contactors in the cabinet to switch higher lighting loads.

Product ID	EOC
LRC5423/10 CONTR 4X0 DIN SW&RE	731100 99

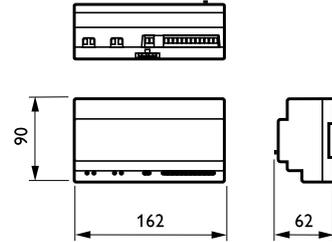


LRC5423



Input unit with 4 sensor interfaces (light sensors, movement detectors and infrared [IR] receivers) and 4 inputs for standard wall switches/emergency test sensors. DIN-rail unit, which is also suitable for use as an installation box, i.e. this unit does not require an outer enclosure.

Product ID	EOC
LRC5059/00 CONTR 0x4 SENSR & SW DIN	730240 00



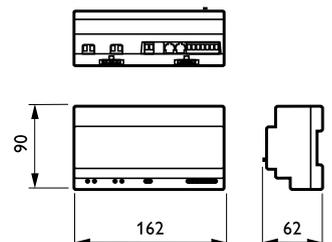
LRC5059



DALI Lighting Control Module in a DIN-rail housing with 1 DALI output. This controller can switch and regulate up to 64 DALI devices. The DALI devices can be controlled separately or in groups. The unit has inputs for sensors and switches, but is designed to work in combination with the 4SI input unit for sensors. The use of

sensors and the maximum numbers of separate DALI groups depend on the application (refer to the datasheet for more information).

Product ID	EOC
LRC5141/10 CONTR 16x2 DIN DALI	731117 99



LRC5141/5143



Lighting Control Module for Dynamic Ambience control. This controller can be used stand-alone or as part of an LMM system and holds 4 Dynamic Ambience rhythms for different types of Philips Dynamic Lighting luminaires. It can control 64 ballasts (usually 32 luminaires). For more information, see the system reference sheet.

Product ID	EOC
LRC5143/10 LON-DALI DYNAMIC LIGHT	731131 99



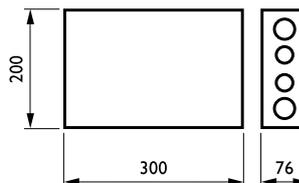
Lighting Control Module with 4 volt-free outputs, Switching & Regulating (1-10V), to allow separate circuits of the same phase to be switched. There are 2 permanent supplies for emergency luminaires, also volt-free but switched simultaneously. The 4LS has 4 sensor interfaces (light sensors, movement detectors and infrared [IR] receivers)

and 4 inputs for standard wall switches and emergency test sensors. There is a plug-and-socket network connection. The 4 outputs have screw connectors to supply switching loads up to 8 A each.

Product ID	EOC
LRC5414/10 CONTR 4x4 HW SW&RE	731094 99



A steel installer enclosure with knock-out ports for cable glands. It provides the right housing for those situations where an LMM DIN rail unit is required but where no installation cabinet is available. Cannot be used for the LRD80x0 dimmer devices.



LRH5100

Product ID	EOC
LRH5100/10 HOUSE DIN 9TE	731148 99

Network Components



The LightMaster Modular Floor Manager has an important role in connecting the physical parts (floors) of a building-wide lighting control system. It ensures transparent and open communication to all parts of the system while at the same time managing the network traffic. It also has embedded floor management

functionality and resources, like a scheduler; central control functions, data logging and a possible link to the internet using TCP/IP. The unit (DIN-rail) is supplied with a 12V DC adapter and a bus line terminator.

Product ID	EOC
LFC5099/00 NETWK FLOOR MGR WPR SUP	730288 00

Product ID	Description	EOC
LCC5301/00 CABLE BUS 100M	Bus cable, 100m	517148 00

Software

Product ID	Description	EOC
LCS5200/00 SOFTW LIGHT MGR MOD LIC 200	Software LMM 10 credits	730608 00
LCS5010/00 SOFTW LIGHT MGR MOD 10 CR	Software LMM Licence 200 credits	730615 00

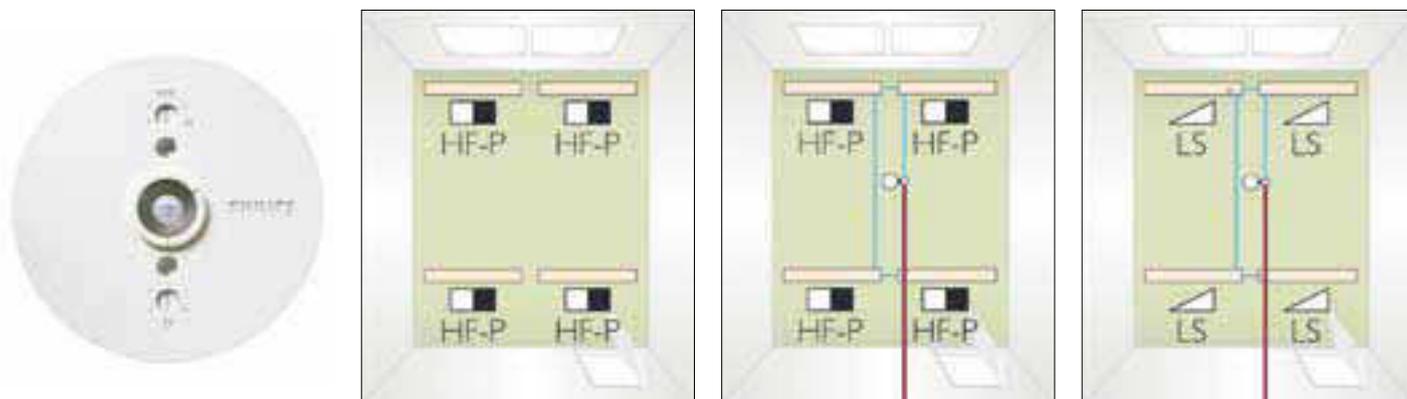


Indoor stand alone control

Our stand-alone systems are designed to offer the best solution for dedicated tasks.

To provide easy to experience energy savings in an office (Occuswitch), to improve working conditions with dynamic lighting, or to offer project specific solutions with TRIOS.

The 2nd-generation **Occuswitch** combines application experience with a contemporary design and improved functionality. It is the energy-saving solution with the fastest payback time and can easily be combined with Luxsense, our luminaire-based solution for daylight linking.



	Conventional	Occuswitch	Occuswitch + Luxsense
Initial investment	100 %	110 %	130 %
Energy savings	0 %	30 %	50 %

TRIOS is our most versatile system, which has proven its reliability in innumerable applications and projects. In combination with our superior sensor technology – also in use in LightMaster Modular – the controllers provide solutions for switching and dimming applications.



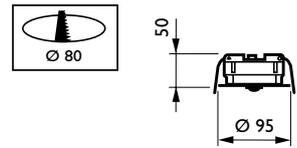
For the Dynamic Lighting concept with changing color temperature and intensity, the **Dynamic Ambience Kit** is our stand-alone solution. With only a minimal configuration it supports our Light & Well-being approach with different lighting rhythms: Human, Natural, Pendulum and Wave.





Occuswitch basic version. LRM1070 is a movement detector with a built-in switch. It switches the lights off in a room or area when it is vacated, thus saving up to 30% on electricity consumption. Occuswitch can switch any load up to 6 A and control an office area of around 20 m². A detachable mains connector enables

easy installation and mounting of Occuswitch in the ceiling. A separate Wieland cable is available for easy, fast and trouble-free installation



LRM1070/1080

Product ID	EOC
LRM1070/00 SENSR MOV DET ST	731384 99



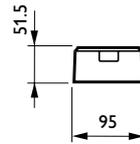
Occuswitch advanced version. LRM1080 is a movement detector with a built-in switch. It switches the lights off in a room or area when it is vacated, thus saving up to 30% on electricity consumption. Occuswitch can switch any load up to 6 A and control an office area of around 20 m². A detachable mains connector

enables easy installation and mounting of Occuswitch in the ceiling. A separate Wieland cable is available for easy, fast and trouble-free installation. Same as the LRM1070 but with parallel operation (up to 10 Occuswitches), local override and absence mode

Product ID	EOC
LRM1080/00 SENSR MOV DET ST IR	731407 99



Ceiling box for surface mounting of Occuswitch (LRM1070, LRM1080)

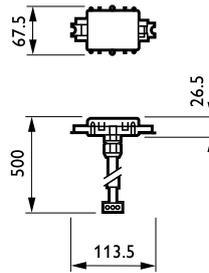


LRH1070

Product ID	EOC
LRH1070/00 SENSR SURFACE BOX	731438 99

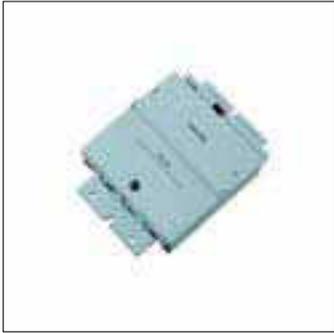


Extension cable for Wieland connection of Occuswitch (LRM1070, LRM1080)



LCC1070

Product ID	EOC
LCC1070/00 PIRT-CABLE 3P	731773 99

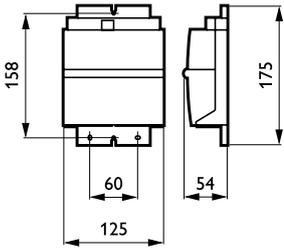


They are specifically designed for energy-saving solutions with dimmable and non-dimmable luminaires. The functionality of the switching and regulating LRC1030 can be adapted by PC programming software (available separately) for special lighting control applications. A highly informative Trios Manual is available

to assist designers and installers in selecting the correct products for their applications. Trios multifunctional and addressable light controllers in a housing for distributed installation in three versions. The switching (LRC1010) and the switching/regulating (LRC1020) versions have pre-defined functionalities that depend on the

connection of movement detector; infrared receiver and/or light sensor:

Product ID	EOC
LRC1010/20 CONTR 1x1 ST SW	731995 99
LRC1020/20 CONTR 1x1 ST SW&RE	731971 99
LRC1030/10 CONTR 1x1 PROG ST SW&R	731957 99



LRC1010/1020/1030

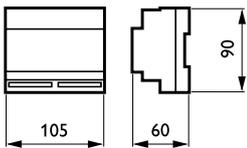


They are specifically designed for energy-saving solutions with dimmable and non-dimmable luminaires. The functionality of the switching and regulating LRC1035 can be adapted by PC programming software (available separately) for special lighting control applications. A highly informative Trios Manual is available to assist designers

and installers in selecting the correct products for their applications. Trios multifunctional and addressable light controllers in a DIN-rail housing for centralized installation in three versions. The switching (LRC1015) and the switching/regulating (LRC1025) versions have pre-defined functionalities that depend on the

connection of a movement detector; infrared receiver and/or light sensor:

Product ID	EOC
LRC1015/20 CONTR 1x1 DIN SW	732008 99
LRC1025/20 CONTR 1x1 DIN SW&RE	731988 99
LRC1035/10 CONTR 1x1 PROG DIN SW&R	731964 99



LRC1015/1025/1035



The simplest way to achieve lighting control

In order to improve comfort, energy saving and flexibility in offices, Philips has incorporated miniature lighting controls within the luminaires. Philips offers a choice of intelligent luminaire solutions that provide a wide range of functions such as daylight linking, movement detection, remote control and scene setting, with energy savings of up to 70%.

Intelligent luminaires enable lighting control to be incorporated into a building at any stage of a project. The sensor-controller combination inside the luminaire has little or no impact on the electrical installation.



ActiLume

Actilume is designed to fit the needs of open plan and cell offices, but can also be adjusted to other applications. It combines energy-saving functions with simple possibilities for user interaction. This DALI solution does not require the typical DALI commissioning procedure, but still allows additional savings from daylight harvesting when controlling two lighting groups separately. The presence detection feature also allows the external sensor connection to enlarge the detection area. The presence and daylight functions allow savings of 50% on electrical energy. Acti Lume has capabilities for manual interaction by means of a pushbutton or an IR control.



Luxsense

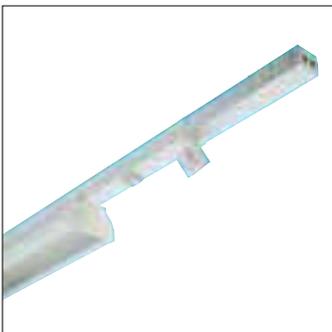
Luminaires fitted with Luxsense offer the benefit of a comfortable, constant level of illumination throughout the working day. Moreover, they can provide substantial energy savings (of between 25 and 50%) when installed near windows, where natural illumination is usually greatest. They also save further energy by maintaining the illumination level over the lifetime of the lamp, eliminating the need to set higher-than-necessary initial lighting levels to compensate for the decrease in lamp efficiency over time.



Color Variation Control (Personal Light)

Personal Light enables individuals to control the lighting according to their personal preference.

The desired lighting level and color temperature can be set by remote control (IRT7090) to suit their working situation, mood and physical condition. CVC is available for, amongst others, Savio luminaires.



Linesense

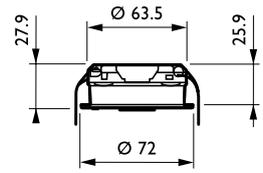
Linesense is a luminaire-based control system designed for light-line systems such as the TTX400 that helps save energy in industrial facilities and warehouses by switching the lights off when there is nobody.

Linesense consists of a 618 mm piece of trunking, which is fully pre-equipped and wired and ready to be clicked between the light-line and the electrical connection unit. High-bay movement detectors are connected with standard RJ-12 cables and mounted at the right location with the use of dedicated brackets.

ActiLume



Compact movement detector to be used to expand the detection area of luminaires incorporating ActiLume. The sensor is connected to the DALI bus from the ActiLume luminaire and does not require external power. The sensor is suitable for both recessed and surface mounting. Mounting height is between 2.5 and 3.5 m.

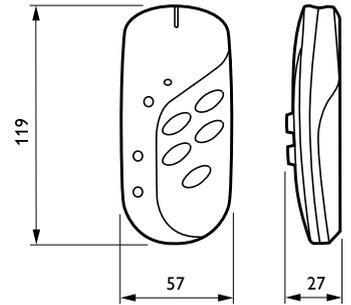


LRM8118

Product ID	EOC
LRM8118/00 ACTILUME EXTENSION SENSOR	730783 99



Simple mode selection tool for ActiLume (mode 1 and mode 2 selection). Light set point calibrator; easy to use. Batteries are included.



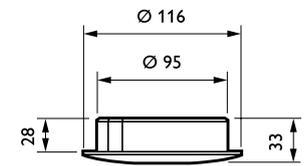
IRT8098

Product ID	EOC
IRT8098/00 ACTILUME PROGRAMMER	730806 99

Linesense



Light sensor intended for high-bay mounting (approx. 7.5 m high). Intended for use with the Linesense control (ZTX400 MDU-D). An installation bracket is included. The sensor is connected to the control unit with a modular plug-in (RJ-12) connector cable.

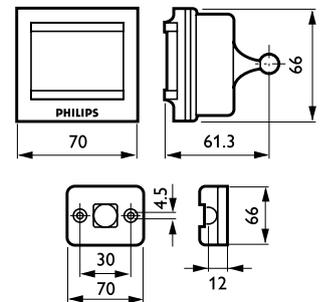


LRL8102/00

Product ID	EOC
LRL8102/00 HIGH BAY SENSR	517209 00



High-bay passive infrared movement detector (mounting height up to 15 m), equipped with an adjustable delay timer (up to 35 minutes). Can be used with all three MDU control units. A dedicated mounting bracket (ZTX400 MB-MDU) is available, into which the movement detector can be clicked.



LRM8117

Product ID	EOC
LRM8117/00 SENSR MOV DET AISLE	518473 99



General-purpose Products

General-purpose Products

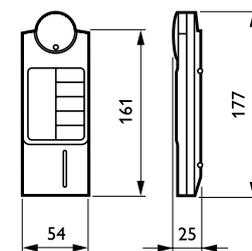
The Philips Lighting Controls range of 'general purpose products' covers all the sensors, infrared transmitters and other accessories that can be used with all our systems and some third party systems.

The performance and capabilities of the general purpose products vary according to the lighting control system they are connected to.

www.philips.com/lighting



Remote control for personal light. With this remote control, in combination with a Dynamic Lighting luminaire that includes the CVC option, the user can apply his own preferences for light level and color temperature.



IRT7090/IRT80x0

Product ID	EOC
IRT7090/00TRANSM IR CVC + DA	518855 99



Four-preset hand-held transmitter; suitable for infrared control of Trios and LightMaster Modular applications. It has four keys for presets and one key for "all off". Keys for individual control and preset programming are located under a hinged cover at the bottom of the transmitter. In "teach mode" the transmitter can be used as

commissioning tool for Trios. The group address selector switch is contained in the battery compartment. The unit is supplied complete with wall holder and batteries.

Product ID	EOC
IRT8030/00TRANSM IR TRIOS	517636 99



Hand-held transmitter; suitable for infrared control of LightMaster Modular applications combined with HVAC and Sunblind systems. It has keys for two lighting groups, blinds control and temperature control and a key for "all off/absence". Keys for lighting presets and preset programming are located under a hinged cover at the

bottom of the transmitter. The group address selector switch is contained in the battery compartment. The unit is supplied complete with wall holder and batteries.

Product ID	EOC
IRT8040/00TRANSM IR SYS	517650 99



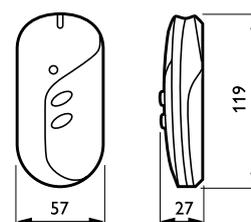
Hand-held transmitter; suitable for infrared control of various lighting control systems and other building control systems (sunblind, HVAC). The transmitter can easily be adapted to project specifications by selecting one of its 15 settings. This can be achieved without any tools, and even after installation. The group address

selector switch is contained in the battery compartment. The unit is supplied complete with text plates for the various settings, wall holder and batteries.

Product ID	EOC
IRT8080/00TRANSM IR MULTI-FUNC	517674 99



Hand-held two-key transmitter; for infrared control of various lighting control systems. The group address selector switch is contained in the battery compartment. The unit is supplied with batteries. A wall holder is available. This transmitter is not designed to be operated from the wall

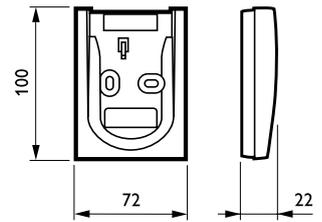


IRT8010

Product ID	EOC
IRT8010/00TRANSM IR POINT	517490 99



Wall holder for the IRT8010 hand-held two-key transmitter

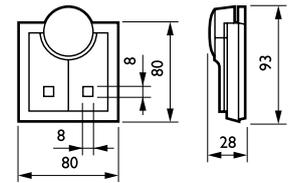


LRH8010

Product ID	EOC
LRH8010/00 MOUNT IR POINT	517971 99



Two-key infrared remote control transmitter for wall mounting and table-top use. The unit can be used in Trios applications. The actual function of the two large keys can be selected with a dip switch in the battery compartment. A dip switch is also used to select the group address.



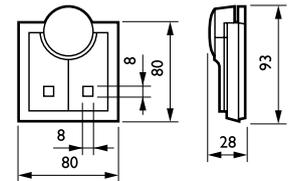
IRT8050

Product ID	EOC
IRT8050/00 TRANSM IR 2KEY WALL	517070 99



Multi-purpose infrared remote control transmitter for wall mounting, suitable for the transmission of measured temperature values. The unit can be used in integrated control systems with Heating, Ventilation and Airconditioning (HVAC) in combination with LightMaster Modular applications. The actual function of the two large keys

can be selected with a switch in the battery compartment. The same switch is used to select the group address. Only available as project special.



IRT8055

Product ID	EOC
IRT8055/00 TRANSM IR 2KEY WALL TEMP	518435 99



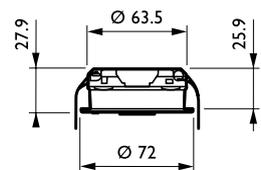
Commissioning tool for Occuswitch, Luminaires with ActiLume and Saber sensors. Easy to use and inexpensive tool to adjust the functionality and/or calibrate light levels. The functionality is depending on the product it is used with. Batteries are included.

Product ID	EOC
IRT8099/00 PRGMR IR	518893 00



Compact multi-sensor combining advanced internal light sensor, movement detector and infra-red receiver. The unit features individual element selection, variable delay-to-off via DIP switch and auto-calibrating light sensor. The movement detector can be part-shaded to limit coverage. The sensor is powered via the additional

modular plug-in (RJ12) connector cable that attaches it to a lighting controller. The sensor is suitable for both recessed and surface mounting. Mounting height is between 2.5 m and 3.5 m.



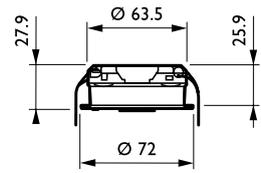
LR18134

Product ID	EOC
LR18134/00 SENSR MULTISENSOR	519043 99



Compact advanced movement detector that features variable delay-to-off via DIP switch and can be part-shaded to limit coverage. The sensor is powered via the additional modular plug-in (RJ12) connector cable that attaches it to a lighting controller. The sensor is suitable for both recessed and surface mounting. Mounting height is

between 2.5 m and 3.5 m.



LRM8114

Product ID	EOC
LRM8114/00 SENSR MOV DET	519067 99



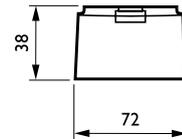
LRL5002/10 The solar level detector monitors the level of ambient light at its location. More than one solar level detector may be used to monitor daylight levels in different areas, or aspects of a building. The unit provides input to the lighting management system in order to allow use of local light level information. The detector is

normally connected to the sensor input of a Lighting Control Module (LCM)

Product ID	EOC
LRL5002/10 SENSR LIGHT EXT	731858 99



Surface mounting box for the LRI8134 and LRM8114 sensors. Comes with cut-out holes for most common cable trunking.



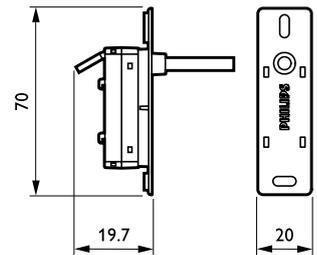
LRH8100

Product ID	EOC
LRH8100/00 SENSR SURFACE BOX	519203 99



Infrared receiver for remote control of lighting systems and other building-related functions. The unit is especially intended for "invisible" mounting behind a false ceiling. Only a thin plastic optic protrudes from the ceiling. More infrared receivers can be connected in parallel to cover large or odd-shaped rooms. It is powered from the

corresponding controller; not requiring an external power supply unit. Electrical connections with a fixed cable (1 m.) with modular plug. Mounting height 2.5 to 3 m.



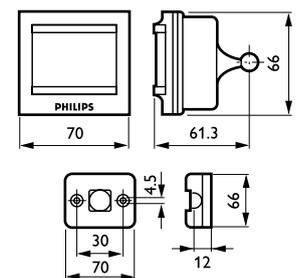
IRR8125

Product ID	EOC
IRR8125/10 SENSR IR NV	731315 99



Wall-mounted passive infrared movement detector for energy-saving solutions in indoor lighting applications (automatic light switching based on occupancy). It detects the slightest movement within a range of 25 m. Adjustable switch-off delay time of up to 35 minutes. Electrical connections via an additional sensor cable with a

modular socket ("snap-in"). The daylight override function prevents the lights being switched on if enough daylight is available.



LRM8115/ LRM8116

Product ID	EOC
LRM8115/00 SENSR MOV DET LONG	517223 99



Wall-mounted passive infrared movement detector for energy-saving solutions in indoor lighting applications. It detects movement within an angle of 90° (maximum range 15 m at a mounting height of 2.1 m). Adjustable switch-off delay time of up to 35 minutes. Electrical connections via an additional sensor cable with a modular

socket ("snap-in"). The daylight override function prevents the lights being switched on if enough daylight is available.

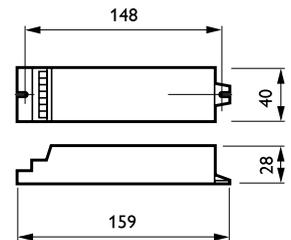
Product ID	EOC
LRM8116/00 SENSR MOV DET WIDE	518411 99



Push-button interface. RC5 code generator with digital inputs for the connection of push-buttons. Intended for manual control of light controllers and for coupling to other systems such as building management systems. The unit is connected to the infrared remote control input of the controller. Combination with an IR receiver is

possible. Codes generated depend on the input terminals used; 20 combinations are possible. Different sets of codes can be selected with a rotary switch. The unit is powered from the corresponding controller:

Product ID	EOC
LCU8020/00 INTERF PUSHBUTTON	516561 99

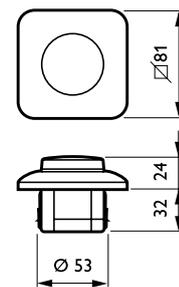


LCU8020



Manual rotary potentiometer with microswitch for recessed mounting. In combination with one or more electronic 1-10V HFR ballasts, electronic light regulators or Trios controllers, it serves to control the light level of fluorescent lamps, halogen lamps or incandescent lamps.

Product ID	EOC
LPS100/00 POTSW 1-10V DIM	558039 99

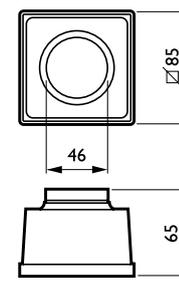


LPS100/00



Manual rotary potentiometer with microswitch for surface mounting. In combination with one or more electronic 1-10V HFR ballasts, electronic light regulators or Trios controllers, it serves to control the light level of fluorescent lamps, halogen lamps or incandescent lamps.

Product ID	EOC
LPS100/01 POTSW 1-10V DIM	558060 99

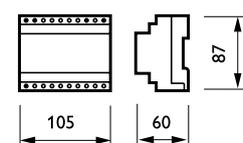


LPS100/01



Light regulator for incandescent lamps, high-voltage halogen lamps and low-voltage halogen lamps with electronic transformers. To be used in combination with either a TRIOS unit, LMM (1-10V) controller or LPS100. Max. load is 1000 VA.

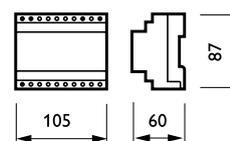
Product ID	EOC
LRD8000/10 DIMMER 1KVA MAGNETIC.TX	515717 99



LRD8000



Light regulator for incandescent lamps, high-voltage halogen lamps and low-voltage halogen lamps with electronic transformers. Max. load is 1000VA, to be used in combination with either a Trios unit, LightMaster Modular (1-10 V) controller or LPS100.



LRD8010

Product ID	EOC
LRD8010/10 DIMMER 1KVA ELECTRONIC TX	515731 99



Interlink cable of 1 m length with modular plugs at both ends for interconnection of multifunctional light controllers so that the connected sensors can be shared by several controllers.

Product ID	EOC
LCC8011/00 CABLE INTER RJ12M-RJ12M 1M	515939 99



Extension cables of 5 m length (LCC8012) and 20 m length (LCC8013) with modular plugs and sockets to increase the distance between sensors (infrared receivers, light sensors and movement detectors) and the corresponding controllers.

Product ID	EOC
LCC8012/00 CABLE EXT RJ12M-RJ12F 5M	515953 99
LCC8013/00 CABLE EXT RJ12M-RJ12F 20M	515977 99



Cable of 5 m length with modular plugs at both ends for the connection of sensors to the various types of light controllers.

Product ID	EOC
LCC8014/00 CABLE SENSR RJ12M-RJ12M 5M	516370 99



Interlink cable of 5 m length with modular plugs at both ends for interconnection of Trios light controllers. The cable is intended to distribute (only) the RC5 signal from a push-button interface over the connected controllers, especially in centrally controlled Trios applications.

Product ID	EOC
LCC8015/00 CABLE IR RJ12M-RJ12M 5M	517117 99



Branching connector with three modular sockets and one modular plug for use when several sensors are to be connected to the same controller input socket (or extension cable socket).

Product ID	EOC
LCC8024/00 CONN BLOCK RJ12 1M-3F	515991 99



Branching connector with 2 modular sockets and a modular plug with a 20 cm lead. Designed for the daisy chaining of sensors.

Product ID	EOC
LCC8025/00 T-ADAPT RJ12 1M-2F	519326 99





Scene setting system

Versatile lighting control

MultiDim is a versatile scene-setting lighting control system that is suited to a wide range of lighting applications. A variety of push-button interfaces, sensors and an easy-to-use remote control unit allow different lighting scenes to be programmed and selected, changing the mood of the room in seconds.

Creative lighting design

MultiDim is ideally suited to applications using a variety of luminaires with different lamp types, from incandescent to halogen and fluorescent. In addition, the MultiDim system can also be used to switch LCD projectors, lower projection screens or close window blinds.

Scene setting for all occasions

The MultiDim lighting control system can be used in conference halls, boardrooms, lecture theaters, hotel function rooms, museums, showrooms, cafes, restaurants and shops. Basically in any application where easy access to lighting adjustment is required.

Digital control solution

MultiDim offers a versatile and easy-to-install lighting control solution that brings the benefits of digital lighting control to many different application areas.

Quick and economical installation

MultiDim consists of an integrated range of DALI-compatible devices that can be interlinked to create the desired lighting control functionality. The system's digital addressable architecture means that only a single two-core cable is needed to interconnect all the units. The elimination of conventional vertical wall wiring reduces both installation time and cost. In addition, the system architecture makes it easier for the system to be modified at a later date.

Freedom in lighting design

MultiDim offers great flexibility and ease of lighting system design. The MultiDim controllers can be used directly in combination with DALI-compatible fluorescent ballasts and lamp interface units (both high-voltage incandescent lamps and low-voltage halogen lamps).

Maximizing flexibility with DALI

Thanks to the system's digital addressable control and communication concept, each unit in the DALI network has its own unique address that allows it to be switched and controlled independently. Up to 63 devices can be connected to the same physical control line. Luminaires can be grouped and fade times or room-specific parameters set via the MultiDim commissioning software package.

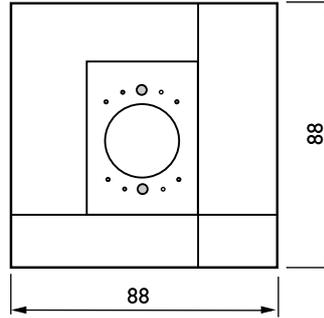


Accessories



MultiDim rotary module providing dimming functionality + IR receiver

Product ID	EOC
DCMD100 MODULE ROTARY	747921 00

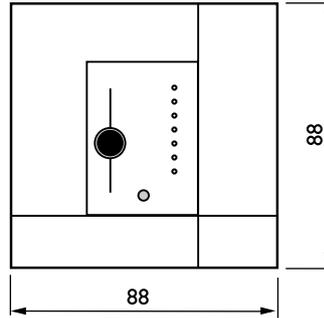


DCMD100



MultiDim control module with single slider providing dimming functionality + IR receiver

Product ID	EOC
DCMD110 MODULE SINGLE SLIDER	747938 00

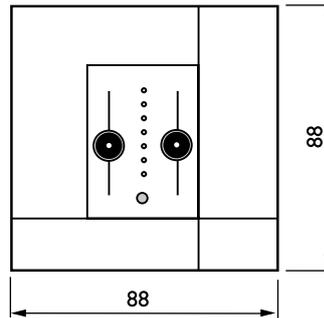


DCMD110



MultiDim control module with twin sliders, both providing dimming functionality + IR receiver

Product ID	EOC
DCMD111 MODULETWIN SLIDER	747945 00

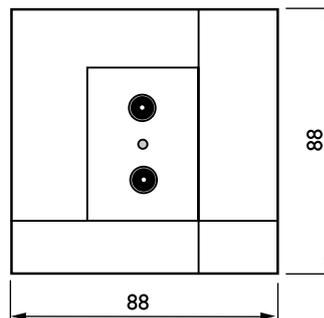


DCMD111



MultiDim 2-button control module providing ON and OFF functionality + IR receiver

Product ID	EOC
DCMD121 MODULE 2 BUTTON ON/OFF	747952 00

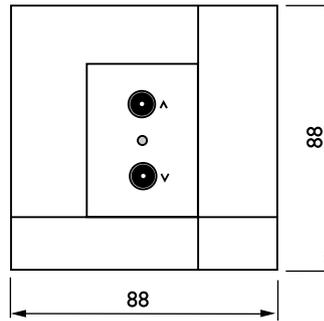


DCMD121



MultiDim 2-button control module
providing raise and lower functionality
+ IR receiver

Product ID	EOC
DCMD I 22 MODULE 2 BUTTON UP/DWN	747969 00

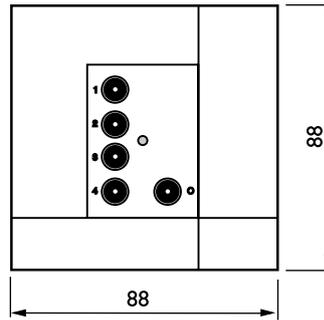


DCMD I 22

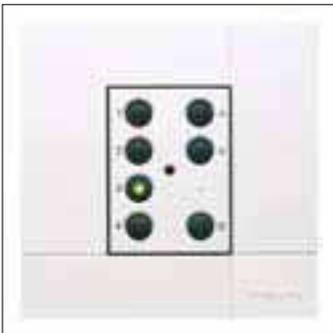


MultiDim 5-button control module
providing 4 scene buttons and OFF
button + IR receiver

Product ID	EOC
DCMD I 24 MODULE 5 BUTTON	747976 00

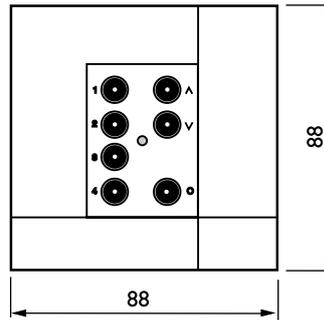


DCMD I 24



MultiDim 7-button control module
providing 4 scene buttons, 2 raise/
lower buttons and OFF button + IR
receiver

Product ID	EOC
DCMD I 25 MODULE 7 BUTTON	747983 00

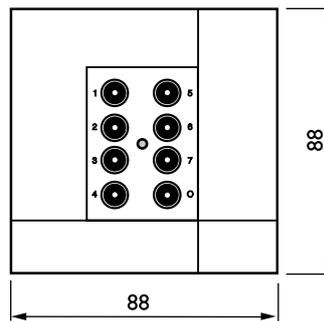


DCMD I 25

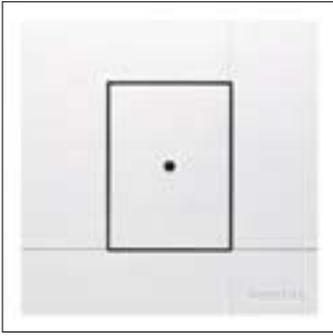


MultiDim 8-button control module
providing 7 scene buttons and OFF
button + IR receiver

Product ID	EOC
DCMD I 26 MODULE 8 BUTTON	747990 00

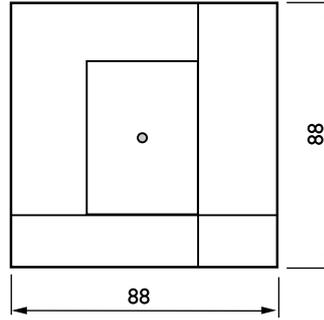


DCMD I 26

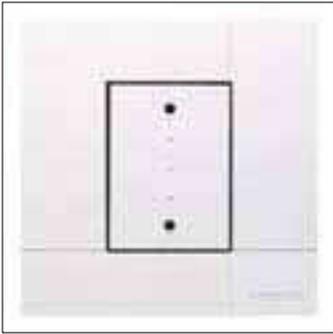


MultiDim single blank module used to cover an empty module position in a frame

Product ID	EOC
DCMD150 MODULE SINGLE BLANK	748003 00

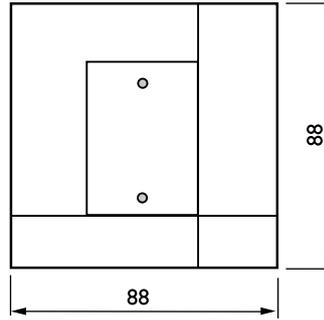


DCMD150



This MultiDim module provides IR receiver functionality only.

Product ID	EOC
DCMD170 MODULE IR RECEIVER	748010 00

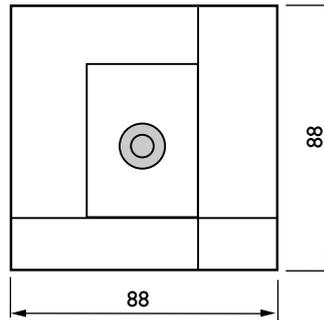


DCMD170



This MultiDim module provides a hardware programming point for a PC or laptop to be connected to the MultiDim system via a dedicated serial interface cable.

Product ID	EOC
DCMD180 MODULE PROGR POINT	748027 00

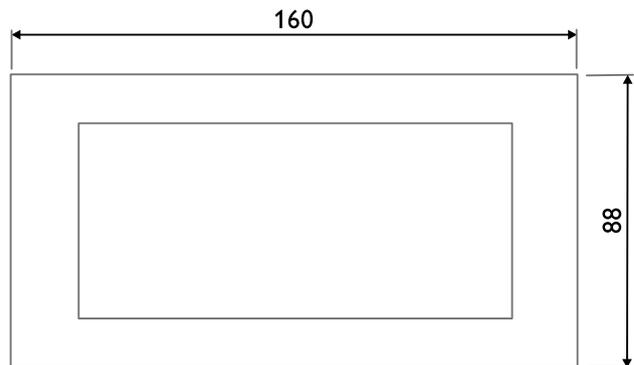


DCMD180



White MultiDim frame that can hold up to 3 MultiDim control modules

Product ID	EOC
DCMD200D FRAME TRIPLE MODULE	748034 00

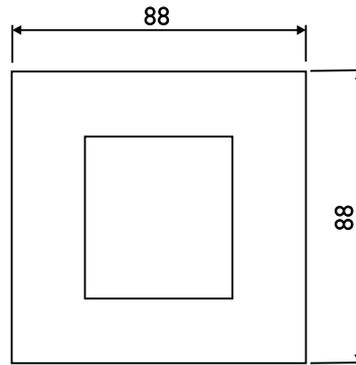


DCMD200D



White MultiDim frame that holds a single MultiDim control module

Product ID	EOC
DCMD200S FRAME SINGLE MODULE	748041 00

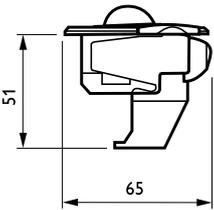


DCMD200S

Product ID	EOC
DCMD302 MULTISENSOR CEILING	747877 00



This ceiling-mounted multi-sensor contains an IR receiver, a constant light sensor that measures reflected light from below the device, and a PIR occupancy sensor. The multi-sensor is provided with a 40° angle restrictor for the light sensor. The timer of the PIR occupancy sensor can be set between 1 and 85 minutes.

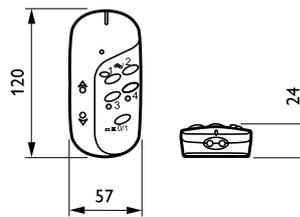


DCMD302



MultiDim 7-button IR transmitter: The IR remote control provides basic functions such as ON/OFF, up/down and a selection of four preset light scenes. It can also be used as a basic system configuration tool.

Product ID	EOC
DCMD303 TRANSM IR 7KEY	747884 00

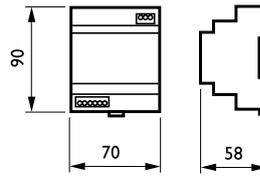


DCMD303



MultiDim DIN-rail-mounted power supply to feed the DALI wire. The power supply is capable of a maximum load of 250 mA.

Product ID	EOC
DCMD400 POWER SUPPLY DIN	747891 00



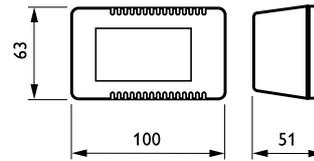
DCMD400

DCMD400



MultiDim ceiling-mounted power supply to feed the DALI wire. The power supply is capable of a maximum load of 250 mA.

Product ID	EOC
DCMD401 POWER SUPPLY CEILING	748744 00

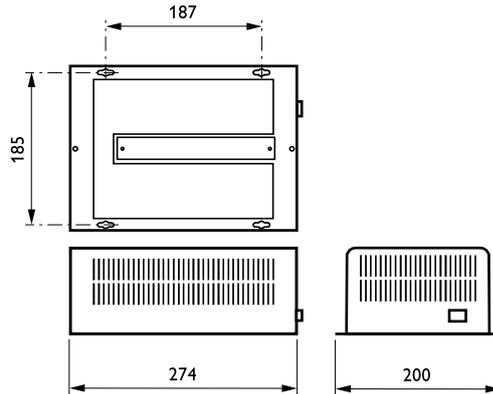


DCMD401



Solo Dimmer; capable of dimming a single channel with total loads of up to 16A. It is suitable for controlling a variety of light sources. The dimmer is controlled by a digital signal, using the DALI (Digital Addressable Lighting Interface) protocol.

Product ID	EOC
DCMD416 SINGLE CHANNEL DIMMER 16A	731667 99



DCMD416



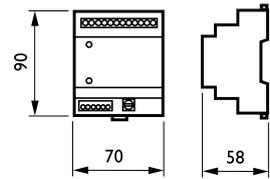
Solo Dimmer; capable of dimming a single channel with total loads of up to 25A. It is suitable for controlling a variety of light sources. The dimmer is controlled by a digital signal, using the DALI (Digital Addressable Lighting Interface) protocol.

Product ID	EOC
DCMD425 SINGLE CHANNEL DIMMER 25A	731674 99



The Input unit provides 8-volt free input contacts. The input unit has three modes of operation, two of these emulate push button panels using momentary contacts, and the third mode is for use with continuous closure contacts. Like the other controls in the MultiDim range the input unit is pre-configured for out-of-box

operation. This means you can be in control of your light from the moment that power is first applied.

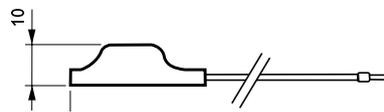
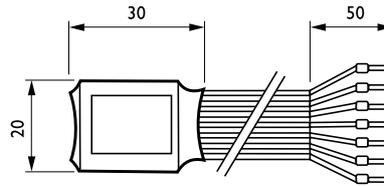


DCMD440

Product ID	EOC
DCMD440 INPUT UNIT	731681 99



This MultiDim push-button interface allows users to connect their own button panels to the MultiDim system. For retractive (push-to-make) buttons only.

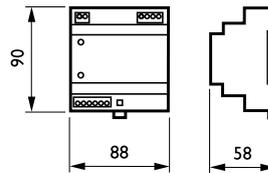


DCMD444

Product ID	EOC
DCMD444 PUSHBUTTON INTERFACE	928887 00



The 800 W transistor dimmer (trailing edge) is a DIN-rail-mounted unit that can control a maximum load of up to 800 W. It can be connected to mains-voltage (incandescent) lamps directly, or to low-voltage (halogen) lamps via an electronic transformer.



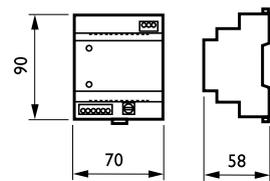
DCMD450

Product ID	EOC
DCMD450 DIMMER 800W TE	747914 00



The 1 - 10V Converter has been designed to control HF-R ballasts. This ensures that MultiDim systems are compatible with and easily integrated into existing systems. The converter can switch a maximum of 12 HF-R ballasts. The analogue 1 - 10V signal and the digital DSI signal can control 50 HF-R ballasts.

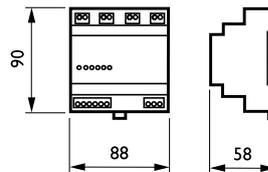
Product ID	EOC
DCMD472 CONVERTER 1-10V	731698 99



DCMD472



This MultiDim relay unit features 4 outputs capable of handling loads of up to 8 A per output.



DCMD494

Product ID	EOC
DCMD494 RELAY UNIT 4x8A	928894 00



MultiDim PC programming kit comprises configuration software, a serial interface cable and a programming point.

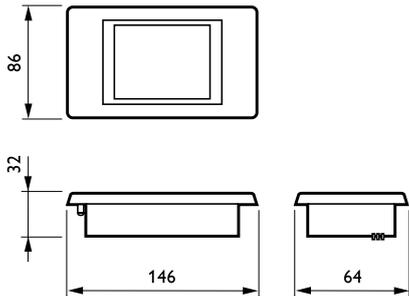
Product ID	EOC
DCMD502 PC PROGRAMMING KIT	749802 00



The Touchpanel is a touch sensitive full color LCD screen that can be used for controlling and programming a MultiDim lighting control system. Key criteria for the consumer market such as ease-of-use and installation have been fully incorporated. With a full color 3.5" high-resolution touch screen the Touchpanel also offers

first-class display quality combined with attractive looks that further boost the panels appeal. The Touchpanel can be configured easily to meet individual customer lighting control requirements.

Product ID	EOC
DCMD9242 TOUCH PANEL BSS	731650 99



DCMD9242





Create your own atmosphere, in-a-box solutions

ColourChaser is a range of simple, easy-to-use lighting control solutions that enable users to create their own lighting experience.

Providing out-of-the-box functionalities, Philips' user-friendly control solutions are ready for use immediately after installation.

Even users with minimal technical background can install and operate these "in-a-box solutions".

With the ColourChaser family it is possible to set a color, dim, or create one's own color sequence, simply by pushing a button or turning a wheel.



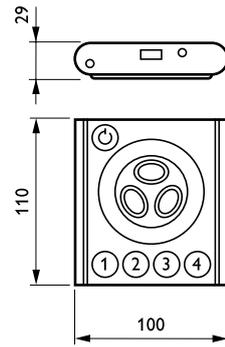
ColourChaser Touch



The ColourChaser-Touch provides an intuitive, touch-sensitive interface – with acoustic feedback – to control and match colors from multiple sources (RGB, RGBW, CMY and CMYK) and can control up to 100 (groups of) intelligent DMX-controlable color-changing luminaires.

Color (C), Intensity (I) and Saturation (S) can be simply adjusted directly by pressing the appropriate button and dialing the wheel

Product ID	EOC
LRC9611 COLOURCHASER TOUCH (48 V)	808963 99



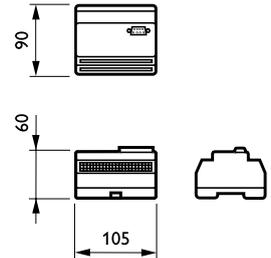
LRC9611

ColourChaser



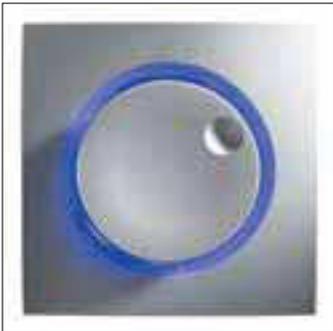
Individually control up to 48 RGB luminaires with one of the four pre-programmed sequences or create your own dynamic sequence. You can create the sequences with Windows-compatible software and upload via a standard serial connection. Individual control of up to 144 DMX channels

Product ID	EOC
LRC9600/00 COLCHAS SW DMX 144	730899 00
LRC9601/00 DMX CONTRI44+SW 730950 99 (110V)	



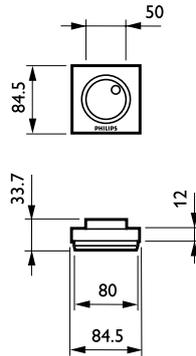
LRC9600/9601

ColourWheel



The ColourChaser Wheel makes it possible to directly set a color; dim or set a pre-programmed automatic color sequence on a maximum of 30 RGB luminaires with full manual control

Product ID	EOC
LRC9610/00 COLCHAS WHEEL DMX RGB	730882 00



LRC9610

Converters



The DMX-to-DALI converter converts four successive DMX channels into four separate DALI lines and enables digital control gear with DALI interfaces to be switched and dimmed. Connects easily to the ColourChaser DMX 144 (LRC9600) to enable DMX and DALI luminaires to work together

Product ID	EOC
LRC9630/00 DMX-DALI CONV (230V)	730929 99



The DMX-to-PWM converter converts four successive DMX channels into four separate PWM lines. Connects easily to the ColourChaser DMX 144 (LRC9600) to enable DMX and PWM luminaires to work together

Product ID	EOC
LRC9631/00 DMX-PWM CONV (230V)	730936 99

Product ID	Description	EOC
LRC9632/00 PWM-1/10V CONV	Converter PWM to 1-10V	730943 99



PHILIPS



Candeo – look on the bright side

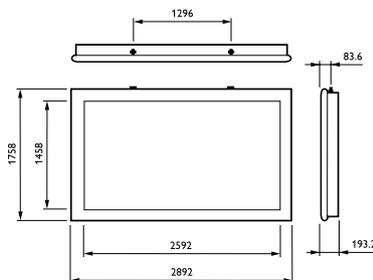
The most effective communication in larger indoor environments occurs from a distance of 5 to 50 meters. Until now, there has been no suitable means of dynamic communication that can overcome the issue of size for full impact and the ambient light conditions. With this in mind, Philips has developed the Philips Candeo range of displays, designed specifically to bridge this gap.

The Candeo LED video screen is the latest in professional display solutions. These seamless LED-based screens display all content with ultra-high brightness so viewing is crystal clear, even in bright ambient conditions. Candeo is the true out-of-the-box solution and through the use of Dynamic Power Control, can be operated from a regular European mains socket.

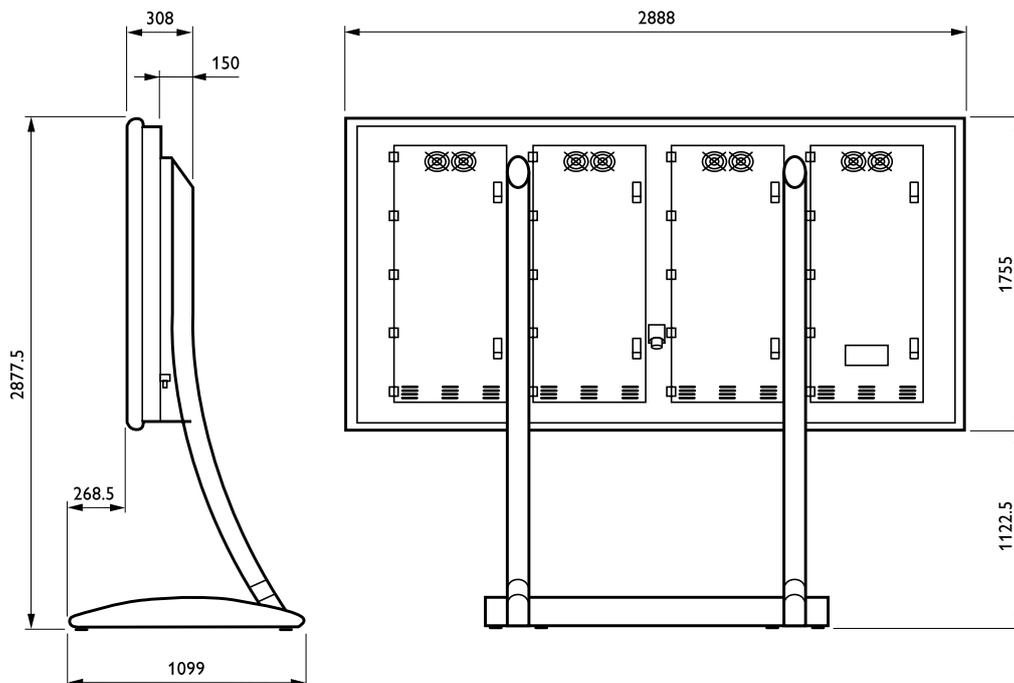
www.philips.com/vidiwall

Candeo

Types	VWL015, VWL025, VWL035
Brightness	VWL015: 1200, VWL025: 2000, VWL035: 2000 cd/m ²
Display dimensions	2592 x 1458 mm
Display screen type	3 in 1 SMD LED
Viewing angle	150° (H) / 150° (V)
Pixel pitches	4.5, 6.75, 10, 125 mm
Color temperature	6500 K
Refresh rate	>100 Hz
Grey scale	15 bit
Color resolution	45 bit
Mains Voltage	200-240 V AC 50/60 Hz
Power consumption	VWL015: 3200VA, VWL025: 2600VA, VWL035: 2600VA
LED lifetime	>100 000 hours
Optional accessories	Wall bracket, pedestal



VWL015/025/035





Technical data

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12.6	Gear types
12.8	LED technology
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12.36	Optic guide - Specifications
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Safety and protection of luminaires

Approvals and standards

Luminaires sold in the market are expected to comply with the appropriate safety requirements as laid down in the European series of standards EN 60598 prepared by CENELEC, the European Committee for Electrotechnical Standardisation, and which are almost fully harmonized with the worldwide series of standards IEC 60598. European standards are accepted as the national standards and published as such.

Since the issuing of the Low Voltage Directive the availability of the appropriate safety standards has improved the overall quality of our luminaires. The European testing institutes, in cooperation with the European Luminaire Industry, introduced the ENEC mark in January 1993.

All luminaires supplied by Philips comply with the ENEC criteria and many indeed carry the ENEC mark to show the involvement of objective third parties. The CE mark, which is a condition for the free circulation on the entire European market of products that are safe, for example, is the way our organization demonstrates its compliance with the relevant European legislation.

For more information on the European platform of Testing agencies, please consult their website www.EEPCA.org

Electrical supply

An important step has been taken to harmonise the European mains supply voltage. From 2003 onwards the voltage delivered for use in buildings is 230 V/400 V with a tolerance of $\pm 10\%$.

Philips luminaires are designed for the future and will operate well on the supply of today and tomorrow. An example is the electronic ballast designed for a rated mains voltage of 220-240 V, with tolerance for safety of $\pm 10\%$ and tolerances for performance of -8% and $+6\%$, covering the full range between 202 V and 254 V.

Electrical safety classes

Electrical equipment is classified according to the protection level against electrical shock. In normal operation as well as during service and maintenance, luminaires should be protected against electrical shock. The safety of a luminaire depends on electrical, mechanical and thermal aspects, both under normal and fault conditions. The electrical safety classification drawn up by the IEC embraces 3 luminaire classes: Class I, II and III. Low voltage luminaires designed to meet the Safety Extra-Low Voltage (SELV) limits can be categorized as Class III. The table gives a brief description of each electrical safety class. The official definitions are too long to be reproduced in full here, but can be summarized as printed below. If a protective earth connection is available, Class I luminaires are applied. However, if there is no earth connection or if eddy currents are present, Class II luminaires shall be applied. Class II water-protected luminaires are applied in wet and outdoor locations. Local electricity boards can provide the appropriate advice.

Class I - symbol

Luminaires in this class have basic insulation and are fitted with an earthing point (identified) for the connection of all those exposed metal parts that could conceivably become live in the presence of a fault.

Where the Class I luminaire is provided with a flexible power lead, it must include an earth wire.

Class II - symbol

Luminaires in this class are designed and constructed in such a way that exposed metal parts cannot become live. This can be achieved by means of either reinforced or double insulation, but without a provision for protective earthing.

Class III - symbol

The luminaires in this class are those in which protection against electric shock relies on supply at Safety Extra-Low Voltage (SELV), typically 12 V or 24 V, and in which voltages higher than those of SELV (50 V a.c. r.m.s.) are not generated. A Class III luminaire should not be fitted with a facility for protective earthing.

Ambient temperature

Philips luminaires are designed to meet the (environmental) conditions under which they are most likely to be used. The maximum ambient temperature T_a under which a luminaire can be operated safely, is indicated on the type label on the product; if no indication is given the product is intended for a maximum ambient temperature of 25°C . The ambient temperature always refers to the typical use of the luminaire: indoors or outdoors. The majority of luminaires developed for office, shop and general indoor applications show no T_a , thus indicating 25°C . Luminaires designed for industrial high-bay applications are designed for ambient temperatures as high as 40 to 45°C . The use of luminaires above their specified maximum ambient temperature may reduce safety margins and will mostly lead to a reduction of the lifetime of the various components. Electronic equipment, ballasts and lighting controls are particularly sensitive to overheating. Although (extremely) low temperatures do not normally affect the safety of luminaires, this may affect operation during the starting-up phase of the lamp. Fluorescent lamps should not be used below -5°C to -10°C . Upon request special solutions are often possible for higher or lower ambient temperatures. High-intensity discharge lamps function well below -20°C and are the most suitable lamps for outdoor use.

Protection against electrical shock		
Safety class	Symbol	Protection
I		Basic insulation plus protective earth connector
II		Double or reinforced insulation, no provision for protective earthing
III		Supply of safety extra-low voltage

Protection against ingress of solid objects, dust and moisture

The Ingress Protection system (IP) EN 60529, 1991 defines various degrees of protection against the ingress of foreign bodies, dust and moisture. The term 'foreign bodies' includes things like fingers and tools coming into contact with the electrical live parts of the product. Both safety aspects (contact with live parts) and harmful effects on the function of the luminaire are defined. The exact testing method for luminaires for each IP classification is described in the standard EN 60598, chapter 9. Some testing methods from EN 60529 were found to be inappropriate for luminaires and it must be noted that the specific conditions in an application may differ from the conditions during testing.

The designation to indicate the degree of protection consists of the characteristic letters IP followed by 2 digits indicating conformity with the conditions stated in the two tables. All Philips luminaires fulfil the minimum classification: IP20 (protected against finger contact with live parts), however a selection of luminaires, especially those for industrial and outdoor (road) applications, meet a higher IP classification. It is important to realize that the specification and safety of luminaires are only secured if the necessary maintenance is carried out according to the instructions of the manufacturer within the time schedules indicated.

Protection against ingress of dust, solid objects and moisture					
First number Degree of protection against accidental contact/contact with external elements			Second number: Degree of protection against ingress of moisture		
First number	Description	Explanation	Second number	Description	Explanation
0	Non-protected	Not protected	0	Non-protected	Not protected against moisture
1	Hand-protected	Protected against solid objects exceeding 50 mm in diameter	1	Drip-proof against vertical water drops	Water drips falling vertically shall have no harmful effect
2	Finger-protected	Protected against finger contact with live parts; and against solid objects exceeding 12 mm in diameter	2	Drip-proof when tilted at angles of up to 15°	Water drips shall have no harmful effect
3	Tool-protected	Protected against contact with live parts by tools, wire or similar objects over 2.5 mm thick; and protection against penetration of solid objects exceeding 2.5 mm in diameter	3	Rain-/spray-proof	Water falling at an angle of up to 60° shall have no harmful effect
4	Wire-protected	Protected against contact with live parts by tools, wire or similar objects over 1 mm thick; protection against penetration of solid objects exceeding 1 mm in diameter	4	Splash-proof	Splashing water from any direction shall have no harmful effect
5	Dust-accumulation-protected	Complete protection against contact with live parts and against harmful accumulation of dust; some dust may penetrate but not to the extent that operation is impaired	5	Jet-proof	Water projected by a nozzle from any direction shall have no harmful effect. (Nozzle diameter 6.3 mm, pressure 30 kPa)
6	Dust-penetration-protected	Complete protection against contact with live parts and against penetration of dust	6	Jet-proof	Water projected by a nozzle from any direction shall have no harmful effect. (Nozzle diameter 12.5 mm, pressure 100 kPa)
			7	Watertight	Watertight; temporary immersion in water under specified conditions of pressure and time possible without ingress of water in harmful quantities
			8	Pressure watertight	Pressure watertight; continuous submersion in water under specified conditions of pressure and time without ingress of water in harmful quantities

Protection against mechanical shock

The impact resistance of a luminaire defines the protection of the luminaire against mechanical shock. The European standard EN 50102 defines the degrees of protection against external mechanical impact (IK code) and the method of testing. The luminaire housing should withstand the defined energy of the mechanical shock without losing its electrical and mechanical safety, or the basic luminaire function. Translated into a more practical implementation, this means that after withstanding the shock, deformation of the mirror and housing

is allowed, although broken lamps, an unsafe electrical situation and failure to meet the specified IP classifications are not permitted. The impact resistance is expressed as a group numeral, for instance IK06, which is related to the impact energy. All types of Philips luminaires have a minimum impact resistance of 0.2 J. The table shows the ten IK classifications and the defined shock energy expressed in joules. Notice that fully vandal-proof luminaires are not available; vandal-protected (IK09) and vandal-resistant (IK10) are the best achievable classifications.

Protection against mechanical shock			
IK code	Shock energy (joules)	Description	Example
IK00	-		
IK01	0.15		
IK02	0.2	Standard	Standard open luminaire, closed luminaire with acrylic cover
IK03	0.3		
IK04	0.5	Standard plus	Open luminaire with reinforced optical system
IK05	0.7		
IK06	1		
IK07	2	Reinforced	
IK08	5	Vandal-protected	Closed luminaire with polycarbonate or hardened glass cover
IK09	10		
IK10	20	Vandal-resistant	Closed luminaire



Ball impact resistance

For indoor sports halls ball-impact-resistant luminaires are essential. As no European standards have been developed for this purpose, Philips has classified the relevant luminaires according to the German DIN 18032. After the impact test according to this standard (36 handballs targeted at a speed of 60 km/h) no damage of the luminaire should have occurred and no loose particles should drop down from the luminaire. The symbol for a ball-impact-resistant luminaire is the football. Luminaires protected by a wire guard with a grid width exceeding 60 mm are not to be used in tennis sports halls.

Flammability

From the point of view of flammability of mounting materials, luminaires can always be mounted on non-flammable building materials like concrete and stone. If luminaires are to be mounted on flammable materials special measures should be taken. Luminaires for discharge lamps with no warning sign to indicate that they are unsuitable for mounting on normally flammable surfaces, are suitable for mounting on building surfaces that do not ignite below 200°C.

Safety distance

In the application of reflector lamps and luminaires with narrow beam distributions of a high intensity, a minimum distance between light source and illuminated surface has to be ensured. This is to prevent too high temperatures of the illuminated surface. Minimum values for

Luminaire marking for flammability		
Symbol	Application	Characteristics of ceiling material
	Suitable for direct mounting on non-combustible surfaces	Stone, concrete
	Suitable for direct mounting on normally flammable surfaces	Ignition temperature materials > 200°C; some combustion time lag
	Suitable for direct mounting in/on normally flammable surfaces where thermally insulating material may cover the luminaire	Ignition temperature materials > 200°C; some combustion time lag
	Suitable for direct mounting on easily flammable surfaces, where combustible dust is present	Ignition temperature materials < 200°C; no combustion time lag

safety distances are specified on the luminaire packing. The specified values must be considered as the shortest distances permitted between light source and illuminated object or surface to ensure long-lasting safe operation.

Gear types

Fluorescent and high-intensity discharge lamps require a device to limit the current due to the unfavorable current-voltage characteristics of the lamps. Traditionally this has been achieved using electromagnetic control gear in combination with either a glow-starter switch or electronic starter. Almost the complete range of Philips fluorescent and high-intensity discharge lamp/luminaires are available with the electromagnetic type of ballast system. From the point of view of energy consumption the electromagnetic control gear system is inefficient because the losses in the system are relatively high and significant improvements are possible by applying electronic control gear instead.

Electronic control gear offers a number of advantages in comparison with electromagnetic ballasts:

- The electronic ballast offers interesting cost savings, such as reduction in energy consumption of about 25%, extension of the lamp life up to 50% and, moreover, lower maintenance costs.
- Application of electronic ballasts adds to the comfort in numerous ways: no cathode flicker occurs; at the end of lamp life the lamp is automatically switched off; smooth and rapid starting is ensured without flickering; and no stroboscopic effects can arise due to the high frequency at which the lamps are operated.
- Extra safety is assured through over-voltage detection, protected control of the mains voltage input and a noticeably lower operating temperature.
- Flexibility is enhanced: installations with fluorescent lamps, for instance, are dimmable if a regulating ballast is selected, allowing for adjustment of lighting levels to personal preference and the opportunity for additional savings on energy, e.g. by daylight-linked lighting control.

Following the trend towards greater efficiency and comfort, some of the newer fluorescent lamps like all TL5 and high-wattage PL-L types will operate only on electronic control gear.

Electronic transformers

Philips offers high frequency electronic transformers for operation with 12V halogen lamps up to and including 150W. Electronic transformers are compact, lightweight and are also dimmable. They fully comply with the applicable safety and radiofrequency interference standards. Over conventional gear they offer self-resetting short-circuit protection, thermal-switch interruption for overload protection, temperature protection by output voltage reduction and inaudible operation. Electronic transformers produce a constant output voltage, ensuring long lamp life and a constant light level.

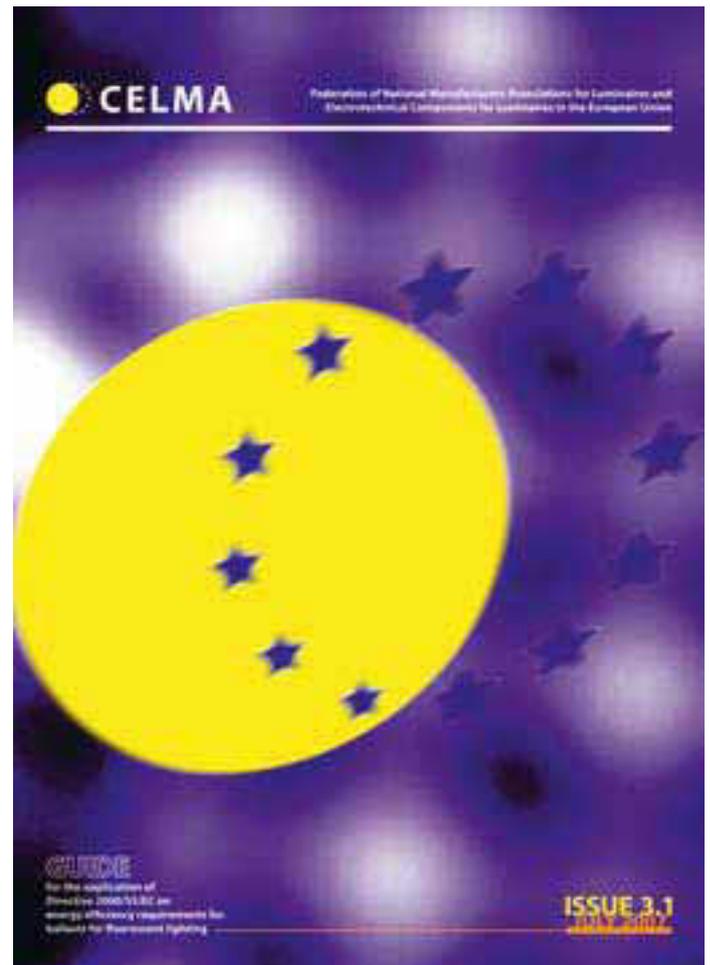
CELMA classification

The Federation of National Manufacturers' Associations for Luminaires and Electrotechnical Components for Luminaires in the European Union, CELMA, has created a guide for the application of Directive 2000/55/EC on energy efficiency requirements for ballasts

for fluorescent lighting. The Directive aims to reduce the energy consumption of ballasts for fluorescent lighting by moving gradually away from the less efficient ballasts towards more efficient ones. The degree of energy efficiency of fluorescent lighting circuits depends upon the combination of ballast and lamp. CELMA has developed a ballast classification system based on the ballast lamp system. This classification system defines ballast classes as listed in the following table. For further details refer to their website <http://www.celma.org>.

Ballast classification

Class	Typical ballast type
A1	Dimmable electronic ballasts (best energy performance)
A2	Electronic ballasts with reduced losses
A3	Electronic ballasts
B1	Magnetic ballasts with very low losses
B2	Magnetic ballasts with low losses
C	Magnetic ballasts with moderate losses
D	Magnetic ballasts with very high losses (lowest energy performance)



Fluorescent ballast types

Philips offers five options when it comes to selecting high-frequency ballasts for fluorescent lamps: HF-MATCHBOX designed for compact luminaires; HF-PERFORMER for areas where the demands are greater; HF-REGULATOR for areas where frequent dimming is required; HF-REGULATOR Touch and Dim for easy operation; and HF-DALI ballast working in accordance with the DALI Protocol. DALI stands for Digital Addressable Lighting Interface (IEC 929).

HF-DALI (HFD)

Electronic regulating ballast for TL5, PL-L and TL-D lamps.

The high-frequency regulating ballasts permit light output regulation down to 3% via the DALI control input.

HF-MATCHBOX (HFM)

Compact electronic ballast for the smaller (compact) fluorescent lamps up to 25 W. These high-frequency ballasts offer more freedom of luminaire design.

HF-REGULATOR (HFR)

Electronic regulating ballast for TL5, PL-L and TL-D lamps.

These high-frequency regulating ballasts permit light output regulation down to 3% of the maximum light output by the 1-10V control input.

Up to 60% reduction in energy consumption can be achieved by using automatic lighting control systems like Luxsense.

All Philips HF-Regulator ballasts are fitted with a dedicated integrated circuit (alpha-control) to ensure that lamp life is unaffected by the dimming level, that lamp operation is stable in every dimming setting and that energy savings are maximized when the lamp is dimmed.

HF-REGULATOR II TOUCH AND DALI (HFD-T)

The new-style electronic regulating ballast for TL5, PL-L and TL-D lamps. Standard push buttons can be used to dim the light output down to 3%. The lamp can also be switched on or off using the push-button control.

HF-PERFORMER (HFP)

Electronic ballast for TL5, PL-L and TL-D lamps.

These high-frequency ballasts offer low energy consumption. A warm-start circuit that preheats the lamp electrodes enables the lamp to be switched on and off without reducing its useful life.

HID ballast types

Philips supplies electronic control gear for metal halide and low- and high-pressure sodium lamps up to and including 150 W. They offer improved start-up performance and color stability, and prevent lamp flicker. Compact, one-piece PrimaVision ballasts are available for (mini) CDM, CDO, SDW and SON lamps. For light regulation applications DynaVision ballasts are available for CDM, CDO and SON lamps and are equipped with 1-10V or DALI control input. Larger conventional ballasts for SON lamps of 250/400 W can be controlled by means of the DynaVision Controller with 1-10V and DALI control input.

DynaVision (EBR)

The compact DynaVision ballasts allow for light regulation down to 20% light output for SON lamps or 50% for CDO lamps.

Low-frequency electronic dimming and stable flicker-free operation will increase lamp life by between 20 and 30%. Full protection against fault conditions and a self-stopping facility prevent cycling of old lamps.

PrimaVision (EB)

The compact PrimaVision ballasts provide constant power regulation over a lamp life that is up to 30% longer. They eliminate lamp flicker, offer full protection against fault conditions, and a self-stopping facility, which prevents cycling of old lamps.

Further details, specifications and availability of ballast types for all kinds of lamp types can be found at <http://www.lampsandgear.philips.com>.

The principles of LED technology

The basis for light generation inside a Light Emitting Diode (LED), a solid-state semiconductor, is the conversion of electrical energy directly into light.

On its most basic level this can be seen as an electron that moves from one material into another while losing an amount of energy. Due to the law of conservation of energy, this loss of energy needs to be converted and, inside a LED, this energy is converted into radiation energy composed of light in the visible part of the spectrum, and a bit of infrared radiation dissipated as heat.

The LED is comprised of two semiconductor regions, a positive electrically charged or p-region and a negative electrically charged or n-region, see diagram 1. In the p-region there is a shortage of electrons and in the n-region a surplus of electrons. When voltage is applied across these two regions, current begins to flow and electrons move across the p-n junction, from the n-region into the p-region. The process of an electron moving through the p-n junction releases energy. The dispersion of this energy produces photons with visible wavelengths. The higher the energy released, the shorter the wavelength becomes. Low energy photons will emit in the infrared part of the spectrum, and as the energy increases, the color of the light will change from deep red, via yellow, green, cyan and blue to the ultra-violet part of the spectrum – in fact it follows the colors of the rainbow.

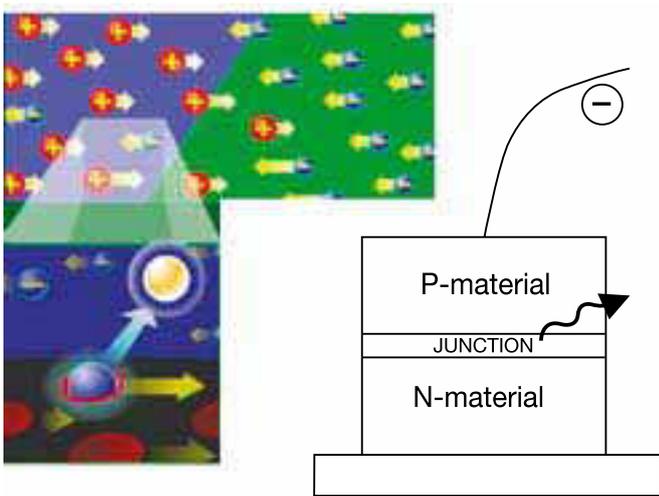


Diagram 1. LED composition with the electrically charged p- and n-regions and the p-n junction emitting light.

White light and RGB (red, green and blue)

A white LED consists of a blue LED chip and a yellow phosphor coating, see diagram 2. The blue photons generated in the semiconductor chip can either pass the phosphor layer unaffected, or be converted into yellow photons. These two colors – blue and yellow – combine to produce white light.

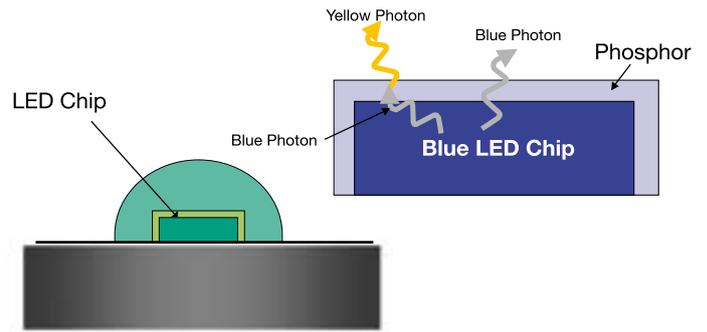
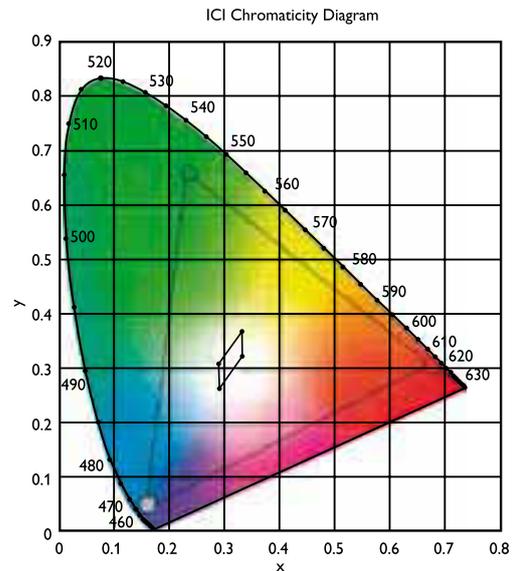


Diagram 2. White LED, the principle of white light generation.

It is also possible to generate white light with the aid of a red, green and blue LED. Such LED array systems are called RGB systems. Normally the RGB systems are used to make different color effects. With a RGB system all colors of light within the color triangle can be produced.



Graph. Color triangle for a RGB system; all colors within the triangle can be reproduced.

Characteristics and benefits

On the next page you will find an overview of the characteristics and benefits of LEDs. In the various indoor and outdoor applications different advantages will be important. Architectural applications will use the vivid colors and dynamic color control, whereas the traffic signal market is focused on maximizing energy savings and reducing maintenance costs to practically zero.

In general:

- More energy-efficient than incandescent and halogen lamps
- Much longer life, up to 50 000 hours at 70 per cent of lumen maintenance
- Reduced maintenance cost
- No unwanted IR or UV radiation in the beam of light, less risk of fading of color pigments and textile
- Highly efficient low-cost plastic optics can be used

Architecture/design:

- Design flexibility, hidden compact light sources
- Vivid saturated colors without the use of additional filters
- Directed light for increased system efficacy
- Robust, vibration-proof, solid-state lighting
- Less light pollution due to precise optical control

Unique LED advantages:

- Dynamic color control, white point adjustable
- Fully dimmable without color variation
- Instant switch-on at full color and full lighting level
- No transmission loss due to color filters
- Install and forget for a long time

Environment:

- No hazardous metals e.g. mercury in the light source

Safety and low temperature:

- Low voltage dc operation
- Highly efficient in cold environment
- Cold start capability down to -40°C
- Sealed for life waterproof luminaires

Value chain

The definition of levels of integration describes the road from LED chip to luminaire, with increasing complexity and value. Philips undertakes business activities at all levels of the value chain.

Level 0. LED chip

Semiconductor chips are the basis for every LED and these are grown in complex wafer production equipment. The wavelength of the LED is defined according to the manufacturing process, the parameters and the tolerance.

Level 1. LED component

Packaging is the next step. Here the thermal and optical properties are determined and the chip is connected to its package by means of bond wires for external connections.

Level 2. LED array

A miniature printed circuit board is used to connect one or more LEDs, possibly together with driver electronics, and acts as a thermal interface between LEDs and heat sink.

Level 3. LED module

A LED module combines heat sink, optics and separate driver in one module, ready to be installed in a luminaire.

A mono-color traffic light source is an example of level 3. Three of these modules will be combined in a level-4 traffic signal head.

Level 4. LED luminaire

A LED luminaire can be connected directly to the outside, mechanically and electrically. It houses, supplies power to and protects the LED array(s) from the environment while maintaining optimal operating conditions.

Philips LEDline is an example of a level-4 product.

				
Level 0	Level 1	Level 2	Level 3	Level 4
LED-Chip	LED or lamp	LEDs on PCB	LED module with optics and driver	Luminaire

Table. Survey of levels of integration and LED products.

LED lighting system

A LED lighting system comprises several components like a power supply, controller, control interface and luminaire/LED arrays/optics. In many cases one or more components are combined in one product for ease of installation. In other cases there might be a need for more flexibility in terms of system configuration and control. E.g. a power supply or control interface may be shared by a group of luminaires. Every single component is selected to fit the application demands.

Lighting controls

The revolution of LED technology for lighting creates new possibilities in the application of lighting. In many applications the dynamic character of LED enables a lighting solution to create a unique experience. By using RGB colors or variation in color temperature, all sorts of effects are made possible and can be specified for a particular lighting design or application, both indoor and outdoor. To enable these dynamic lighting solutions there is a need for lighting control systems that create the right experience for the customer. Philips provides a range of smart scene-setting lighting controllers that offers a reliable solution for any project, from simple color selection at the push of a button or the turn of a wheel to fully automated, pre-programmed light control and or multimedia integration.

Color characteristics of lamps

Lamps do not all emit light of the same color. There is, for example, a striking difference between the pronounced amber light from standard sodium lamps and the white light from most other lamps. Even then, one white light is not the same as another. To select the right light source for the color characteristics required, two separate parameters have to be considered, i.e. the color temperature of the emitted light and its color rendering.

Color temperature

Given that the color of the light has an important influence on the color impression of the area, the color temperature of the light source plays an essential role. To enable an objective comparison of the color impressions from various sources, subjective terms such as the popular words 'cool' and 'warm' are inadequate. A precise scale is required and given by the term 'correlated color temperature'; the color gradation of the light is compared with the light emitted by an intensely heated iron bar of which the temperature is known. In this way, the light color can be specified by a value in kelvin (K). A low color temperature represents warm, yellow, orange or red light and a high color temperature cool, blue or violet light.

Four categories, as a practical guideline, are:

2500 - 2800 K warm/cosy

The color from incandescent lamps, (compact) fluorescent lamps in the colors 827 and 927 and the SDW-T White SON lamp. Generally used for intimate and cosy environments where the emphasis is on a peaceful relaxing ambience.

2800 - 3000 K warm/neutral

The color from halogen lamps, color 830 and 930 (compact) fluorescent lamps and MASTERColour 830 lamps. Used in places where people are active, requiring a welcoming comfortable ambience.

3000 - 5000 K neutral/cool

The light color from 840 and 940 fluorescent lamps as well as MASTERColour 942 and MHN metal halide lamps. Usually applied in commercial areas and offices where a look of cool efficiency is desired.

5000 K and above daylight and cool daylight

The light color that best matches natural daylight, such as fluorescent colors 850, 865, 950 and 965 and the new ActiViva colors 451 and 452.

Color rendering

The perception of surface colors, the color rendering of the light, depends on the color content of the incident light. The light emitted by a light source is composed of a mixture of colors, all in different intensities. A change in the color mixture and intensity yields a different color rendering.

Cool daylight and incandescent lamps have fully natural color rendering properties. The same is true for halogen lamps. The reason

for this is the continuous spectrum of the sources, which is typical for filament lamps.

Most gas discharge sources, however, have an interrupted or line spectrum. This has an influence on the quality of their color rendering properties, which vary from very poor, with SOX low-pressure sodium gas discharge lamps, to excellent, with the color 90 De Luxe series fluorescent and MASTERColour 942 lamps.

When selecting a particular lamp type, a clear understanding of the color rendering properties is essential. A fair indication is given by the color rendering index (CRI), which is a standardized scale with 100 as the maximum value. Colors are best shown under a light source with the highest color rendering index. Incidentally, it is only worthwhile to compare CRI values of lamps of similar color temperature.

In practice, three color rendering categories are normally found.

CRI between Ra 90 and 100.

Excellent color rendering properties.

Applications are mainly those where correct color appraisal is a critical task.

CRI between Ra 80 and 90.

Good color rendering properties.

Applications in areas where critical color appraisal is not the primary consideration but where good rendition of colors is essential.

CRI below Ra 80.

Moderate to poor color rendering properties.

Applications in areas where the quality of color rendering is of minor importance.

The choice in favor of a particular color rendering class does, of course, depend on the demands that an application makes on a lamp. For example, a CRI of Ra 60 is inadequate for shop lighting, but is qualified as good for functional road lighting.

Light color	Color temperature in kelvin	Type of lamp or lamp color *
Cool daylight	17000	452
	8000	451
	6500	865, 965
Daylight	6000	
	5000	850, 950
Cool white	4500	HPI (-T) Plus
	4200	942, HPL-N, MHN
	4000	
Neutral white	3500	
	3400	HPL Comfort
	3000	Halogen 12V, 830, 930
"Crisp"	2900	Halogen Plusline
warm white	2800	Halogen PAR
	2700	Incandescent, 827, 927
	2500	SDW-T
"Cosy" warm white	2150	SON Comfort
	2000K	SON PIA Plus

*= For exact color temperature figures refer to the lamp family data.

Indoor applications	CRI	Type of lamp or lamp color *
Excellent	100	Incandescent, halogen 12V, 230V
	92	927, 930, 940, 950, 965
	90	CDM 942
Good	83	SDW-T
	82	451, 452, 827, 830, 840, 850, 865
	80	CDM 830, SDW-T, MHN, QL
Moderate	75	54
	70	25
	69	HPI (-T) Plus
	65	SON Comfort
	60	33
	55	35, HPL Comfort
Insufficient	50	29
	45	HPL-N
	40	SON Plus
Poor	25	SON

*= For exact color rendering index figures refer to the lamp family data.

Areas of application

Correct light impressions and correct rendering of colors assists us in recognising our surroundings. The color climate of an artificially-lit space is determined by light color temperature and color rendering.

Room furnishings of wood and fabrics in warm colors require warm lighting in the colors 827 or 927. For pleasing light the colors 830 and 930 are most suitable for many applications. The more business-like the interiors are, the cooler the light can be. Furniture using chromium, glass and marble, or in black and white, is emphasised by the neutral light colors 840 and 940. Colors 865 and 965 are best used in environments where there is a high daylight content.

For (compact) fluorescent lamps it is most economical to choose the colors 830 and 840 as they produce the highest light output.

Colors 927, 930, 940 and 950, on the other hand, give the best color rendering.

Proper use of fluorescent lamps						Optimal solution			Also suitable	
Philips light colors	Special	Warm white			Neutral white		Cool daylight			
	79	827	927	830	930	840	940	950	865	965
Sales areas										
Groceries										
Meat										
Textiles, leather										
Furniture, carpets										
Sports, games, stationery										
Photo, clocks and jewellery										
Cosmetics, hairdressing										
Flowers										
Bookshops										
Industry										
Workshops										
Electro-, mechanical assembly										
Textile manufacture										
Printing, graphical tasks										
Color testing										
Paintshops										
Stores										
Plant nurseries										
Offices, schools										
Office areas										
Conference rooms										
Teaching areas										
Lobbies, corridors										
Others										
Dwellings										
Restaurants										
Museums										
Sport, multipurpose areas										
Hospital bedrooms										
Treatment rooms										

Damage factor/Fading of color

Radiation in the form of light or heat can cause damage to objects or merchandise being displayed. The extent of deterioration of objects upon exposure to light, such as fading colors, corrosion and disintegration of structure and material, depends on:

- sensitivity of the material to radiant energy
- illumination level
- time of exposure
- spectral composition of the radiation.

Without a standard classification available for the sensitivity of materials in relation to the amount of damage under a certain light source, the only indication which can be given is the 'probable damage' caused to an object.

This method ignores the spectral sensitivity of the object concerned, and only indicates the relative damage caused by one light source compared to another. Each light source can be characterised by the damage factor DF, which yields the relative damage caused by this source compared to other sources, provided that the illuminance and exposure times are constant.

The fading risk (FR) is the deterioration in color caused by one light source, calculated for a certain period of time, relative to a reference. A fading risk of 160 is obtained in a 'worst-case' situation, e.g. an object in a shop window illuminated by bright sunshine (10,000 lux) for a period of 1 hour.

Example 1: the formula mentioned in the table for an illuminance of 500 lux, realised with fluorescent lamps color 830, results in a fading risk of 2. Thus the possible fading of pigments will occur 80 times slower than at the reference, FR of 160, so it is negligible.

Example 2: a projector produces 10,000 lux at a certain display. Applying e.g. a MASTERColour CDM lamp results in a fading risk of 40. Light sources with more ultraviolet radiation, such as metal-halide lamps without UV-filter or open halogen lamps, might, at high illuminances, result in damaging radiation.

Daylight conditions / light source	Damage factor
Overcast sky – average	1.52
Sunlight – average	0.79
Daylight through 4 mm window glass	0.43 - 0.68
Incandescent lamp	0.08
PAR38	0.11
PAR38 cool beam	0.07
Open halogen lamp	0.17
Closed halogen lamp	0.10
MASTERLine ES	0.10
MASTERColour CDM	0.22
White SON SDW-T	0.10
Open metal halide lamp	0.50
Closed metal halide lamp	0.25
Fluorescent lamps - color	
/827	0.19
/830	0.20
/840	0.21
/850	0.22
/865	0.24
/927	0.15
/930	0.15
/940	0.18
/950	0.22
/965	0.24
/29	0.17
/33	0.24
/79	0.22
FR = 0.02 x DF x E x T where	
FR = fading risk	
DF = damage factor	
E = illuminance in lux	
T = exposure time in hours	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

Fluorescent lamps**MASTER TL5 ActiViva**

TL5-24W/451	MASTER TL5 ActiViva Natural 24W	G5	8000	82	1650			20000
TL5-49W/451	MASTER TL5 ActiViva Natural 49W	G5	8000	82	4100			20000
TL5-54W/451	MASTER TL5 ActiViva Natural 54W	G5	8000	82	4250			20000
TL5-24W/452	MASTER TL5 ActiViva Active 24W	G5	17000	82	1550			20000
TL5-49W/452	MASTER TL5 ActiViva Active 49W	G5	17000	82	3700			20000
TL5-54W/452	MASTER TL5 ActiViva Active 54W	G5	17000	82	3800			20000

MASTER TL5 Circular

TL5C-22W/827	MASTER TL5 Circular 22W/827	2GX13	2700	85	1800			12000
TL5C-22W/830	MASTER TL5 Circular 22W/830	2GX13	3000	85	1800			12000
TL5C-22W/840	MASTER TL5 Circular 22W/840	2GX13	4000	85	1800			12000
TL5C-40W/827	MASTER TL5 Circular 40W/827	2GX13	2700	85	3300			12000
TL5C-40W/830	MASTER TL5 Circular 40W/830	2GX13	3000	85	3300			12000
TL5C-40W/840	MASTER TL5 Circular 40W/840	2GX13	4000	85	3300			12000
TL5C-55W/827	MASTER TL5 Circular 55W/827	2GX13	2700	85	4200			12000
TL5C-55W/830	MASTER TL5 Circular 55W/830	2GX13	3000	85	4200			12000
TL5C-55W/840	MASTER TL5 Circular 55W/840	2GX13	4000	85	4200			12000
TL5C-60W/827	MASTER TL5 Circular 60W/827	2GX13	2700	85	5000			12000
TL5C-60W/830	MASTER TL5 Circular 60W/830	2GX13	3000	85	5000			12000
TL5C-60W/840	MASTER TL5 Circular 60W/840	2GX13	4000	85	5000			12000

MASTER TL5 High Efficiency

TL5-14W/827	MASTER TL5 HE 14W/827	G5	2700	85	1200			20000
TL5-14W/830	MASTER TL5 HE 14W/830	G5	3000	85	1200			20000
TL5-14W/835	MASTER TL5 HE 14W/835	G5	3500	85	1200			20000
TL5-14W/840	MASTER TL5 HE 14W/840	G5	4000	85	1200			20000
TL5-14W/850	MASTER TL5 HE 14W/850	G5	5000	85	1100			20000
TL5-14W/865	MASTER TL5 HE 14W/865	G5	6500	85	1100			20000
TL5-21W/827	MASTER TL5 HE 21W/827	G5	2700	85	1900			20000
TL5-21W/830	MASTER TL5 HE 21W/830	G5	3000	85	1900			20000
TL5-21W/835	MASTER TL5 HE 21W/835	G5	3500	85	1900			20000
TL5-21W/840	MASTER TL5 HE 21W/840	G5	4000	85	1900			20000
TL5-21W/865	MASTER TL5 HE 21W/865	G5	6500	85	1750			20000
TL5-28W/827	MASTER TL5 HE 28W/827	G5	2700	85	2600			20000
TL5-28W/830	MASTER TL5 HE 28W/830	G5	3000	85	2600			20000
TL5-28W/835	MASTER TL5 HE 28W/835	G5	3500	85	2600			20000
TL5-28W/840	MASTER TL5 HE 28W/840	G5	4000	85	2600			20000
TL5-28W/850	MASTER TL5 HE 28W/850	G5	5000	85	2400			20000
TL5-28W/865	MASTER TL5 HE 28W/865	G5	6500	85	2400			20000
TL5-35W/827	MASTER TL5 HE 35W/827	G5	2700	85	3300			20000
TL5-35W/830	MASTER TL5 HE 35W/830	G5	3000	85	3300			20000
TL5-35W/835	MASTER TL5 HE 35W/835	G5	3500	85	3300			20000
TL5-35W/840	MASTER TL5 HE 35W/840	G5	4000	85	3300			20000
TL5-35W/865	MASTER TL5 HE 35W/865	G5	6500	85	3100			20000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTERTL5 High Output

TL5-24W/827	MASTER TL5 HO 24W/827	G5	2700	85	1750			20000
TL5-24W/830	MASTER TL5 HO 24W/830	G5	3000	85	1750			20000
TL5-24W/835	MASTER TL5 HO 24W/835	G5	3500	85	1750			20000
TL5-24W/840	MASTER TL5 HO 24W/840	G5	4000	85	1750			20000
TL5-24W/865	MASTER TL5 HO 24W/865	G5	6500	85	1650			20000
TL5-39W/827	MASTER TL5 HO 39W/827	G5	2700	85	3100			20000
TL5-39W/830	MASTER TL5 HO 39W/830	G5	3000	85	3100			20000
TL5-39W/835	MASTER TL5 HO 39W/835	G5	3500	85	3100			20000
TL5-39W/840	MASTER TL5 HO 39W/840	G5	4000	85	3100			20000
TL5-39W/865	MASTER TL5 HO 39W/865	G5	6500	85	2950			20000
TL5-49W/827	MASTER TL5 HO 49W/827	G5	2700	85	4300			20000
TL5-49W/830	MASTER TL5 HO 49W/830	G5	3000	85	4300			20000
TL5-49W/840	MASTER TL5 HO 49W/840	G5	4000	85	4300			20000
TL5-49W/865	MASTER TL5 HO 49W/865	G5	6500	85	4100			20000
TL5-54W/827	MASTER TL5 HO 54W/827	G5	2700	85	4450			20000
TL5-54W/830	MASTER TL5 HO 54W/830	G5	3000	85	4450			20000
TL5-54W/840	MASTER TL5 HO 54W/840	G5	4000	85	4450			20000
TL5-54W/850	MASTER TL5 HO 54W/850	G5	5000	85	4250			20000
TL5-54W/865	MASTER TL5 HO 54W/865	G5	6500	85	4250			20000
TL5-80W/827	MASTER TL5 HO 80W/827	G5	2700	85	6150			20000
TL5-80W/830	MASTER TL5 HO 80W/830	G5	3000	85	6150			20000
TL5-80W/840	MASTER TL5 HO 80W/840	G5	4000	85	6150			20000
TL5-80W/865	MASTER TL5 HO 80W/865	G5	6500	85	5850			20000

MASTERTL5 High Output 90 De Luxe

TL5-24W/940	MASTER TL5 HO De Luxe 24W/940	G5	4000	91	1400			20000
TL5-24W/950	MASTER TL5 HO De Luxe 24W/950	G5	5200	93	1400			20000
TL5-24W/965	MASTER TL5 HO De Luxe 24W/965	G5	6800	93	1400			20000
TL5-49W/940	MASTER TL5 HO De Luxe 49W/940	G5	4000	91	3700			20000
TL5-49W/950	MASTER TL5 HO De Luxe 49W/950	G5	5200	93	3700			20000
TL5-49W/965	MASTER TL5 HO De Luxe 49W/965	G5	6800	93	3700			20000
TL5-54W/940	MASTER TL5 HO De Luxe 54W/940	G5	4000	91	3800			20000
TL5-54W/950	MASTER TL5 HO De Luxe 54W/950	G5	5200	93	3800			20000
TL5-54W/965	MASTER TL5 HO De Luxe 54W/965	G5	6800	93	3800			20000

MASTERTL5 High Efficiency Secura, MASTERTL5 High Output Optiview, MASTERTL5 High Output Secura,**MASTERTL5 High Output Xtra, MASTERTL5 Colored** - For data refer to <http://www.lampsandgear.philips.com>**MASTERTL-D ActiViva**

TL-D18W/45I	MASTER TL-D ActiViva Natural 18W	G13	8000	82	1300		15000	20000
TL-D36W/45I	MASTER TL-D ActiViva Natural 36W	G13	8000	82	3100		15000	20000
TL-D58W/45I	MASTER TL-D ActiViva Natural 58W	G13	8000	82	5000		15000	20000

MASTERTL Mini Super 80

TL8W/827	MASTER TL Mini Super 80 8W/827	G5	2700	82	470		10000	10000
TL8W/830	MASTER TL Mini Super 80 8W/830	G5	3000	85	470		10000	10000
TL8W/840	MASTER TL Mini Super 80 8W/840	G5	4000	85	470		10000	10000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTER TL Mini Super 80								
TLI3W/827	MASTER TL Mini Super 80 13W/827	G5	2700	82	1000		8000	8000
TLI3W/830	MASTER TL Mini Super 80 13W/830	G5	3000	85	1000		8000	8000
TLI3W/840	MASTER TL Mini Super 80 13W/840	G5	4000	85	1000		8000	8000
MASTER TL-D Super 80								
TL-D15W/827	MASTER TL-D Super 80 15W/827	G13	2700	85	1000		15000	20000
TL-D15W/830	MASTER TL-D Super 80 15W/830	G13	3000	85	1000		15000	20000
TL-D15W/840	MASTER TL-D Super 80 15W/840	G13	4000	85	1000		15000	20000
TL-D18W/827	MASTER TL-D Super 80 18W/827	G13	2700	85	1350		15000	20000
TL-D18W/830	MASTER TL-D Super 80 18W/830	G13	3000	85	1350		15000	20000
TL-D18W/835	MASTER TL-D Super 80 18W/835	G13	3500	85	1350		15000	20000
TL-D18W/840	MASTER TL-D Super 80 18W/840	G13	4000	85	1350		15000	20000
TL-D18W/865	MASTER TL-D Super 80 18W/865	G13	6500	85	1300		15000	20000
TL-D30W/827	MASTER TL-D Super 80 30W/827	G13	2700	85	2400		15000	20000
TL-D30W/830	MASTER TL-D Super 80 30W/830	G13	3000	85	2400		15000	20000
TL-D30W/840	MASTER TL-D Super 80 30W/840	G13	4000	85	2400		15000	20000
TL-D30W/865	MASTER TL-D Super 80 30W/865	G13	6500	85	2300		15000	20000
TL-D36W/827	MASTER TL-D Super 80 36W/827	G13	2700	85	3350		15000	20000
TL-D36W/830	MASTER TL-D Super 80 36W/830	G13	3000	85	3350		15000	20000
TL-D36W/835	MASTER TL-D Super 80 36W/835	G13	3500	85	3350		15000	20000
TL-D36W/840	MASTER TL-D Super 80 36W/840	G13	4000	85	3350		15000	20000
TL-D36W/865	MASTER TL-D Super 80 36W/865	G13	6500	85	3250		15000	20000
TL-D38W/830	MASTER TL-D Super 80 38W/830	G13	3000	85	3350		15000	20000
TL-D38W/840	MASTER TL-D Super 80 38W/840	G13	4000	85	3350		15000	20000
TL-D58W/827	MASTER TL-D Super 80 58W/827	G13	2700	85	5200		15000	20000
TL-D58W/830	MASTER TL-D Super 80 58W/830	G13	3000	85	5200		15000	20000
TL-D58W/835	MASTER TL-D Super 80 58W/835	G13	3500	85	5200		15000	20000
TL-D58W/840	MASTER TL-D Super 80 58W/840	G13	4000	85	5200		15000	20000
TL-D58W/865	MASTER TL-D Super 80 58W/865	G13	6500	85	5000		15000	20000
MASTER TL-D 90 De Luxe								
TL-D18W/930	MASTER TL-D 90 De Luxe 18W/930	G13	3000	92	1100		15000	20000
TL-D18W/940	MASTER TL-D 90 De Luxe 18W/940	G13	4000	91	1200		15000	20000
TL-D18W/950	MASTER TL-D 90 De Luxe 18W/950	G13	5300	93	1150		15000	20000
TL-D18W/965	MASTER TL-D 90 De Luxe 18W/965	G13	6500	93	1150		15000	20000
TL-D30W/930	MASTER TL-D 90 De Luxe 30W/930	G13	3000	92	1950		15000	20000
TL-D36W/930	MASTER TL-D 90 De Luxe 36W/930	G13	3000	92	2800		15000	20000
TL-D36W/940	MASTER TL-D 90 De Luxe 36W/940	G13	4000	91	2800		15000	20000
TL-D36W/950	MASTER TL-D 90 De Luxe 36W/950	G13	5300	93	2800		15000	20000
TL-D36W/965	MASTER TL-D 90 De Luxe 36W/965	G13	6500	93	2800		15000	20000
TL-D58W/930	MASTER TL-D 90 De Luxe 58W/930	G13	3000	92	4350		15000	20000
TL-D58W/940	MASTER TL-D 90 De Luxe 58W/940	G13	4000	91	4600		15000	20000
TL-D58W/950	MASTER TL-D 90 De Luxe 58W/950	G13	5300	93	4550		15000	20000
TL-D58W/965	MASTER TL-D 90 De Luxe 58W/965	G13	6500	93	4550		15000	20000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTER TL-D Reflex Eco

TL-DR18W/830	MASTER TL-D Reflex Eco 18W/830	G13	3000	85	1350		15000	20000
TL-DR18W/840	MASTER TL-D Reflex Eco 18W/840	G13	4000	85	1350		15000	20000
TL-DR18W/865	MASTER TL-D Reflex Eco 18W/865	G13	6500	85	1300		15000	20000
TL-DR36W/830	MASTER TL-D Reflex Eco 36W/830	G13	3000	85	3350		15000	20000
TL-DR36W/840	MASTER TL-D Reflex Eco 36W/840	G13	4000	85	3350		15000	20000
TL-DR36W/865	MASTER TL-D Reflex Eco 36W/865	G13	6500	85	3250		15000	20000
TL-DR58W/830	MASTER TL-D Reflex Eco 58W/830	G13	3000	85	5200		15000	20000
TL-DR58W/840	MASTER TL-D Reflex Eco 58W/840	G13	4000	85	5200		15000	20000
TL-DR58W/865	MASTER TL-D Reflex Eco 58W/865	G13	6500	85	5000		15000	20000

MASTER TL-D Secura

Remarks *For optimum safety it is advisable to replace the lamps after 10000 hours if any damage in the coating is apparent

TL-DS18W/830	MASTER TL-D Secura 18W/830	G13	3000	85	1300		15000*	20000*
TL-DS18W/840	MASTER TL-D Secura 18W/840	G13	4000	85	1300		15000*	20000*
TL-DS30W/830	MASTER TL-D Secura 30W/830	G13	3000	85	2350		15000*	20000*
TL-DS30W/840	MASTER TL-D Secura 30W/840	G13	4000	85	2350		15000*	20000*
TL-DS36W/830	MASTER TL-D Secura 36W/830	G13	3000	85	3200		15000*	20000*
TL-DS36W/840	MASTER TL-D Secura 36W/840	G13	4000	85	3200		15000*	20000*
TL-DS58W/830	MASTER TL-D Secura 58W/830	G13	3000	85	5000		15000*	20000*
TL-DS58W/840	MASTER TL-D Secura 58W/840	G13	4000	85	5000		15000*	20000*

MASTER TL-D Xtra

TL-D-XA18W/830	MASTER TL-D Xtra 18W/830	G13	3000	85	1350		28000	55000
TL-D-XA18W/840	MASTER TL-D Xtra 18W/840	G13	4000	85	1350		28000	55000
TL-D-XA18W/865	MASTER TL-D Xtra 18W/865	G13	6500	85	1250		28000	55000
TL-D-XA30W/830	MASTER TL-D Xtra 30W/830	G13	3000	85	2400		28000	55000
TL-D-XA30W/840	MASTER TL-D Xtra 30W/840	G13	4000	85	2400		28000	55000
TL-D-XA36W/830	MASTER TL-D Xtra 36W/830	G13	3000	85	3250		28000	55000
TL-D-XA36W/840	MASTER TL-D Xtra 36W/840	G13	4000	85	3250		28000	55000
TL-D-XA36W/865	MASTER TL-D Xtra 36W/865	G13	6500	85	3200		28000	55000
TL-D-XA58W/830	MASTER TL-D Xtra 58W/830	G13	3000	85	5200		28000	55000
TL-D-XA58W/840	MASTER TL-D Xtra 58W/840	G13	4000	85	5200		28000	55000
TL-D-XA58W/865	MASTER TL-D Xtra 58W/865	G13	6500	85	5000		28000	55000

MASTER TL-D Xtreme

TL-D-XE18W/830	MASTER TL-D Xtreme 18W/830	G13	3000	85	1350		47000	79000
TL-D-XE18W/840	MASTER TL-D Xtreme 18W/840	G13	4000	85	1350		47000	79000
TL-D-XE18W/865	MASTER TL-D Xtreme 18W/865	G13	6500	85	1250		47000	79000
TL-D-XE30W/830	MASTER TL-D Xtreme 30W/830	G13	3000	85	3000		47000	79000
TL-D-XE30W/840	MASTER TL-D Xtreme 30W/840	G13	4000	85	3000		47000	79000
TL-D-XE36W/830	MASTER TL-D Xtreme 36W/830	G13	3000	85	3250		47000	79000
TL-D-XE36W/840	MASTER TL-D Xtreme 36W/840	G13	4000	85	3250		47000	79000
TL-D-XE36W/865	MASTER TL-D Xtreme 36W/865	G13	6500	85	3150		47000	79000
TL-D-XE58W/830	MASTER TL-D Xtreme 58W/830	G13	3000	85	5150		47000	79000
TL-D-XE58W/840	MASTER TL-D Xtreme 58W/840	G13	4000	85	5150		47000	79000
TL-D-XE58W/865	MASTER TL-D Xtreme 58W/865	G13	6500	85	5000		47000	79000

MASTER TL-D 90 Graphica, MASTER TL-D Food, MASTER TL-D Food Secura, MASTER TL-D Optiview, MASTER TL-D Xtra Polar, MASTER TL-D Xtra Secura,**MASTER TL-D Xtreme Polar, MASTER TL-D Xtreme Secura** - For data refer to <http://www.lampsandgear.philips.com>

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			[K]		[lm]	[cd]	[hrs]	[hrs]

Compact fluorescent lamps without integrated gear**MASTER PL-C 2 Pin**

PL-C/2P10W/827	MASTER PL-C 10W/827/2P	G24d-1	2700	82	600		10000	
PL-C/2P10W/830	MASTER PL-C 10W/830/2P	G24d-1	3000	82	600		10000	
PL-C/2P10W/840	MASTER PL-C 10W/840/2P	G24d-1	4000	82	600		10000	
PL-C/2P13W/827	MASTER PL-C 13W/827/2P	G24d-1	2700	82	900		10000	
PL-C/2P13W/830	MASTER PL-C 13W/830/2P	G24d-1	3000	82	900		10000	
PL-C/2P13W/840	MASTER PL-C 13W/840/2P	G24d-1	4000	82	900		10000	
PL-C/2P13W/865	MASTER PL-C 13W/865/2P	G24d-1	6500	80	900		10000	
PL-C/2P18W/827	MASTER PL-C 18W/827/2P	G24d-2	2700	82	1200		10000	
PL-C/2P18W/830	MASTER PL-C 18W/830/2P	G24d-2	3000	82	1200		10000	
PL-C/2P18W/835	MASTER PL-C 18W/835/2P	G24d-2	3500	82	1200		10000	
PL-C/2P18W/840	MASTER PL-C 18W/840/2P	G24d-2	4000	82	1200		10000	
PL-C/2P18W/865	MASTER PL-C 18W/865/2P	G24d-2	6500	80	1200		10000	
PL-C/2P26W/827	MASTER PL-C 26W/827/2P	G24d-3	2700	82	1800		10000	
PL-C/2P26W/830	MASTER PL-C 26W/830/2P	G24d-3	3000	82	1800		10000	
PL-C/2P26W/835	MASTER PL-C 26W/835/2P	G24d-3	3500	82	1800		10000	
PL-C/2P26W/840	MASTER PL-C 26W/840/2P	G24d-3	4000	82	1800		10000	
PL-C/2P26W/865	MASTER PL-C 26W/865/2P	G24d-3	6500	80	1800		10000	

MASTER PL-C Xtra 2 Pin - For data refer to <http://www.lampsandgear.philips.com>

MASTER PL-C 4 Pin

PL-C/4P10W/827	MASTER PL-C 10W/827/4P	G24q-1	2700	82	600			13000
PL-C/4P10W/830	MASTER PL-C 10W/830/4P	G24q-1	3000	82	600			13000
PL-C/4P10W/840	MASTER PL-C 10W/840/4P	G24q-1	4000	82	600			13000
PL-C/4P13W/827	MASTER PL-C 13W/827/4P	G24q-1	2700	82	900			13000
PL-C/4P13W/830	MASTER PL-C 13W/830/4P	G24q-1	3000	82	900			13000
PL-C/4P13W/840	MASTER PL-C 13W/840/4P	G24q-1	4000	82	900			13000
PL-C/4P18W/827	MASTER PL-C 18W/827/4P	G24q-2	2700	82	1200			13000
PL-C/4P18W/830	MASTER PL-C 18W/830/4P	G24q-2	3000	82	1200			13000
PL-C/4P18W/840	MASTER PL-C 18W/840/4P	G24q-2	4000	82	1200			13000
PL-C/4P26W/827	MASTER PL-C 26W/827/4P	G24q-3	2700	82	1800			13000
PL-C/4P26W/830	MASTER PL-C 26W/830/4P	G24q-3	3000	82	1800			13000
PL-C/4P26W/835	MASTER PL-C 26W/835/4P	G24q-3	3500	82	1800			13000
PL-C/4P26W/840	MASTER PL-C 26W/840/4P	G24q-3	4000	82	1800			13000

MASTER PL-C Xtra 4 Pin - For data refer to <http://www.lampsandgear.philips.com>

MASTER PL-H 4 Pin

PL-H60W/830	MASTER PL-H 60W/830/4P	2G8-1	3000	82	4000		20000	10000
PL-H60W/840	MASTER PL-H 60W/840/4P	2G8-1	4000	82	4000		20000	10000
PL-H85W/830	MASTER PL-H 85W/830/4P	2G8-1	3000	82	6000		20000	10000
PL-H85W/840	MASTER PL-H 85W/840/4P	2G8-1	4000	82	6000		20000	10000
PL-H120W/830	MASTER PL-H 120W/830/4P	2G8-1	3000	82	9000		20000	10000
PL-H120W/840	MASTER PL-H 120W/840/4P	2G8-1	4000	82	9000		20000	10000

MASTER PL-L 4 Pin

PL-L18W/827	MASTER PL-L 18W/827/4P	2G11	2700	82	1200		15000	20000
PL-L18W/830	MASTER PL-L 18W/830/4P	2G11	3000	82	1200		15000	20000
PL-L18W/835	MASTER PL-L 18W/835/4P	2G11	3500	82	1200		15000	20000

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			[K]		[lm]	[cd]	[hrs]	[hrs]
PL-L18W/840	MASTER PL-L 18W/840/4P	2G11	4000	82	1200		15000	20000
PL-L18W/865	MASTER PL-L 18W/865/4P	2G11	6500	80	1200		15000	20000
PL-L24W/827	MASTER PL-L 24W/827/4P	2G11	2700	82	1800		15000	20000
PL-L24W/830	MASTER PL-L 24W/830/4P	2G11	3000	82	1800		15000	20000
PL-L24W/835	MASTER PL-L 24W/835/4P	2G11	3500	82	1800		15000	20000
PL-L24W/840	MASTER PL-L 24W/840/4P	2G11	4000	82	1800		15000	20000
PL-L24W/865	MASTER PL-L 24W/865/4P	2G11	6500	80	1800		15000	20000
PL-L36W/827	MASTER PL-L 36W/827/4P	2G11	2700	82	2900		15000	20000
PL-L36W/830	MASTER PL-L 36W/830/4P	2G11	3000	82	2900		15000	20000
PL-L36W/835	MASTER PL-L 36W/835/4P	2G11	3500	82	2900		15000	20000
PL-L36W/840	MASTER PL-L 36W/840/4P	2G11	4000	82	2900		15000	20000
PL-L36W/850	MASTER PL-L 36W/850/4P	2G11	5000	82	2900		15000	20000
PL-L36W/865	MASTER PL-L 36W/865/4P	2G11	6500	80	2900		15000	20000
PL-L40W/830	MASTER PL-L 40W/830/4P	2G11	3000	82	3500			20000
PL-L40W/835	MASTER PL-L 40W/835/4P	2G11	3500	82	3500			20000
PL-L40W/840	MASTER PL-L 40W/840/4P	2G11	4000	82	3500			20000
PL-L55W/827	MASTER PL-L 55W/827/4P	2G11	2700	82	4800			20000
PL-L55W/830	MASTER PL-L 55W/830/4P	2G11	3000	82	4800			20000
PL-L55W/835	MASTER PL-L 55W/835/4P	2G11	3500	82	4800			20000
PL-L55W/840	MASTER PL-L 55W/840/4P	2G11	4000	82	4800			20000
PL-L55W/865	MASTER PL-L 55W/865/4P	2G11	6500	80	4800			20000
PL-L80W/827	MASTER PL-L 80W/827/4P	2G11	2700	82	6000			20000
PL-L80W/830	MASTER PL-L 80W/830/4P	2G11	3000	82	6000			20000
PL-L80W/835	MASTER PL-L 80W/835/4P	2G11	3500	82	6000			20000
PL-L80W/840	MASTER PL-L 80W/840/4P	2G11	4000	82	6000			20000

MASTER PL-L de Luxe 4 Pin

PL-L18W/930	MASTER PL-L 18W/930/4P	2G11	3000	90	950		15000	20000
PL-L18W/940	MASTER PL-L 18W/940/4P	2G11	4000	90	950		15000	20000
PL-L18W/950	MASTER PL-L 18W/950/4P	2G11	5300	90	950		15000	20000
PL-L24W/930	MASTER PL-L 24W/930/4P	2G11	3000	90	1500		15000	20000
PL-L24W/940	MASTER PL-L 24W/940/4P	2G11	4000	90	1500		15000	20000
PL-L24W/950	MASTER PL-L 24W/950/4P	2G11	5300	90	1500		15000	20000
PL-L36W/930	MASTER PL-L 36W/930/4P	2G11	3000	90	2350		15000	20000
PL-L36W/940	MASTER PL-L 36W/940/4P	2G11	4000	90	2350		15000	20000
PL-L36W/950	MASTER PL-L 36W/950/4P	2G11	5300	90	2350		15000	20000
PL-L55W/930	MASTER PL-L 55W/930/4P	2G11	3000	90	3650			20000
PL-L55W/940	MASTER PL-L 55W/940/4P	2G11	4000	90	3650			20000
PL-L55W/950	MASTER PL-L 55W/950/4P	2G11	5300	90	3650			20000

MASTER PL-L Polar 4 Pin, MASTER PL-L Xtra 4 Pin - For data refer to <http://www.lampsandgear.philips.com>

PL-Q 2 Pin

PL-Q/2P16W/827	PL-Q 16W/827/2P	GR8	2700	82	1050		10000	
PL-Q/2P16W/830	PL-Q 16W/830/2P	GR8	3000	82	1050		10000	
PL-Q/2P16W/835	PL-Q 16W/835/2P	GR8	3500	82	1050		10000	
PL-Q/2P28W/827	PL-Q 28W/827/2P	GR8	2700	82	2050		10000	
PL-Q/2P28W/830	PL-Q 28W/830/2P	GR8	3000	82	2050		10000	
PL-Q/2P28W/840	PL-Q 28W/840/2P	GR8	4000	82	2050		10000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
PL-Q 4 Pin								
PL-Q/4P16W/827	PL-Q 16W/827/4P	GR10q	2700	82	1050			12000
PL-Q/4P16W/830	PL-Q 16W/830/4P	GR10q	3000	82	1050			12000
PL-Q/4P16W/835	PL-Q 16W/835/4P	GR10q	3500	82	1050			12000
PL-Q/4P28W/827	PL-Q 28W/827/4P	GR10q	2700	82	1800			12000
PL-Q/4P28W/830	PL-Q 28W/830/4P	GR10q	3000	82	1800			12000
PL-Q/4P28W/835	PL-Q 28W/835/4P	GR10q	3500	82	1800			12000
PL-Q/4P28W/840	PL-Q 28W/840/4P	GR10q	4000	82	1800			12000
PL-Q/4P38W/827	PL-Q 38W/827/4P	GR10q	2700	82	2800			12000
PL-Q/4P38W/830	PL-Q 38W/830/4P	GR10q	3000	82	2800			12000
PL-Q/4P38W/835	PL-Q 38W/835/4P	GR10q	3500	82	2800			12000
PL-Q/4P38W/840	PL-Q 38W/840/4P	GR10q	4000	82	2800			12000
MASTER PL-S 2 Pin								
PL-S/2P7W/827	MASTER PL-S 7W/827/2P	G23	2700	82	400		10000	
PL-S/2P7W/830	MASTER PL-S 7W/830/2P	G23	3000	82	400		10000	
PL-S/2P7W/840	MASTER PL-S 7W/840/2P	G23	4000	82	400		10000	
PL-S/2P9W/827	MASTER PL-S 9W/827/2P	G23	2700	82	600		10000	
PL-S/2P9W/830	MASTER PL-S 9W/830/2P	G23	3000	82	600		10000	
PL-S/2P9W/840	MASTER PL-S 9W/840/2P	G23	4000	82	600		10000	
PL-S/2P11W/827	MASTER PL-S 11W/827/2P	G23	2700	82	900		10000	
PL-S/2P11W/830	MASTER PL-S 11W/830/2P	G23	3000	82	900		10000	
PL-S/2P11W/840	MASTER PL-S 11W/840/2P	G23	4000	82	900		10000	
MASTER PL-S 4 Pin								
PL-S/4P7W/827	MASTER PL-S 7W/827/4P	2G7	2700	82	400			13000
PL-S/4P7W/830	MASTER PL-S 7W/830/4P	2G7	3000	82	400			13000
PL-S/4P7W/840	MASTER PL-S 7W/840/4P	2G7	4000	82	400			13000
PL-S/4P9W/827	MASTER PL-S 9W/827/4P	2G7	2700	82	600			13000
PL-S/4P9W/830	MASTER PL-S 9W/830/4P	2G7	3000	82	600			13000
PL-S/4P9W/840	MASTER PL-S 9W/840/4P	2G7	4000	82	600			13000
PL-S/4P11W/827	MASTER PL-S 11W/827/4P	2G7	2700	82	900			13000
PL-S/4P11W/830	MASTER PL-S 11W/830/4P	2G7	3000	82	900			13000
PL-S/4P11W/840	MASTER PL-S 11W/840/4P	2G7	4000	82	900			13000
MASTER PL-T 2 Pin								
PL-T/2P13W/827	MASTER PL-T 13W/827/2P	GX24d-1	2700	82	875		10000	
PL-T/2P13W/830	MASTER PL-T 13W/830/2P	GX24d-1	3000	82	875		10000	
PL-T/2P13W/840	MASTER PL-T 13W/840/2P	GX24d-1	4000	82	875		10000	
PL-T/2P18W/827	MASTER PL-T 18W/827/2P	GX24d-2	2700	82	1200		10000	
PL-T/2P18W/830	MASTER PL-T 18W/830/2P	GX24d-2	3000	82	1200		10000	
PL-T/2P18W/840	MASTER PL-T 18W/840/2P	GX24d-2	4000	82	1200		10000	
PL-T/2P26W/827	MASTER PL-T 26W/827/2P	GX24d-3	2700	82	1800		10000	
PL-T/2P26W/830	MASTER PL-T 26W/830/2P	GX24d-3	3000	82	1800		10000	
PL-T/2P26W/840	MASTER PL-T 26W/840/2P	GX24d-3	4000	82	1800		10000	
MASTER PL-T 4 Pin								
PL-T/4P13W/827	MASTER PL-T 13W/827/4P	GX24q-1	2700	82	900			13000
PL-T/4P13W/830	MASTER PL-T 13W/830/4P	GX24q-1	3000	82	900			13000
PL-T/4P13W/840	MASTER PL-T 13W/840/4P	GX24q-1	4000	82	900			13000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
PL-T/4P18W/827	MASTER PL-T 18W/827/4P	GX24q-2	2700	82	1200			13000
PL-T/4P18W/830	MASTER PL-T 18W/830/4P	GX24q-2	3000	82	1200			13000
PL-T/4P18W/840	MASTER PL-T 18W/840/4P	GX24q-2	4000	82	1200			13000
PL-T/4P26W/827	MASTER PL-T 26W/827/4P	GX24q-3	2700	82	1800			13000
PL-T/4P26W/830	MASTER PL-T 26W/830/4P	GX24q-3	3000	82	1800			13000
PL-T/4P26W/840	MASTER PL-T 26W/840/4P	GX24q-3	4000	82	1800			13000
PL-T/4P32W/827	MASTER PL-T 32W/827/4P	GX24q-3	2700	82	2400			13000
PL-T/4P32W/830	MASTER PL-T 32W/830/4P	GX24q-3	3000	82	2400			13000
PL-T/4P32W/840	MASTER PL-T 32W/840/4P	GX24q-3	4000	82	2400			13000
PL-T/4P42W/827	MASTER PL-T 42W/827/4P	GX24q-4	2700	82	3200			13000
PL-T/4P42W/830	MASTER PL-T 42W/830/4P	GX24q-4	3000	82	3200			13000
PL-T/4P42W/840	MASTER PL-T 42W/840/4P	GX24q-4	4000	82	3200			13000
PL-T/4P57W/827	MASTER PL-T 57W/827/4P	GX24q-5	2700	82	4300			13000
PL-T/4P57W/830	MASTER PL-T 57W/830/4P	GX24q-5	3000	82	4300			13000
PL-T/4P57W/840	MASTER PL-T 57W/840/4P	GX24q-5	4000	82	4300			13000

MASTER PL-T TOP 2 Pin

PL-TT/2P18W/830	MASTER PL-T TOP 18W/830/2P	GX24d-2	3000	82	1200		10000	
PL-TT/2P18W/840	MASTER PL-T TOP 18W/840/2P	GX24d-2	4000	82	1200		10000	
PL-TT/2P26W/830	MASTER PL-T TOP 26W/830/2P	GX24d-3	3000	82	1800		10000	
PL-TT/2P26W/840	MASTER PL-T TOP 26W/840/2P	GX24d-3	4000	82	1800		10000	

MASTER PL-T TOP 4 Pin

PL-TT/4P18W/830	MASTER PL-T TOP 18W/830/4P	GX24d-2	3000	82	1200			13000
PL-TT/4P18W/840	MASTER PL-T TOP 18W/840/4P	GX24d-2	4000	82	1200			13000
PL-TT/4P26W/830	MASTER PL-T TOP 26W/830/4P	GX24d-3	3000	82	1800			13000
PL-TT/4P26W/840	MASTER PL-T TOP 26W/840/4P	GX24d-3	4000	82	1800			13000
PL-TT/4P32W/827	MASTER PL-T TOP 32W/827/4P	GX24q-3	2700	82	2400			13000
PL-TT/4P32W/830	MASTER PL-T TOP 32W/830/4P	GX24q-3	3000	82	2400			13000
PL-TT/4P32W/840	MASTER PL-T TOP 32W/840/4P	GX24q-3	4000	82	2400			13000
PL-TT/4P42W/827	MASTER PL-T TOP 42W/827/4P	GX24q-4	2700	82	3200			13000
PL-TT/4P42W/830	MASTER PL-T TOP 42W/830/4P	GX24q-4	3000	82	3200			13000
PL-TT/4P42W/840	MASTER PL-T TOP 42W/840/4P	GX24q-4	4000	82	3200			13000
PL-TT/4P57W/827	MASTER PL-T TOP 57W/827/4P	GX24q-5	2700	82	4300			13000
PL-TT/4P57W/830	MASTER PL-T TOP 57W/830/4P	GX24q-5	3000	82	4300			13000
PL-TT/4P57W/840	MASTER PL-T TOP 57W/840/4P	GX24q-5	4000	82	4300			13000

MASTER PL-T Xtra 4 Pin

PL-T/4P-XA32W/830	MASTER PL-T Xtra 32W/830/4P	GX24q-3	3000	82	2400			33000
PL-T/4P-XA32W/840	MASTER PL-T Xtra 32W/840/4P	GX24q-3	4000	82	2400			33000
PL-T/4P-XA42W/830	MASTER PL-T Xtra 42W/830/4P	GX24q-4	3000	82	3200			33000
PL-T/4P-XA42W/840	MASTER PL-T Xtra 42W/840/4P	GX24q-4	4000	82	3200			33000
PL-T/4P-XA57W/830	MASTER PL-T Xtra 57W/830/4P	GX24q-5	3000	82	4300			33000
PL-T/4P-XA57W/840	MASTER PL-T Xtra 57W/840/4P	GX24q-5	4000	82	4300			33000

Compact fluorescent lamps with integrated gear

MASTER PL-Electronic, MASTER PL-Electronic Automatic, MASTER PL-Electronic Dimmable,

MASTER PL-Electronic Polar - For data refer to <http://www.lampsandgear.philips.com>

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

Halogen lamps

Accentline - For data refer to <http://www.lampsandgear.philips.com>

Aluline 37/56

HAL-R37-6-15W/6V-CL	Aluline 15W 6V R37 6D CL	BA15d	3000	100		5200	2000	
HAL-R37-6-20W/12V-CL	Aluline 20W 12V R37 6D CL	BA15d	3000	100		6400	2000	
HAL-R37-18-20W/12V-CL	Aluline 20W 12V R37 18D CL	BA15d	3000	100		1500	2000	
HAL-R37-18-20W/12V-FR	Aluline 20W 12V R37 18D FR	BA15d	3000	100		1000	2000	
HAL-R37-32-20W/12V-CL	Aluline 20W 12V R37 32D CL	BA15d	3000	100		750	2000	
HAL-R37-32-20W/12V-FR	Aluline 20W 12V R37 32D FR	BA15d	3000	100		350	2000	
HAL-R56-4-15W/6V-CL	Aluline 15W 6V R56 4D CL	B15	3000	100		11000	2000	
HAL-R56-6-35W/6V-CL	Aluline 35W 6V R56 6D CL	B15	3000	100		18000	2000	
HAL-R56-10-50W/12V-CL	Aluline 50W 12V R56 10D CL	B15	3000	100		12000	2000	
HAL-R56-14-15W/6V-CL	Aluline 15W 6V R56 14D CL	B15	3000	100		1900	2000	
HAL-R56-14-35W/6V-CL	Aluline 35W 6V R56 14D CL	B15	3000	100		4400	2000	
HAL-R56-22-50W/12V-FR	Aluline 50W 12V R56 22D FR	B15	3000	100		2000	2000	
HAL-R56-25-50W/12V-CL	Aluline 50W 12V R56 25D CL	B15	3000	100		2500	2000	

Aluline 111

HAL-R111-8-50W	Aluline 111 50W 12V 8D	G53	3000	100		23000	3000	
HAL-R111-24-50W	Aluline 111 50W 12V 24D	G53	3000	100		4000	3000	
HAL-R111-8-75W	Aluline 111 75W 12V 8D	G53	3000	100		30000	3000	
HAL-R111-24-75W	Aluline 111 75W 12V 24D	G53	3000	100		5300	3000	
HAL-R111-45-75W	Aluline 111 75W 12V 45D	G53	3000	100			3000	
HAL-R111-8-100W	Aluline 111 100W 12V 8D	G53	3000	100		48000	3000	
HAL-R111-24-100W	Aluline 111 100W 12V 24D	G53	3000	100		8500	3000	
HAL-R111-45-100W	Aluline 111 100W 12V 45D	G53	3000	100			3000	

Brilliantline Alu

HAL-AR50-36-20W	Brilliantline Alu 20W 12V MR16 36D	GU5.3	3000	100		700	4000	
HAL-AR50-36-35W	Brilliantline Alu 35W 12V MR16 36D	GU5.3	3000	100		1500	4000	
HAL-AR50-36-50W	Brilliantline Alu 50W 12V MR16 36D	GU5.3	3000	100		2100	4000	

Brilliantline Dichroic

HAL-PR35-10-20W	Brilliantline Dichroic 20W 12V MR11 10D	GU4	3000	100		4800	4000	
HAL-PR35-30-20W	Brilliantline Dichroic 20W 12V MR11 30D	GU4	3000	100		690	4000	
HAL-PR35-10-35W	Brilliantline Dichroic 35W 12V MR11 10D	GU4	3000	100		7000	4000	
HAL-PR35-30-35W	Brilliantline Dichroic 35W 12V MR11 30D	GU4	3000	100		1300	4000	
HAL-PR50-10-20W	Brilliantline Dichroic 20W 12V MR16 10D	GU5.3	3000	100		5000	4000	
HAL-PR50-24-20W	Brilliantline Dichroic 20W 12V MR16 24D	GU5.3	3000	100		1800	4000	
HAL-PR50-36-20W	Brilliantline Dichroic 20W 12V MR16 36D	GU5.3	3000	100		780	4000	
HAL-PR50-60-20W	Brilliantline Dichroic 20W 12V MR16 60D	GU5.3	3000	100		350	4000	
HAL-PR50-10-35W	Brilliantline Dichroic 35W 12V MR16 10D	GU5.3	3000	100		8000	4000	
HAL-PR50-24-35W	Brilliantline Dichroic 35W 12V MR16 24D	GU5.3	3000	100		3100	4000	
HAL-PR50-36-35W	Brilliantline Dichroic 35W 12V MR16 36D	GU5.3	3000	100		1500	4000	
HAL-PR50-60-35W	Brilliantline Dichroic 35W 12V MR16 60D	GU5.3	3000	100		700	4000	
HAL-PR50-10-50W	Brilliantline Dichroic 50W 12V MR16 10D	GU5.3	3000	100		13000	4000	
HAL-PR50-24-50W	Brilliantline Dichroic 50W 12V MR16 24D	GU5.3	3000	100		4400	4000	
HAL-PR50-36-50W	Brilliantline Dichroic 50W 12V MR16 36D	GU5.3	3000	100		2200	4000	
HAL-PR50-60-50W	Brilliantline Dichroic 50W 12V MR16 60D	GU5.3	3000	100		1100	4000	

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			[K]		[lm]	[cd]	[hrs]	[hrs]

Diamondline

HAL-DR50-10-35W	Diamondline 35W 4100K 12V 10D	GU5.3	4100	100		5400	4000	
HAL-DR50-24-35W	Diamondline 35W 4100K 12V 24D	GU5.3	4100	100		1700	4000	
HAL-DR50-36-35W	Diamondline 35W 4100K 12V 36D	GU5.3	4100	100		1000	4000	
HAL-DR50-10-50W	Diamondline 50W 4100K 12V 10D	GU5.3	4100	100		6400	4000	
HAL-DR50-24-50W	Diamondline 50W 4100K 12V 24D	GU5.3	4100	100		2700	4000	
HAL-DR50-36-50W	Diamondline 50W 4100K 12V 36D	GU5.3	4100	100		1200	4000	

Halogen 12V Dichroic 2 Year - For data refer to <http://www.lampsandgear.philips.com>

Halogen 12V Dichroic 4 Year

HAL-R50-10-20W/GU4	Halogen Dichroic 4yr 20W 12V 10D	GU4	3000	100		4800	4000	
HAL-R50-30-20W/GU4	Halogen Dichroic 4yr 20W 12V 30D	GU4	3000	100		690	4000	
HAL-R50-30-35W/GU4	Halogen Dichroic 4yr 35W 12V 30D	GU4	3000	100		1300	4000	
HAL-R50-10-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 10D	GU5.3	3000	100		5000	4000	
HAL-R50-24-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 24D	GU5.3	3000	100		1800	4000	
HAL-R50-36-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 36D	GU5.3	3000	100		780	4000	
HAL-R50-36-35W/GU5.3	Halogen Dichroic 4yr 35W 12V 36D	GU5.3	3000	100		1500	4000	
HAL-R50-10-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 10D	GU5.3	3000	100		13000	4000	
HAL-R50-24-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 24D	GU5.3	3000	100		4400	4000	
HAL-R50-36-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 36D	GU5.3	3000	100		2200	4000	

Halogen 12V Dichroic Essential - For data refer to <http://www.lampsandgear.philips.com>

HalogenA PAR16

HAL-P16-30-25W	HalogenA PAR16 25W 230V 30D	E14	2700	100		800	2000	
HAL-P16-25-40W	HalogenA PAR16 40W 230V 25D	E14	2700	100		950	2000	

HalogenA PAR20

HAL-P20-10-50W	HalogenA PAR20 50W 230V 10D	E27	2800	100		2250	2000	
HAL-P20-25-50W	HalogenA PAR20 50W 230V 25D	E27	2800	100		850	2000	

HalogenA PAR30S

HAL-P30S-10-75W	HalogenA PAR30S 75W 230V 10D	E27	2800	100		5525	2000	
HAL-P30S-30-75W	HalogenA PAR30S 75W 230V 30D	E27	2800	100		1700	2000	
HAL-P30S-10-100W	HalogenA PAR30S 100W 230V 10D	E27	2800	100		9000	2500	
HAL-P30S-30-100W	HalogenA PAR30S 100W 230V 30D	E27	2800	100		3000	2500	

HalogenA PAR38

HAL-P38-12-50W	HalogenA PAR38 50W 230V 12D	E27	2800	100		3100	2500	
HAL-P38-30-50W	HalogenA PAR38 50W 230V 30D	E27	2800	100		1200	2500	
HAL-P38-12-65W	HalogenA PAR38 65W 230V 12D	E27	2800	100		4700	2500	
HAL-P38-30-65W	HalogenA PAR38 65W 230V 30D	E27	2800	100		1800	2500	
HAL-P38-10-75W	HalogenA PAR38 75W 230V 10D	E27	2800	100		7800	2000	
HAL-P38-10-100W	HalogenA PAR38 100W 230V 10D	E27	2800	100		8500	2000	
HAL-P38-30-100W	HalogenA PAR38 100W 230V 30D	E27	2800	100		3100	2500	

MASTER PAR20 E

HAL-P20E-10-20W	MASTER PAR-E 20W 230V 10D	E27	2900	100		7000	5000	
HAL-P20E-25-20W	MASTER PAR-E 20W 230V 25D	E27	2900	100		1200	5000	

MASTERLine ES

HAL-MR50-8-20W	MASTERLine ES 20W 12V 8D	GU5.3	3000	100		6500	5000	
HAL-MR50-36-20W	MASTERLine ES 20W 12V 36D	GU5.3	3000	100		1000	5000	
HAL-MR50-8-30W	MASTERLine ES 30W 12V 8D	GU5.3	3000	100		11000	5000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTERLine ES								
HAL-MR50-24-30W	MASTERLine ES 30W 12V 24D	GU5.3	3000	100		3350	5000	
HAL-MR50-36-30W	MASTERLine ES 30W 12V 36D	GU5.3	3000	100		1600	5000	
HAL-MR50-60-30W	MASTERLine ES 30W 12V 60D	GU5.3	3000	100		750	5000	
HAL-MR50-8-35W	MASTERLine ES 35W 12V 8D	GU5.3	3000	100		13500	5000	
HAL-MR50-24-35W	MASTERLine ES 35W 12V 24D	GU5.3	3000	100		4400	5000	
HAL-MR50-36-35W	MASTERLine ES 35W 12V 36D	GU5.3	3000	100		2200	5000	
HAL-MR50-60-35W	MASTERLine ES 35W 12V 60D	GU5.3	3000	100		1050	5000	
HAL-MR50-8-45W	MASTERLine ES 45W 12V 8D	GU5.3	3000	100		16000	5000	
HAL-MR50-24-45W	MASTERLine ES 45W 12V 24D	GU5.3	3000	100		5450	5000	
HAL-MR50-36-45W	MASTERLine ES 45W 12V 36D	GU5.3	3000	100		2850	5000	
HAL-MR50-60-45W	MASTERLine ES 45W 12V 60D	GU5.3	3000	100		1300	5000	
MASTERLine Plus								
HAL-R50-10-20W	MASTERLine Plus 20W 12V 10D	GU5.3	3100	100		6500	4000	
HAL-R50-24-20W	MASTERLine Plus 20W 12V 24D	GU5.3	3100	100		1700	4000	
HAL-R50-38-20W	MASTERLine Plus 20W 12V 38D	GU5.3	3100	100		800	4000	
HAL-R50-60-20W	MASTERLine Plus 20W 12V 60D	GU5.3	3100	100		350	4000	
HAL-R50-10-35W	MASTERLine Plus 35W 12V 10D	GU5.3	3100	100		11000	4000	
HAL-R50-24-35W	MASTERLine Plus 35W 12V 24D	GU5.3	3100	100		3500	4000	
HAL-R50-38-35W	MASTERLine Plus 35W 12V 38D	GU5.3	3100	100		1600	4000	
HAL-R50-60-35W	MASTERLine Plus 35W 12V 60D	GU5.3	3100	100		700	4000	
HAL-R50-10-50W	MASTERLine Plus 50W 12V 10D	GU5.3	3200	100		15000	4000	
HAL-R50-24-50W	MASTERLine Plus 50W 12V 24D	GU5.3	3200	100		5200	4000	
HAL-R50-38-50W	MASTERLine Plus 50W 12V 38D	GU5.3	3200	100		2300	4000	
HAL-R50-50-50W	MASTERLine Plus 50W 12V 60D	GU5.3	3200	100		1100	4000	
MASTERLine III								
HAL-MR111-8-30W	MASTERLine III 30W 12V 8D	G53	3000	100		23000	4000	
HAL-MR111-24-30W	MASTERLine III 30W 12V 24D	G53	3000	100		4000	4000	
HAL-MR111-45-30W	MASTERLine III 45W 12V 8D	G53	3000	100		33000	4000	
HAL-MR111-24-45W	MASTERLine III 45W 12V 24D	G53	3000	100		5300	4000	
HAL-MR111-45-45W	MASTERLine III 45W 12V 45D	G53	3000	100		1900	4000	
HAL-MR111-8-60W	MASTERLine III 60W 12V 8D	G53	3000	100		48000	4000	
HAL-MR111-24-60W	MASTERLine III 60W 12V 24D	G53	3000	100		8500	4000	
HAL-MR111-45-60W	MASTERLine III 60W 12V 45D	G53	3000	100		2800	4000	
MASTERLine TC								
HAL-TC45W	MASTERLine TC 45W 12V	G8.5	3050	100		1100	5000	
HAL-TC60W	MASTERLine TC 60W 12V	G8.5	3050	100		1600	5000	
Twistline Alu 2000 hrs								
HAL-R-25-25W-GU10	Twistline Alu 2000h 25W 230V 25D	GU10	2800	100		280	2000	
HAL-R-50-25W-GU10	Twistline Alu 2000h 25W 230V 50D	GU10	2800	100			2000	
HAL-R-20-35W-GU10	Twistline Alu 2000h 35W 230V 20D	GU10	2800	100		500	2000	
HAL-R-40-35W-GU10	Twistline Alu 2000h 35W 230V 40D	GU10	2800	100		250	2000	
HAL-R-25-40W-GU10	Twistline Alu 2000h 40W 230V 25D	GU10	2800	100		550	2000	
HAL-R-50-40W-GU10	Twistline Alu 2000h 40W 230V 50D	GU10	2800	100		350	2000	
HAL-R-20-50W-GU10	Twistline Alu 2000h 50W 230V 20D	GU10	2800	100		1000	2000	
HAL-R-25-50W-GU10	Twistline Alu 2000h 50W 230V 25D	GU10	2800	100		1000	2000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
HAL-R-40-50W-GU10	Twistline Alu 2000h 50W 230V 40D	GU10	2800	100		400	2000	
HAL-R-50-50W-GU10	Twistline Alu 2000h 50W 230V 50D	GU10	2800	100		500	2000	
Twistline Alu 3000 hrs								
HAL-TR-25-50W-GU10	Twistline Alu 3000h 50W 230V 25D	GU10	2800	98		1000	3000	
HAL-TR-50-50W-GU10	Twistline Alu 3000h 50W 230V 50D	GU10	2800	98		600	3000	
Twistline Dichro 2000 hrs								
HAL-R-25-50W-GZ10	Twistline Dichro 2000h 50W 230V 25D	GZ10	2900	100		1000	2000	
HAL-R-50-50W-GZ10	Twistline Dichro 2000h 50W 230V 50D	GZ10	2900	100		600	2000	
Twistline Dichro 3000 hrs								
HAL-TR-25-50W-GZ10	Twistline Dichro 3000h 50W 230V 25D	GZ10	2800	98		1000	3000	
HAL-TR-50-50W-GZ10	Twistline Dichro 3000h 50W 230V 50D	GZ10	2800	98		600	3000	
Capsuleline								
HAL-C5W/12V-G4-ST	Capsuleline 5W G4 12V CL 4000h	G4	2800	100	60		4000	
HAL-C10W/12V-G4-SI	Capsuleline 10W G4 12V FR 4000h	G4		100	140		4000	
HAL-C10W/12V-G4-SU	Capsuleline 10W G4 12V CL 4000h	G4	2850	100	140		4000	
HAL-C20W/12V-G4-SI	Capsuleline 20W G4 12V FR 4000h	G4	3000	100	310		4000	
HAL-C20W/12V-G4-SU	Capsuleline 20W G4 12V CL 4000h	G4	3000	100	310		4000	
HAL-C20W/24V-G4-ST	Capsuleline 20W G4 24V CL 4000h	G4	3000	100	300		4000	
HAL-C20W/12V-GY6.35-SI	Capsuleline 20W GY6.35 12V FR 4000h	GY6.35	3000	100	300		4000	
HAL-C20W/12V-GY6.35-SU	Capsuleline 20W GY6.35 12V CL 4000h	GY6.35	3000	100	300		4000	
HAL-C35W/12V-GY6.35-SI	Capsuleline 35W GY6.35 12V FR 4000h	GY6.35	3000	100	600		4000	
HAL-C35W/12V-GY6.35-SU	Capsuleline 35W GY6.35 12V CL 4000h	GY6.35	3000	100	600		4000	
HAL-C50W/12V-GY6.35-SI	Capsuleline 50W GY6.35 12V FR 4000h	GY6.35	3000	100	950		4000	
HAL-C50W/12V-GY6.35-ST	Capsuleline 50W GY6.35 12V CL 3000h	GY6.35	3000	100	935		3000	
HAL-C50W/12V-GY6.35-SU	Capsuleline 50W GY6.35 12V CL 4000h	GY6.35	3000	100	880		4000	
HAL-C50W/24V-GY6.35-SU	Capsuleline 50W GY6.35 24V CL 4000h	GY6.35	3000	100	850		4000	
HAL-C75W/12V-GY6.35-SU	Capsuleline 75W GY6.35 12V CL 4000h	GY6.35	3000	100	1575		4000	
HAL-C100W/12V-GY6.35-ST	Capsuleline 100W GY6.35 12V CL 4000h	GY6.35	3000	100	2550		4000	
HAL-C100W/12V-GY6.35-SU	Capsuleline 100W GY6.35 12V CL 4000h	GY6.35	3000	100	2100		4000	
HAL-C100W/24V-GY6.35-SU	Capsuleline 100W GY6.35 24V CL 3000h	GY6.35	3000	100	2200		3000	
Capsuleline MV B15d								
HAL-MC75W-CL	Capsuleline 75W 230V CL	B15d	2800	100	975		2000	
HAL-MC75W-FR	Capsuleline 75W 230V FR	B15d	2800	100	910		2000	
HAL-MC100W-CL	Capsuleline 100W 230V CL	B15d	2800	100	1400		2000	
HAL-MC100W-FR	Capsuleline 100W 230V FR	B15d	2800	100	1300		2000	
HAL-MC150W-CL	Capsuleline 150W 230V CL	B15d	2800	100	2250		2000	
HAL-MC150W-FR	Capsuleline 150W 230V FR	B15d	2800	100	2100		2000	
MASTERCapsule								
HAL-C20W/12V-GY6.35-MS	MASTERCapsule 20W 12W IR	GY6.35	3000	100	420		4000	
HAL-C30W/12V-GY6.35-MS	MASTERCapsule 30W 12W IR	GY6.35	3000	100	750		4000	
HAL-C45W/12V-GY6.35-MS	MASTERCapsule 45W 12W IR	GY6.35	3000	100	1250		4000	
HAL-C60W/12V-GY6.35-MS	MASTERCapsule 60W 12W IR	GY6.35	3000	100	1700		4000	
Plusline Compact (double ended)								
HAL-TDC60W	Plusline Compact 60W 230V	R7s	2900	100	828		2000	
HAL-TDC100W	Plusline Compact 100W 240V	R7s	2900	100	1550		2000	
HAL-TDC150W	Plusline Compact 150W 230V	R7s	2900	100	2550		2000	
HAL-TDC200W	Plusline Compact 200W 230V	R7s	2900	100	3200		2000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

Plusline Small (double ended)

HAL-TDS150W	Plusline Small 150W 230V	R7s	2900	100	2250		2000	
HAL-TDS200W	Plusline Small 200W 230V	R7s	2900	100	3520		2000	
HAL-TDS300W	Plusline Small 300W 230V	R7s	2900	100	5600		2000	

HalogenA 2Year BTT46-shape

HAL-B60W-CL	HalogenA 2Year 60W 230V BTT46 CL	E27	2900	100	840		2000	
HAL-B60W-OP	HalogenA 2Year 60W 230V BTT46 OP	E27	2900	100	800		2000	
HAL-B100W-CL	HalogenA 2Year 100W 230V BTT46 CL	E27	2900	100	1550		2000	
HAL-B100W-OP	HalogenA 2Year 100W 230V BTT46 OP	E27	2900	100	1480		2000	
HAL-B150W-CL	HalogenA 2Year 150W 230V BTT46 CL	E27	2900	100	2550		2000	
HAL-B150W-OP	HalogenA 2Year 150W 230V BTT46 OP	E27	2900	100	2380		2000	

HalogenA 4Year BTT46-shape - For data refer to <http://www.lampsandgear.philips.com>**HalogenA Tubular**

HAL-T32-60W-CL	HalogenA 60W 230V T32 CL	E27	2900	100	840		2000	
HAL-T32-60W-FR	HalogenA 60W 230V T32 FR	E27	2900	100	840		2000	
HAL-T32-100W-CL	HalogenA 100W 230V T32 CL	E27	2900	100	1550		2000	
HAL-T32-100W-FR	HalogenA 100W 230V T32 FR	E27	2900	100	1550		2000	
HAL-T32-150W-CL	HalogenA 150W 230V T32 CL	E27	2900	100	2550		2000	
HAL-T32-150W-FR	HalogenA 150W 230V T32 FR	E27	2900	100	2550		2000	

Incandescent lamps**Reflector**

NR50-40W	Reflector 40W 230V NR50 30D	E14		100		400	1000	
NR50-60W	Reflector 60W 230V NR50 30D	E14		100		600	1000	
NR63-40W	Reflector 40W 230V NR63 30D	E27		100		420	1000	
NR63-60W	Reflector 60W 230V NR63 30D	E27		100		750	1000	
NR80-40W	Reflector 40W 230V NR80 25D	E27		100		600	1000	
NR80-60W	Reflector 60W 230V NR80 25D	E27		100		1000	1000	
NR80-75W	Reflector 75W 230V NR80 25D	E27		100		1600	1000	
NR80-100W	Reflector 100W 230V NR80 25D	E27		100		2000	1000	

Reflector Crown Mirror

PC45-40W-SI-CL	Reflector Crown Mirror 40W 230V PC45 SI-CL	E14		100		330	1000	
NR60-40W-SI-CL	Reflector Crown Mirror 40W 230V NR60 SI-CL	E27		100		330	1000	
NR60-60W-SI-CL	Reflector Crown Mirror 60W 230V NR60 SI-CL	E27		100		530	1000	
A60-B60W-SI-CL	Reflector Crown Mirror 60W 230V A60 SI-CL	E27		100		6630	1000	
A65-B100W-SI-CL	Reflector Crown Mirror 100W 230V A65 SI-CL	E27		100		1150	1000	

PAR38 Economy

PAR38-12-60W	PAR38 60W 230V SP 12D	E27		100		3100	2000	
PAR38-30-60W	PAR38 60W 230V FL 30D	E27		100		1200	2000	
PAR38-12-80W	PAR38 80W 230V SP 12D	E27		100		4700	2000	
PAR38-30-80W	PAR38 80W 230V FL 30D	E27		100		1800	2000	
PAR38-30-100W	PAR38 100W 230V FL 30D	E27		100		3600	2000	
PAR38-12-120W	PAR38 120W 230V SP 12D	E27		100		8200	2000	
PAR38-30-120W	PAR38 120W 230V FL 30D	E27		100		3100	2000	

PAR38 Cool Beam

PAR38CB-12-120W	PAR38 Cool Beam 120W 230V CSP	E27		100		8200	2000	
PAR38CB-30-120W	PAR38 Cool Beam 120W 230V CFL	E27		100		3100	2000	

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			[K]		[lm]	[cd]	[hrs]	[hrs]

PAR56

PAR56-12-300W	PAR56 300W 230V SP	GX16d		100		40000	2000	
PAR56-25-300W	PAR56 300W 230V FL	GX16d		100		22000	2000	
PAR56-40-300W	PAR56 300W 230V WFL	GX16d		100		9000	2000	

Induction lamps**MASTER QL System**

Remarks * It is advisable to replace the lamps at 70% of their lumen output

QL55W/827	MASTER QL 55W/827		2600	80	3550			60000*
QL55W/830	MASTER QL 55W/830		2900	80	3650			60000*
QL55W/840	MASTER QL 55W/840		3750	80	3650			60000*
QL85W/827	MASTER QL 85W/827		2250	80	6100			60000*
QL85W/830	MASTER QL 85W/830		2900	80	6200			60000*
QL85W/840	MASTER QL 85W/840		3750	80	6300			60000*
QL165W/827	MASTER QL 165W/827		2600	80	11000			60000*
QL165W/830	MASTER QL 165W/830		3000	80	12000			60000*
QL165W/840	MASTER QL 165W/840		3850	80	12000			60000*

High-intensity discharge lamps**MASTERCouleur CDM-R**

CDM-R20-10-35W/830	MASTERCouleur CDM-R 35W/830 PAR20 10D	E27	3000	81		23000		7500
CDM-R20-30-35W/830	MASTERCouleur CDM-R 35W/830 PAR20 30D	E27	3000	81		5000		7500
CDM-R20-10-35W/942	MASTERCouleur CDM-R 35W/942 PAR20 10D	E27	4200	92		21500		6000
CDM-R20-30-35W/942	MASTERCouleur CDM-R 35W/942 PAR20 30D	E27	4200	92		5000		6000
CDM-R30-10-35W/830	MASTERCouleur CDM-R 35W/830 PAR30L 10D	E27	3000	81		44000		7500
CDM-R30-30-35W/830	MASTERCouleur CDM-R 35W/830 PAR30L 30D	E27	3000	81		7400		7500
CDM-R30-10-70W/830	MASTERCouleur CDM-R 70W/830 PAR30L 10D	E27	3000	83		68000		11000
CDM-R30-30-70W/830	MASTERCouleur CDM-R 70W/830 PAR30L 30D	E27	3000	83		13500		11000
CDM-R30-40-70W/830	MASTERCouleur CDM-R 70W/830 PAR30L 40D	E27	3000	83		10000		11000
CDM-R30-10-70W/942	MASTERCouleur CDM-R 70W/942 PAR30L 10D	E27	4200	94		63000		9000
CDM-R30-30-70W/942	MASTERCouleur CDM-R 70W/942 PAR30L 30D	E27	4200	94		13000		9000
CDM-R30-40-70W/942	MASTERCouleur CDM-R 70W/942 PAR30L 40D	E27	4200	94		9000		9000

MASTERCouleur CDM-R111

CDM-R111-10-20W/830	MASTERCouleur CDM-R111 20W/830 10D	GX8.5	3000	85		20000		9000
CDM-R111-24-20W/830	MASTERCouleur CDM-R111 20W/830 24D	GX8.5	3000	85		4500		9000
CDM-R111-10-35W/830	MASTERCouleur CDM-R111 35W/830 10D	GX8.5	3000	81		35000		11000
CDM-R111-24-35W/830	MASTERCouleur CDM-R111 35W/830 24D	GX8.5	3000	81		8500		11000
CDM-R111-40-35W/830	MASTERCouleur CDM-R111 35W/830 40D	GX8.5	3000	81		4000		11000
CDM-R111-10-70W/830	MASTERCouleur CDM-R111 70W/830 10D	GX8.5	3000	84		50000		9000
CDM-R111-24-70W/830	MASTERCouleur CDM-R111 70W/830 24D	GX8.5	3000	84		15000		9000
CDM-R111-40-70W/830	MASTERCouleur CDM-R111 70W/830 40D	GX8.5	3000	84		9000		9000
CDM-R111-10-70W/942	MASTERCouleur CDM-R111 70W/942 10D	GX8.5	4200	95		50000		11000
CDM-R111-24-70W/942	MASTERCouleur CDM-R111 70W/942 24D	GX8.5	4200	95		15000		11000
CDM-R111-40-70W/942	MASTERCouleur CDM-R111 70W/942 40D	GX8.5	4200	95		9000		11000

MASTERCouleur CDM-T

CDM-T35W/830	MASTERCouleur CDM-T 35W/830	G12	3000	81	3300			12000
CDM-T35W/942	MASTERCouleur CDM-T 35W/942	G12	4200	90	3300			6000
CDM-T70W/830	MASTERCouleur CDM-T 70W/830	G12	3000	84	6600			12000
CDM-T70W/942	MASTERCouleur CDM-T 70W/942	G12	4200	92	6600			12000
CDM-T150W/830	MASTERCouleur CDM-T 150W/830	G12	3000	85	14000			12000

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			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTERColour CDM-T								
CDM-T150W/942	MASTERColour CDM-T 150W/942	G12	4200	96	12700			12000
CDM-T250W/830	MASTERColour CDM-T 250W/830	G12	3000	89	23000			11000
CDM-T250W/942	MASTERColour CDM-T 250W/942	G12	4200	94	23000			6000
MASTERColour CDM-TC								
CDM-TC35W/830	MASTERColour CDM-TC 35W/830	G8.5	3000	81	3300			9000
CDM-TC35W/942	MASTERColour CDM-TC 35W/942	G8.5	4200	90	3300			6000
CDM-TC70W/830	MASTERColour CDM-TC 70W/830	G8.5	3000	83	6500			10000
CDM-TC70W/942	MASTERColour CDM-TC 70W/942	G8.5	4400	90	5900			6000
MASTERColour CDM-TD								
CDM-TD70W/830	MASTERColour CDM-TD 70W/830	RX7s	3000	82	6500			16000
CDM-TD70W/942	MASTERColour CDM-TD 70W/942	RX7s	4200	92	6000			16000
CDM-TD150W/830	MASTERColour CDM-TD 150W/830	RX7s	3000	88	13250			16000
CDM-TD150W/942	MASTERColour CDM-TD 150W/942	RX7s	4200	96	14200			16000
MASTERColour CDM-T Elite								
CDM-T35W/930	MASTERColour CDM-T Elite 35W/930	G12	3000	90	3500			12000
CDM-T70W/930	MASTERColour CDM-T Elite 70W/930	G12	3000	90	7300			12000
MASTERColour CDM-Tm Mini								
CDM-Tm20W/830	MASTERColour CDM-Tm Mini 20W/830	PGJ5	3000	85	1650			12000
CDM-Tm35W/930	MASTERColour CDM-Tm Mini 35W/930	PGJ5	3000	90	3000			6000
MASTERColour CDM-TP								
CDM-TP70W/830	MASTERColour CDM-TP 70W/830	PG12-2	3200	81	6000			16000
CDM-TP70W/942	MASTERColour CDM-TP 70W/942	PG12-2	4200	90	5800			16000
CDM-TP150W/830	MASTERColour CDM-TP 150W/830	PGX12-2	2950	85	13000			16000
CDM-TP150W/942	MASTERColour CDM-TP 150W/942	PGX12-2	4200	95	12000			16000
Low-wattage metal halide lamps								
MHN/W-TD								
MHN-TD70W	MHN-TD 70W/842	RX7s	4200	80	5700		10500	
MHN-TD150W	MHN-TD 150W/842	RX7s	4200	85	12900		10500	
MHN-TD250W	MHN-TD 250W/842	FC2	4200	85	20000		10500	
MHW-TD70W	MHN-TD 70W/730	RX7s	3000	75	6200			
MHW-TD150W	MHN-TD 150W/730	RX7s	3000	75	13800			
MASTER HPI Plus on HPL gear								
HPI-P250W-BU	MASTER HPI Plus 250W/745 BU	E40	4500	69	18000		20000	
HPI-P250W-BU-P	MASTER HPI Plus 250W/745 BU-P	E40	4500	69	18000		20000	
HPI-P400W-BU	MASTER HPI Plus 400W/745 BU	E40	4500	69	32500		20000	
HPI-P400W-BU-P	MASTER HPI Plus 400W/745 BU-P	E40	4500	69	32500		20000	
HPI-P400W-BUS	MASTER HPI Plus 400W/745 BUS	E40	4500	69	32500		20000	
HPI-P400W-BUS-P	MASTER HPI Plus 400W/745 BUS-P	E40	4500	69	32500		20000	
MASTER HPI Plus on SON gear								
HPI-P250W-BU	MASTER HPI Plus 250W/745 BU	E40	3500	69	25500		20000	
HPI-P250W-BU-P	MASTER HPI Plus 250W/745 BU-P	E40	3500	69	25500		20000	
HPI-P400W-BU	MASTER HPI Plus 400W/745 BU	E40	3500	69	42500		20000	
HPI-P400W-BU-P	MASTER HPI Plus 400W/745 BU-P	E40	3500	69	42500		20000	
MASTER HPI-T Plus on HPL gear								
HPI-TP250W	MASTER HPI-T Plus 250W/645	E40	4500	69	20500		20000	
HPI-TP400W	MASTER HPI-T Plus 400W/645	E40	4500	69	34000		20000	

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			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTER HPI-T Plus on SON gear

HPL-TP250W	MASTER HPI-T Plus 250W/645	E40	4000	69	25000		20000	
HPL-TP400W	MASTER HPI-T Plus 400W/645	E40	4000	69	42500		20000	

High-pressure mercury lamps**HPL Comfort**

HPL-C50W	HPL Comfort 50W/534	E27	3400	58	1800		16000	
HPL-C80W	HPL Comfort 80W/534	E27	3400	57	3600		16000	
HPL-C125W	HPL Comfort 125W/534	E27	3400	55	6200		16000	
HPL-C250W	HPL Comfort 250W	E40	3300	51	14200		16000	
HPL-C400W	HPL Comfort 400W	E40	3500	47	24200		20000	

HPL-N

HPL-N50W	HPL-N 50W/542	E27	4200	49	1800		16000	
HPL-N80W	HPL-N 80W/542	E27	4200	48	3700		16000	
HPL-N125W	HPL-N 125W/542	E27	4200	46	6200		16000	
HPL-N250W	HPL-N 250W/542	E40	4100	45	12700		16000	
HPL-N400W	HPL-N 400W/542	E40	3900	45	22000		16000	
HPL-N700W	HPL-N 700W/542	E40	3900	45	38500		12000	
HPL-N1000W	HPL-N 1000W/542	E40	3900	36	58500		12000	

High-pressure sodium lamps**SON**

SON50W	SON 50W/220	E27	2000	25	3500		24000	
SON70W	SON 70W/220	E27	2000	25	5600		24000	
SON100W	SON 100W/220	E27	2000	25	8500		28000	
SON150W	SON 150W/220	E40	2000	25	14500		28000	
SON250W	SON 250W/220	E40	2000	25	27000		28000	
SON400W	SON 400W/220	E40	2000	25	48000		28000	
SON1000W	SON 1000W/220	E40	2000	25	130000		16000	

SON Comfort

SON-C150W	SON Comfort 150W/621	E40	2150	65	12500		20000	
SON-C250W	SON Comfort 250W/621	E40	2150	65	22000		20000	
SON-C400W	SON Comfort 400W/621	E40	2150	65	37000		20000	

MASTER SON PIA Hg-Free

SON-PI150W	MASTER SON PIA Hg Free 150W/221	E40	2150	25	14500		32000	
SON-P250W	MASTER SON PIA Hg Free 250W/221	E40	2150	25	27000		32000	
SON-P400W	MASTER SON PIA Hg Free 400W/221	E40	2150	25	48000		32000	

MASTER SON PIA Plus

SON-PP70W	MASTER SON PIA Plus 70W/220	E27	1900	20	5900		28000	
SON-PP100W	MASTER SON PIA Plus 100W/220	E40	2000	25	10200		32000	
SON-PP150W	MASTER SON PIA Plus 150W/220	E40	2000	25	17000		32000	
SON-PP250W	MASTER SON PIA Plus 250W/220	E40	2000	25	31100		32000	
SON-PP400W	MASTER SON PIA Plus 400W/220	E40	2000	25	55500		32000	

SON-T

SON-T70W	SON-T 70W/220	E27	2000	25	6000		24000	
SON-T100W	SON-T 100W/220	E40	2000	25	9000		28000	
SON-T150W	SON-T 150W/220	E40	2000	25	15000		28000	
SON-T250W	SON-T 250W/220	E40	2000	25	28000		28000	
SON-T400W	SON-T 400W/220	E40	2000	25	48000		28000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
SON-T Comfort								
SON-TC150W	SON-T Comfort 150W/621	E40	2150	65	13000		20000	
SON-TC250W	SON-T Comfort 250W/621	E40	2150	65	23000		20000	
SON-TC400W	SON-T Comfort 400W/621	E40	2150	65	38000		20000	
MASTER SON-T PIA Hg-Free								
SON-TP100W	MASTER SON-T PIA Hg-Free 100W/221	E40	2150	25	9000		32000	
SON-TP150W	MASTER SON-T PIA Hg-Free 150W/221	E40	2150	25	15000		32000	
SON-TP250W	MASTER SON-T PIA Hg-Free 250W/221	E40	2150	25	28000		32000	
SON-TP400W	MASTER SON-T PIA Hg-Free 400W/221	E40	2150	25	48000		32000	
MASTER SON-T PIA Plus								
SON-TPP50W	MASTER SON-T PIA Plus 50W/220	E27	2000	25	4400		28000	
SON-TPP70W	MASTER SON-T PIA Plus 70W/220	E27	2000	25	6600		28000	
SON-TPP100W	MASTER SON-T PIA Plus 100W/220	E40	2000	25	10700		32000	
SON-TPP150W	MASTER SON-T PIA Plus 150W/220	E40	2000	25	17500		32000	
SON-TPP250W	MASTER SON-T PIA Plus 250W/220	E40	2000	25	33200		32000	
SON-TPP400W	MASTER SON-T PIA Plus 400W/220	E40	2000	25	56500		32000	
SON-TPP600W	MASTER SON-T PIA Plus 600W/220	E40	2000	25	90000		28000	
High-pressure White SON lamps								
MASTER SDW-T								
SDW-T35W	MASTER SDW-T 35W/825	PG12-I	2500	83	1300		10000	
SDW-T50W	MASTER SDW-T 50W/825	PG12-I	2500	83	2300		10000	
SDW-T100W	MASTER SDW-T 100W/825	PG12-I	2550	83	5000		10000	
MASTER SDW-TG Mini								
SDW-TG50W	MASTER SDW-TG Mini 50W/825	GX12-I	2550	81	2400		10000	
SDW-TG100W	MASTER SDW-TG Mini 100W/825	GX12-I	2550	83	4900		10000	



False ceilings

Ceiling types – introduction

Today, architects and building contractors can choose from an enormous variety of ceiling systems, especially ones designed for offices and other general applications. Use of climate ceilings (cooled) is growing.

The five main standard ceiling types are:

1. Visible profile ceilings
2. Concealed profile ceilings
3. Strip ceilings
4. Panel ceilings
5. Plaster ceilings

Obviously, there are small differences between ceiling types, but the application of luminaires and the accessories you will need for their mounting are basically the same for all these systems.

The first four standard ceiling types discussed here represent the vast majority of ceiling systems currently available. Also real “project-made” plaster ceilings are used more and more and considered to be aesthetically pleasing solutions. If you decide to use another type of system, contact your Philips organization and they will inform you

about the options in your specific situation. If no standard solution is available, a special solution in the luminaire housing or fitting can be discussed.

Ceiling tile materials

Different ceiling types use panels or tiles of different materials. The most popular materials are:

Mineral (hard and soft)

These are produced in thicknesses between 14 and 20 mm. Mineral tiles are usually painted and always mechanically vulnerable. Acoustic qualities of these types of ceilings are reasonable.

Plaster

Plaster ceilings are usually 10 to 15 mm thick and are non-removable ceilings. When recessed luminaires are to be used in this kind of ceiling an opening has to be cut out before mounting the luminaire.

Metal

Metal is available in the shape of tiles, strips and panels. In some cases they are perforated and have a sound-insulating layer on top. This layer helps to create good acoustic quality. Recessed luminaires are usually designed so that they can replace a complete ceiling tile.

1. Visible profile ceilings

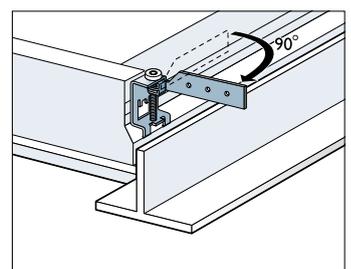
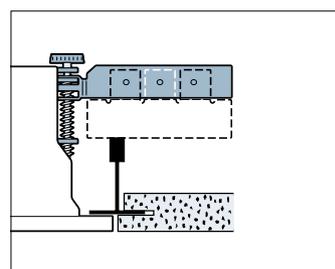
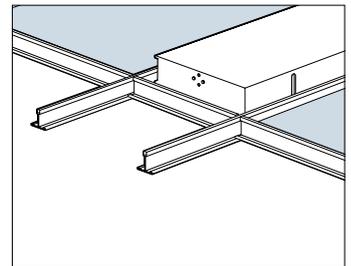
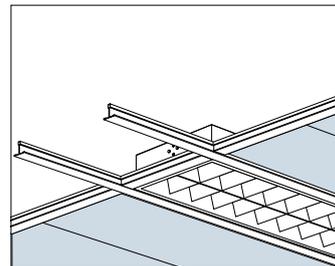
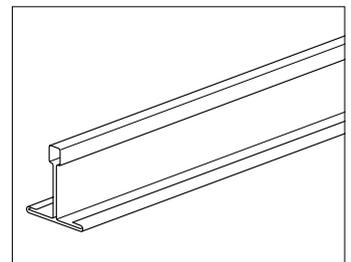
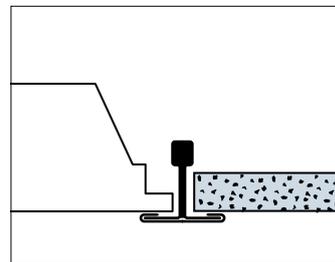
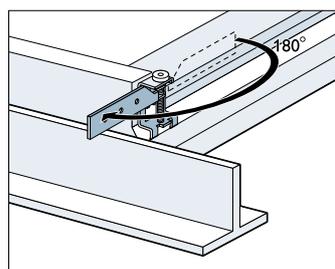
In this very common system, profiles are always visible. Ceiling tiles rest on the profiles and are in most cases made from a mineral material. The two standard module sizes are 300 mm and 312.5 mm. The most popular tiles in this type of ceiling are for ceiling grids of 600 mm x 600 mm and 600 mm x 1200 mm, or 625 mm x 625 mm and 625 mm x 1250 mm. In this type of modular ceiling the luminaires are mounted as an inlay.

Applications

These ceiling types are usually applied when electrical wiring, LANs and other technical installations are hidden behind the ceiling. Also in this application the ceiling should contribute to the acoustic environment. All Philips recessed luminaires are suitable for this kind of ceiling.

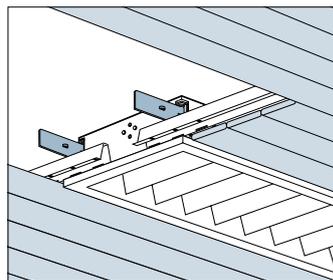
2. Concealed profile ceilings

In this type of ceiling the profiles are covered by the tiles and therefore invisible. Tiles are made from a mineral type of material or metal. In these types of systems suspension brackets are always needed for luminaire mounting.

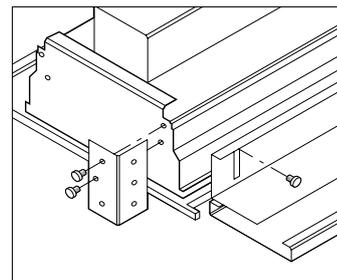


3. Strip ceilings

This ceiling system consists of main carriers on which metal strips are clicked. They can have various widths. Luminaires are usually mounted in line with the strips and perpendicular to the main carriers. In this case, a length profile mounted to the side of the luminaire is required, or suspension brackets at the head of the luminaire are required if the luminaire fits exactly in between two main carriers (see figures).



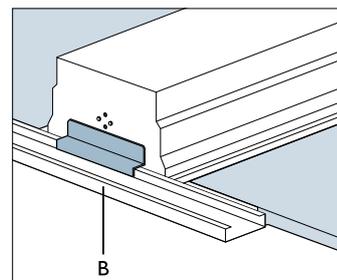
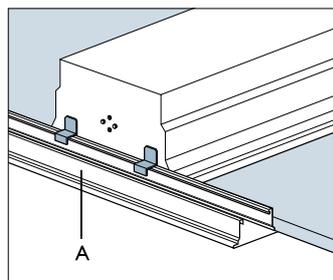
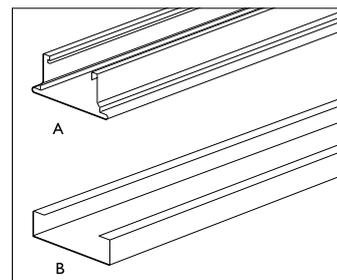
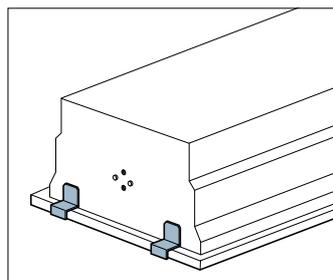
Fixation with ZBS300 SMB



Fixation with ZBS319 LP

4. Panel ceilings

The main carriers of these systems are usually placed at main building module distances, often 1200 or 1800 mm. Ceiling panels are mounted between the main carriers. In this type of ceiling metal and mineral panels are used. If the distance between the main carriers does not match the luminaire length, the luminaires can be made to measure so that they can be mounted between the main carriers like the panels. For profile A the luminaire can be mounted as an inlay. On request safety brackets can be delivered with the luminaire. If profile B is used, brackets are required and should be ordered separately. Alternatively, the luminaires could be factory pre-mounted in the original ceiling tiles.

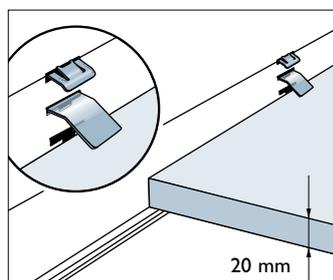
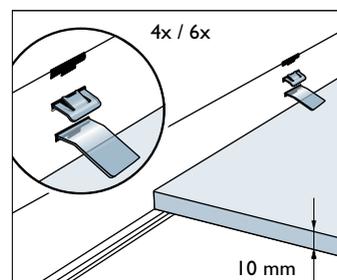
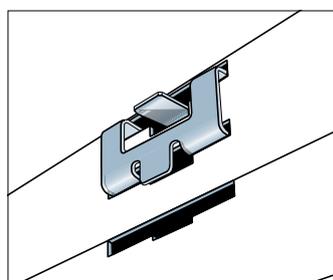


Applications

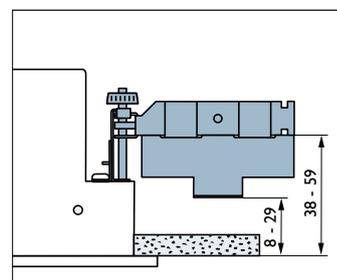
Areas where removable partition walls are used and where acoustic performance of high quality is required. In corridors each panel can span the total width, typically 1.8 m.

5. Plaster ceilings

For plaster ceilings the luminaires are usually made lower and lighter in weight. Brackets are reduced to clips, and they can be inserted in two positions by means of the slots provided in the luminaire housing sides. As the plaster can vary in thickness, it may be necessary to use additional spacer strips to bridge the distance between ceiling and supporting clips. Mounted in this way, the luminaire front can be mounted directly against the ceiling and will effectively hide its opening. For higher and heavier luminaires suspension brackets are provided which can be adjusted in height.



Fixation with ZBS460 SMB-PLC



Fixation with ZBS471 SMB-PLC

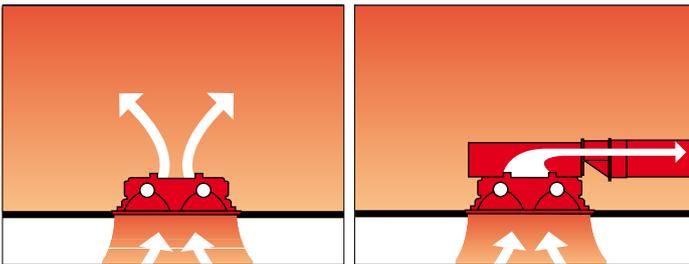
Air-handling devices

Recessed luminaires are often installed in modular ceiling systems. For Philips it is important that the luminaire is well integrated. It should fit aesthetically and mechanically, and the lighting performance should be optimized. The luminaire can also become an integral part of the air-handling system. Nearly all Philips recessed luminaires have integrated air slots and can be used effectively to handle return air.

The principle of using a luminaire as a ventilation point is simple: holes are made in the upper luminaire housing through which air is drawn from the room. HVAC engineers need specific data on the technical advantages and cooling characteristics of such systems. That is why, for most Philips lighting solutions, Philips provides technical data to enable the thermal effects and related cost savings to be calculated. Additional pressure-loss diagrams, noise curves and data on the effects on the lumen output when air is ventilated at a given yield of air flow, all aid the HVAC specialist to fine-tune his system design. All this data, and more, is available on request. Simply contact your local Philips sales office for the necessary information.

Additional light performance

For TL-D lamps, using the luminaire as a ventilation point has the additional advantage of keeping the lamp burning at the optimal operating temperature. This means that the light output of the lamp will increase. With TL5 lamps this advantage is not so pronounced, although extensive tests have shown that with standard air volumes there is some effect on the light output ($F_w = 1$). Hence, light/ventilation integration with TL5 lamps is justified in terms of both cost saving and lighting performance.



Most Philips luminaires for ceiling systems are fitted with air vents on the top to provide natural ventilation for the luminaire.

With a plenum box, exhaust air can be channeled directly to an air-handling system.



Optic guide – Specifications

Innovative OLC optics

OLC stands for Omni directional Light Control, all-around light control. The OLC optics are designed to obtain optimal lighting on the working plane and to limit undesired brightness spots, avoiding direct and reflected glare all around the luminaire. The new open aluminum OLC optics C8, D8, C8-C, D8-C, C8-VH and D8-VH complement the C6, D6, M6, C7 and D7 range, and the new decorative OLC optics AC-MLO and PC-MLO are closed. They all combine optimal luminous efficacy and light distribution with excellent all-round glare control.

New generation optics for TL5 lamps

The computer-aided designed shape of the side reflectors in combination with the advanced miniaturised 3-dimensional cross lamellae with the broken arch contour are made of high-grade aluminum. They have given rise to new optical qualities:

- All-round glare control OLC 1000 cd/m² of C8, D8, C8-VH and D8-VH, or OLC 200 cd/m² of C8-C and D8-C, is in accordance with the European standard on lighting of workplaces EN 12464-1. Depending on the application, the exceedingly efficient optics C8-VH and D8-VH, the performer optics C8 and D8, or the comfort optics C8-C and D8-C can be selected for the application.
- Although the width of the optic is very small, the direct glare from the luminaire is well controlled and the UGR_r limit of 19 is always met.
- The light output ratio (LOR) is up to 94%, depending on the type of mirror material, number of lamps per luminaire and lamp type.
- The wide-beam delta-shaped light distribution yields a high uniformity of light at the working plane and a pleasant balance between the horizontal and vertical illuminances.
- No disturbing luminance spots can be noticed for all optic versions – a very smooth uniform appearance is produced by the comfort version C8-C and D8-C.
- Slim-line optics have an optical opening only 55 mm in width to ensure they are inconspicuous in the ceiling; slim-line luminaires offer the best aesthetical appearance.



Cross louver of OLC optics C8 and D8.

Notice the broken arch and the seam at the underside for improved efficiency and the fully enclosed convex top for optimal lighting control and higher efficiency.

Previous generations of optics with a larger optical width like the mini optics C7 and D7 (optical opening of 80 mm) with 3-D lamellae with curved upper side and concave underside result in slightly lower efficiencies. However, their direct and reflected glare figures remain within the limits set in the standards. This also applies for the mini, the midi and maxi optics C6, D6 and M6 (optical opening of 80, 100 and 125 mm respectively) with their Fresnel structure on top of the cross louvers.

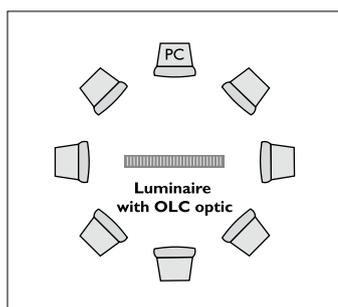
These optical features create comfortable and highly efficient office lighting:

- Flexible office design thanks to all-round glare control: computer displays can be positioned anywhere in the room without the risk of reflected glare.
- Thanks to the high light output ratio the lighting is very cost-effective and less installation power is required to achieve the illuminance specified.
- The delta-shaped light distribution ensures uniform lighting, even in the case of wider or random luminaire spacing.
- No disturbing luminance spots means a high level of visual comfort.

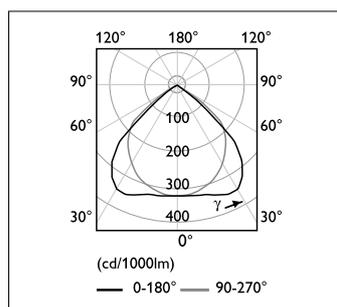
The wide choice of finishes for the high-grade aluminum used for the optics, which are available in semi-high gloss D8, D7 and D6, high gloss C8, C7 and C6 and matt M6, always offers an ideal optic for every application, depending on personal preferences.

Matt mirror material (M) gives the luminaire a particular visual presence in the ceiling, resulting in a certain extent of visual guidance. High gloss specular material (C) reduces all disturbing luminances and produces a higher light output, however, this material is more susceptible to dust pollution and fingerprints.

Semi-high-gloss mirror material (D) offers the best overall practical value: the satin material has a low visual presence without becoming a “dark spot” and is not sensitive to small amounts of pollution. Every trend – in this case low-brightness luminaires – creates a counter-trend: visual guidance and clear presence of the lighting elements in the ceiling architecture can be achieved using the new MLO optics.



All-round glare control

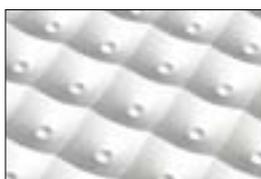


Delta-shaped light distribution

Micro Lens Optics (MLO)

Alternatives for the open aluminum OLC optics are the Micro Lens Optics AC-MLO (acrylate) and PC-MLO (polycarbonate). Their optical technique is quite different, although they are based on more or less identical lighting specifications their appearance is completely different.

- The decorative but uniform optical covers are made of patented Micro Lens Optics.
- All-round glare control OLC 1000 cd/m², with average luminance < 1000 cd/m² for $\gamma \geq 65^\circ$ in all directions, is in accordance with the European standard on workplaces EN 12464-1. This is realised by the typical conical element with 108 degrees top angle and small inverse top moulded in a regular square pattern. In all directions, the same luminance cut-off in combination with a very low luminance between 65 and 90 degrees from the vertical is realised. The limits are achieved by applying dedicated MLO material per lamp type, which differs for TL5 HE and TL5 HO lamps.
- MLO provides the option to mix the light of different lamp colors, e.g. warm-white and cool-white or daylight, at will or continuously, in order to realise individual color temperature control or Dynamic Lighting. The overall light color appearance of the luminaire, when fitted with different lamp colors remains uniform whichever ratio of warm-white to cool-white light is chosen by the end user. The different color tones from the different lamps are perfectly mixed.
- 'Visible' light, the MLO optics realise a strong architectural appearance at the ceiling of the application area and contribute to the room design.
- The wide-beam delta-shaped light distribution is created in all directions to ensure a high uniformity of light at the working plane and a pleasant balance between the horizontal and vertical illuminances.



Enlarged detail of Micro Lens Optics MLO

These optical features of the Micro Lens Optics create comfortable and efficient general lighting that is not only dedicated to office lighting,

but also very suitable for general lighting applications in e.g. hospitals, lobbies and commercial areas:

- Flexible interior design thanks to all-round glare control: computer displays can be positioned anywhere in the room without the risk of reflected glare.
- The direct glare expressed in UGR_R is limited, which results in a comfortable decorative lighting installation.
- The high light output ratios of these closed luminaires make the lighting cost effective.
- The all-around delta-shaped light distribution ensures uniform lighting, even in the case of wider luminaire spacing. By applying square luminaires mounted in square patterns, the ceiling will appear uniform in all directions.
- No disturbing luminance spots will guarantee a high level of visual comfort.

Luminaires with MLO optics are available in such dimensions that they can replace a square or rectangular ceiling tile, and also in slim-line version. By their distinct brightness OLC optics may create clear visual guidance and direction for the users of the illuminated spaces.

Optics to suit all requirements

The optic in a luminaire is made up of the reflector and louvers, diffuser or refractor system that controls the light direction and beam pattern of the luminaire. It is an essential control device. It is therefore not surprising that Philips offers a wide variety of optics, each designed to perform a specific function.

Which optic is best for the practical situation in question?

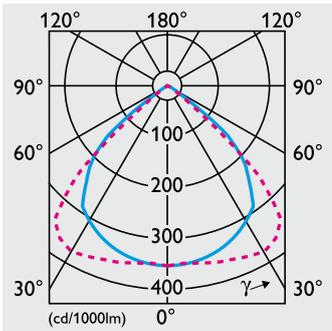
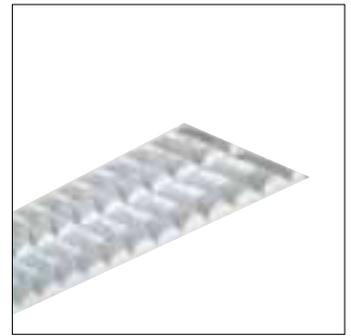
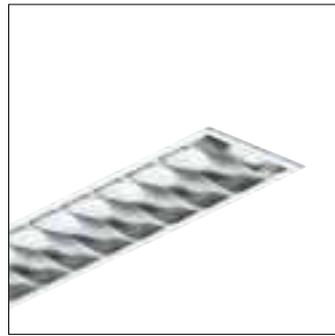
The function of the area to be illuminated and the task to be performed usually determine the type of luminaire and optic you need, while the ceiling system often determines the dimensions and the way the luminaire is to be mounted. The luminaire-optic combination must fulfil the lighting requirements defined for each specific area and task. In addition, other requirements, such as image, efficiency and aesthetics, will influence the decision. Light distribution, direct and reflected glare control and efficiency are parameters that influence the performance of the lighting installation. These elements are described in the European standard EN 12464-1 (Light and lighting - Lighting of workplaces).

The following optic guide is comprised of optics for fluorescent luminaires with TL5 and TL-D lamps, grouped in the different optic dimensions (Micro, Mini, Midi and Maxi), for downlights with compact fluorescent lamps and for projectors with compact HID lamps. The overview offers an indication of the optic description and performance. As the optical performance may vary with lamp type and number of lamps, please consult the photometric database via www.lightingsoftware.philips.com in conjunction with calculation programmes like DIALUX and RELUX.

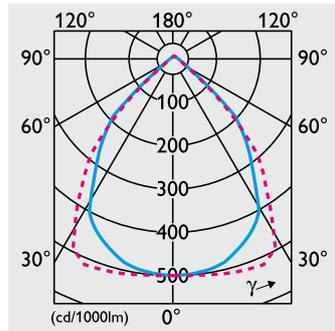
Micro optics – New generation optics for TL5

Micro optics are the latest state-of-the-art in optical design and available for TL5 lamps only. The very slim-line optics, with an opening of only 55 mm, are integrated in high-end luminaires. The aluminum optics with their curved underside enhance the aesthetical appearance and have an improved efficiency.

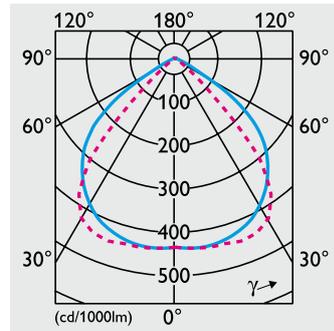
Micro optics are applied in innovative luminaire families like Arano, Celino, Savio, SmartForm, ThinMark and TBS490, slim-line and square luminaires. In SmartForm TBS460 the space between the slim-line aluminum optics is filled in with decorative panels. Micro optics conform to the European standard EN 12464-1.



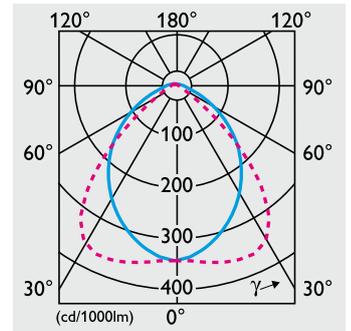
--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°

C8/D8

Performer micro optic made of high-quality standard aluminum, reflection $\geq 83\%$, available in high gloss (C) and semi-high gloss (D).
Delta-shaped light distribution and all-round glare control.

C8-C/D8-C

Excellent comfort micro optic made of high-quality, very highly reflective performance aluminum, reflection $\geq 94\%$, available in high gloss (C) and semi-high gloss (D).
Delta-shaped light distribution and all-round glare control. Optic is optimized for high comfort and good appearance.

C8-VH/D8-VH

Very high efficiency micro optic made of high-quality, very highly reflective optimum silver-coated aluminum, reflection $\geq 97\%$, available in high gloss (C) and semi-high gloss (D).
Delta-shaped light distribution and all-round glare control. Optic is optimized for maximum efficiency.

M2

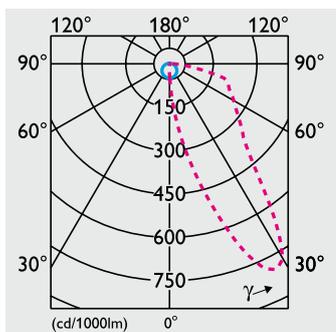
Micro optic made of matt high-quality standard aluminum side reflectors, reflection $\geq 83\%$, and flat profiled aluminum lamellae.
Delta-shaped light distribution.
The distinct appearance creates clear visual guidance in the lengthwise direction.

LOR	up to 82%
UGR _R	≤ 19
L	$< 1000 \text{ cd/m}^2$

LOR	up to 86%
UGR _R	≤ 19
L	$< 200 \text{ cd/m}^2$

LOR	up to 94%
UGR _R	≤ 19
L	$< 1000 \text{ cd/m}^2$ (SmartForm) $< 200 \text{ cd/m}^2$ (Arano, Celino, Thinmark and TBS490)

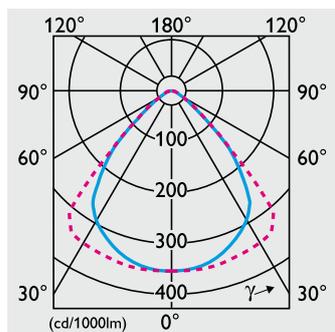
LOR	up to 75%
UGR _R	≤ 19 for square versions ≤ 22 for rectangular versions



----- 0-180° ——— 90-270°

A
Asymmetrical micro optic made of high-quality, very highly reflective performance aluminum, reflection $\geq 94\%$. The optic comprises a single-shell bevelled reflector without lamellae, suitable for 1 or 2 lamps. Lamp is asymmetrically placed in a wider and higher housing, invisible from the main viewing direction. Suitable for wall washing applications in offices, schools and shops.

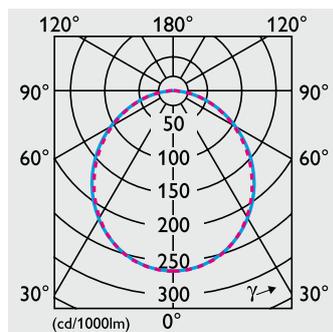
LOR	up to 80%
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----- 0-180° ——— 90-270°

AC-MLO/PC-MLO
Micro lens optic made of acrylate (AC) or polycarbonate (PC). Droplet-shaped light distribution and all-round glare control. The patented micro lens optic is optimized for the best balance between efficiency and low brightness at viewing angles above 65 degrees. Standard with diffuser for uniform brightness. ND version is without diffuser for 10% higher efficiency.

LOR	up to 69% (AC-MLO ND) $\leq 66\%$ (PC-MLO ND)
UGR _R	≤ 16
L	$< 1000 \text{ cd/m}^2$



----- 0-180° ——— 90-270°

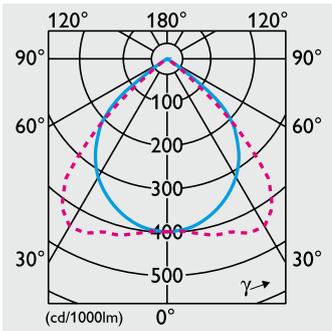
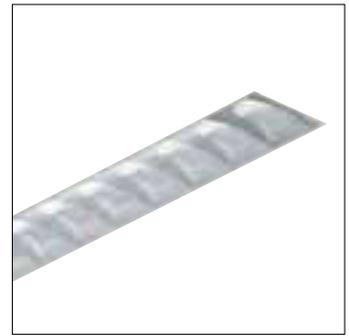
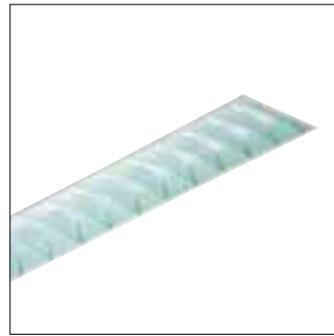
O
Opal micro optic with top reflector made of high-quality, very highly reflective performance aluminum, reflection $\geq 94\%$, ensures a high efficiency of the opal optic. The optic creates a diffuse light distribution and has a distinct appearance that creates clear visual guidance in the lengthwise direction.

LOR	up to 73%
UGR _R	≤ 22

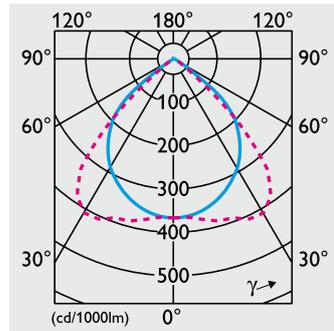
Mini optics – dedicated TL5 performers

Mini optics are specially designed for TL5 lamps and combine an aesthetical high-performance design and optimized photometric characteristics. The slim-line mini optics with an opening of 80 mm are well integrated in high-quality and functional luminaires.

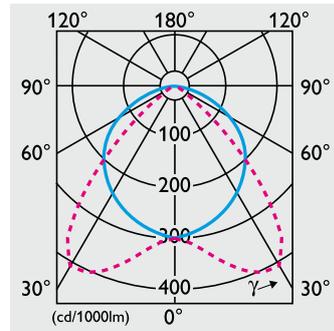
The mini optics are applied in luminaire families like TBS600/625 and the recently introduced EFix 260 recessed, surface and suspended mounted luminaires.



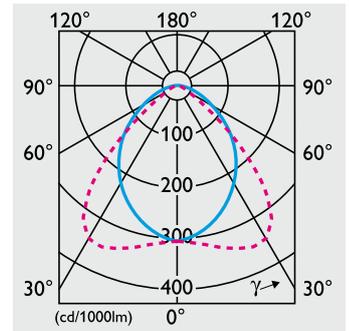
----- 0-180° ——— 90-270°



----- 0-180° ——— 90-270°



----- 0-180° ——— 90-270°



----- 0-180° ——— 90-270°

C7/D7

Comfort mini optic made of high-quality very highly reflective performance aluminum, reflection $\geq 94\%$, available in high gloss (C) and semi-high gloss (D). Delta-shaped light distribution and all-round glare control. Optic is optimized for excellent comfort, pleasing appearance and very high efficiency.

C6/D6/M6

Functional mini optic made of high-quality standard aluminum, reflection $\geq 83\%$ (TBS600/625), or economy aluminum, reflection $\geq 83\%$ (EFix). Available in high gloss (C), semi-high gloss (D) and matt (M). Delta-shaped light distribution with all-round glare control.

Options:

- M6-A, asymmetrical beam
- M6-WB, wide beam
- M6-BD, bidirectional beam

M-DGN

Aesthetic mini optic with matt anodised side reflectors made of high-quality standard aluminum, reflection $\geq 83\%$, and greenish translucent plastic lamellae. This decorative optic creates clear visual guidance due to its distinctive and sophisticated look.

M2

Mini optic with matt high-quality standard aluminum side reflectors, reflection $\geq 83\%$ (TBS600/625), or economy aluminum, reflection $\geq 83\%$ (EFix), and profiled aluminum lamellae. Delta-shaped light distribution. The distinct appearance creates clear visual guidance.

Options:

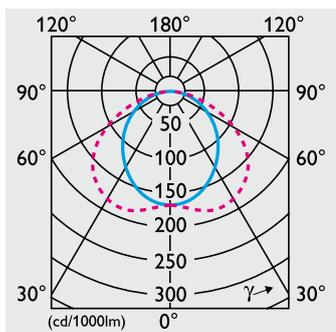
- M2-A, asymmetrical beam
- M2-WB, wide beam
- M2-BD, bidirectional beam

LOR	up to 85%
UGR _R	≤ 19
L	$< 200 \text{ cd/m}^2$

LOR	up to 78%
UGR _R	≤ 19
L	$< 200 \text{ cd/m}^2$ (TBS600) $< 1000 \text{ cd/m}^2$ (EFix)

LOR	up to 79%
UGR _R	≤ 22

LOR	up to 72%
UGR _R	≤ 19 for square versions ≤ 22 for rectangular version



----- 0-180° ——— 90-270°

OD

Decorative closed mini optic with matt side reflectors made of high-quality aluminum and concave shaped polycarbonate opal-prismatic cover. The closed optic has a high efficiency and creates clearly visible lines of light.

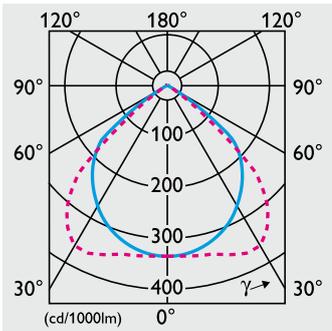
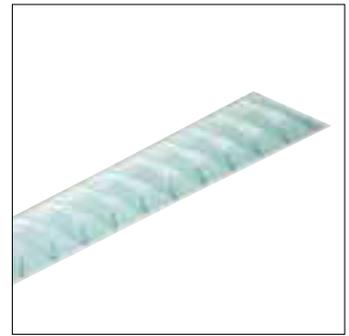
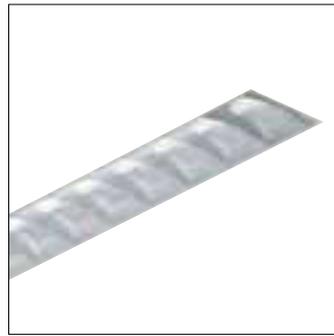
LOR	up to 60%
UGR _R	≤ 25

Midi optics – flexible TL5/TL-D performer solutions

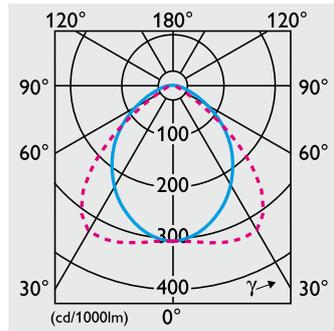
Midi optics are specially designed for luminaire families with TL5 and TL-D lamps and combine a neutral aesthetic design and performance.

The midi optics with an opening of 110 mm are well integrated in functional luminaires.

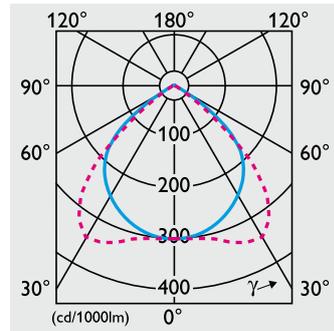
The midi optics are applied in luminaire families like X-tendolight TCS398/TPS498, Indolight TBS330 and TBS105.



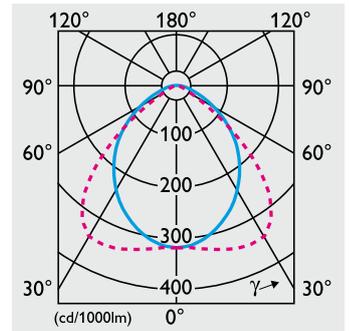
--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°

C6/D6

Comfort midi optic made of high-quality standard aluminum, reflection $\geq 83\%$, available in high gloss (C) and semi-high gloss (D). Cross louver is equipped with Fresnel structure for improved efficiency.

Delta-shaped light distribution and all-round glare control.

Options:

- C6-H, D6-H, high-quality, very highly reflective aluminum for raised LOR
- T, top reflector for raised LOR

M2

Functional midi optic made of matt high-quality standard aluminum, reflection $\geq 82\%$, and profiled lamellae with curved underside.

Delta-shaped light distribution for clear visual guidance.

Options:

- M2-A, asymmetrical beam
- M2-WB, wide beam
- M2-BD30, bidirectional beam under 30 degrees
- M2-BD45, bidirectional beam under 45 degrees

M6

Comfort midi optic, made of matt high-quality standard aluminum, reflection $\geq 82\%$, and matt cross louvers equipped with Fresnel structure for improved efficiency.

Delta-shaped light distribution and all-round glare control.

Options:

- M6-A, asymmetrical beam
- M6-BD45 bidirectional beam under 45 degrees.

M-DGN

Aesthetic midi optic made of matt anodised high-quality standard aluminum side reflectors, reflection $\geq 82\%$, and greenish translucent plastic lamellae.

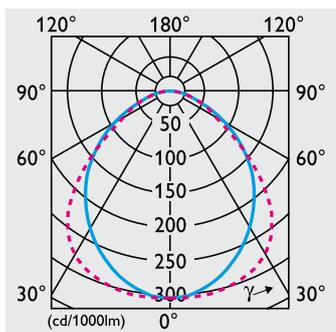
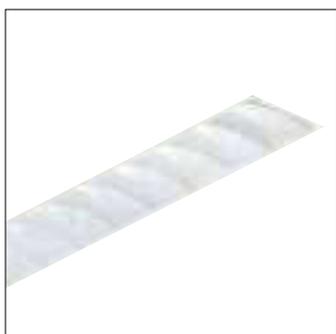
This decorative optic creates clear visual guidance due to its distinct and sophisticated look.

LOR	up to 71% (C6) up to 81% (C6-H)
UGR _R	≤ 19
L	$< 200 \text{ cd/m}^2$

LOR	up to 72%
UGR _R	≤ 22

LOR	up to 67%
UGR _R	≤ 19
L	$< 1000 \text{ cd/m}^2$

LOR	up to 75%
UGR _R	≤ 22

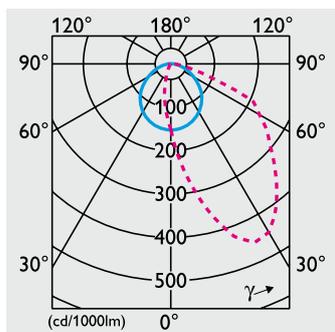


--- 0-180° — 90-270°

LI

Functional midi optic composed of white painted side reflectors and flat white cross louvers.

For functional areas without glare limitations and clear visual guidance.



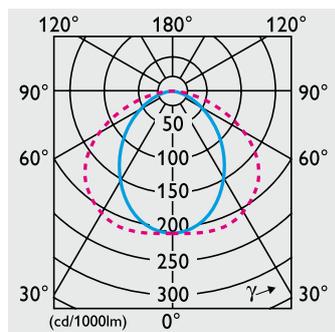
--- 0-180° — 90-270°

A

Midi optic with asymmetrical light distribution made of standard aluminum with reflection of 82%.

The optic comprises a single-shell bevelled reflector without lamellae.

Lamp is invisible from the main viewing direction.

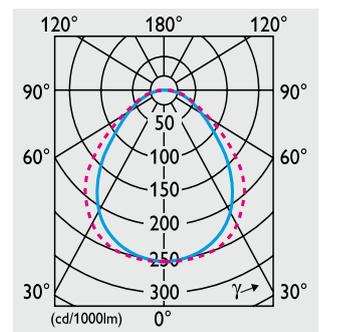
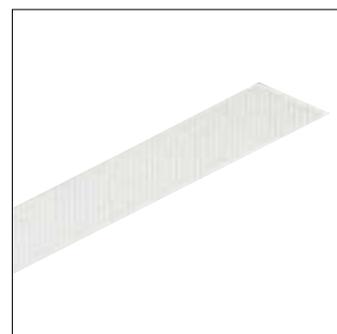


--- 0-180° — 90-270°

OD

Decorative closed midi optic made of high-quality matt aluminum side reflectors and a concave shaped polycarbonate opal-prismatic cover.

The optic has a high efficiency and creates clearly visible lines of light.



--- 0-180° — 90-270°

P

Midi polycarbonate cover with prismatic structure at the underside, mounted in an aluminum frame.

Lamps are noticeable as the prismatic cover is made of clear plastic.

LOR	up to 72%
UGR _r	≤ 22

LOR	up to 85%
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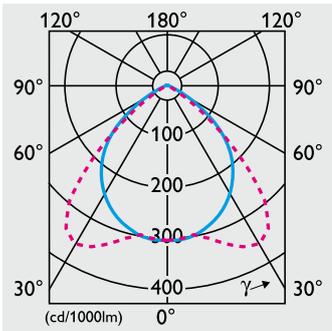
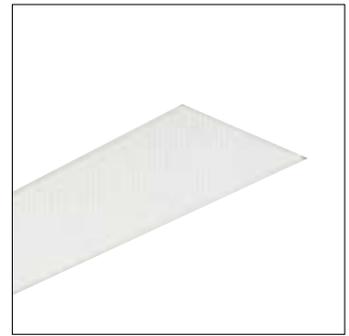
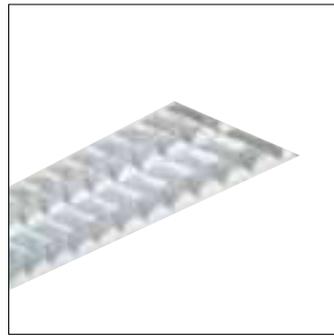
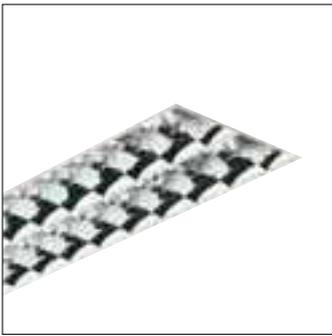
LOR	up to 60%
UGR _r	≤ 25

LOR	up to 71%
UGR _r	≤ 22

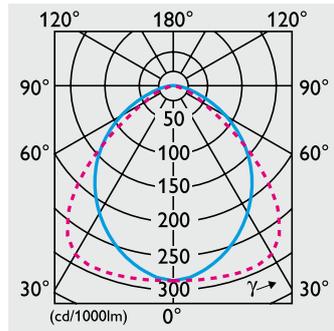
Maxi optics – optics for TL-D lamps

Maxi optics are specially designed for luminaire families with TL-D lamps and combine a neutral aesthetical design and performance. The maxi optics with an opening of 125 mm are well integrated in functional cost-effective luminaires.

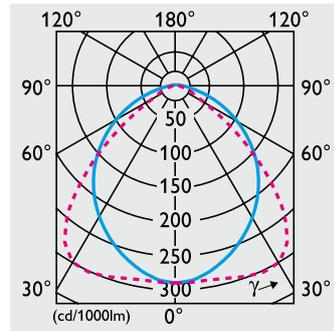
The maxi optics are applied in luminaire families like Centura 2 TCSI60, Finess TCSI98 and Impala TBSI60.



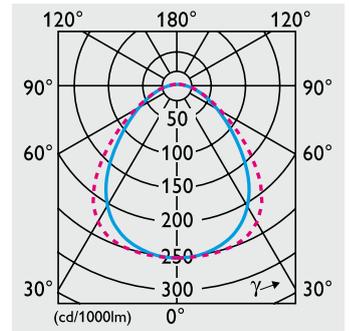
--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°

C6/M6

Maxi optic made of economy, anodised aluminum, reflection $\geq 83\%$, available in high gloss (C) and matt (M).

Cross louver is equipped with Fresnel structure for improved efficiency.

Delta-shaped light distribution and all-round glare control.

M2

Functional maxi optic made of matt economy aluminum side reflectors, reflection $\geq 82\%$, and profiled aluminum lamellae with curved underside.

C3

Functional maxi optic made of high gloss economy aluminum side reflectors, reflection $\geq 82\%$, and matt flat cross louvers.

P

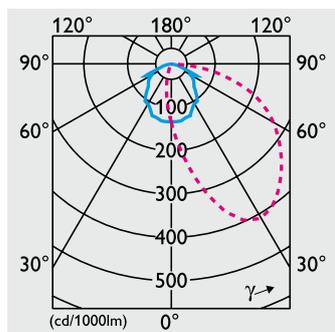
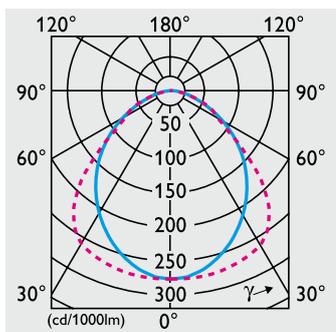
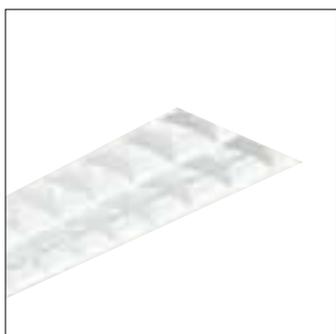
Maxi polycarbonate cover with prismatic structure at underside, mounted in an aluminum frame. Lamps are noticeable as the prismatic panel is made of clear plastic.

LOR	up to 68% (C6-1000)
	up to up to 62% (M6)
UGR _R	≤ 19 (C6-1000)
L	< 1000 cd/m ²

LOR	up to 66%
UGR _R	≤ 19

LOR	up to 60%
UGR _R	≤ 19

LOR	up to 63%
UGR _R	≤ 19



LI

Functional maxi optic composed of white painted side reflectors and flat white cross lamellae.

For functional areas without glare limitations and clear visual guidance.

A

Maxi optic with asymmetrical light distribution made of standard aluminum, reflection 82%, suitable for I lamp. The optic comprises a single-shell bevelled reflector without lamellae.

Lamp is not visible from the main viewing direction.

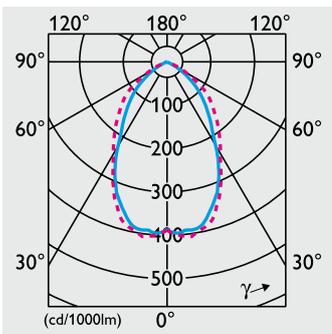
LOR	up to 67%
UGR _R	≤ 19

LOR	up to 69%
UGR _R	≤ 19

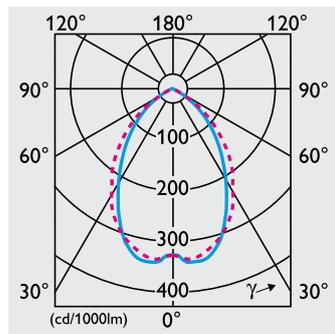
Optics for compact fluorescent downlights

Optics for compact fluorescent downlights are mainly applied in round recessed mounted luminaires. The optic opening dimension varies with the luminaire/lamp combination. The optical design is optimized for high light output and to create the desired light distribution.

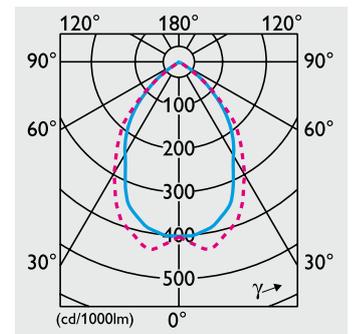
The optics for downlights are fitted in downlight families like Europa 2 and Fugato.



----- 0-180° ——— 90-270°



----- 0-180° ——— 90-270°



----- 0-180° ——— 90-270°

C
Circular optic; lower and top reflector made of high-gloss specular material, reflection 80%. Reflections from the lamp(s) are not visible in the lower part from all around the luminaire. Complete integration of the downlight in the architecture is achieved thanks to the low brightness optic. For functional areas with or without glare limitations and without visual guidance.
Option:
- RL ring louver for reduced glare

M
Circular optic; lower part made of satinised material, top reflector made of high-gloss material, reflection 80%. At the ceiling a pattern of visible downlights with soft even brightness enhances its architecture. For functional areas with a demand for higher luminaire brightness and some visual guidance.
Option:
- RL ring louver for reduced glare

WR
Circular optic; lower part made of white-coated material, top reflector made of high-gloss material, reflection 80%. At the ceiling a clear pattern of visible downlights attracts visual attention. For functional areas with demand for a high luminaire brightness at the ceiling and clear visual guidance.

FR
Circular optic with faceted reflector made of high-gloss mirror material, reflection ≥ 80%. Highly efficient downlight that meets stringent reflected glare limitations, also suitable for high-wattage lamps. For sparkling lighting elements at the ceiling.

LOR	up to 67%
UGR _r	≤ 22 ≤ 19 with ring louver RL
L	< 1000 cd/m ²

LOR	up to 65%
UGR _r	≤ 22 ≤ 19 with ring louver RL
L	< 1000 cd/m ²

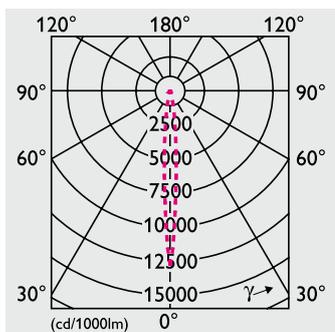
LOR	up to 62%
UGR _r	≤ 25

LOR	up to 71%
UGR _r	≤ 19 or 22 depending on type
L	< 200-1000 cd/m ²

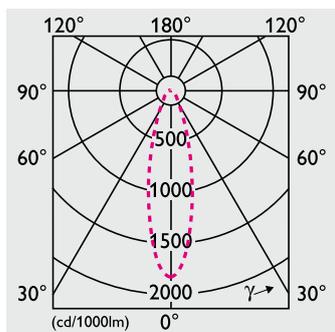
Optics for projectors with compact high-intensity discharge lamps

Optics for compact high-intensity discharge lamps like MasterColour and White SON are usually circular in shape. The optic opening dimension varies with the luminaire/lamp combination. The optical design is optimized for high light output and creation of the desired light distribution and effect (accent factor).

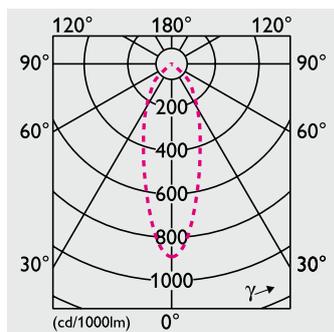
The optics for compact high-intensity discharge lamps are applied in projector families like EFix, Fugato, Magneos and UnicOne.



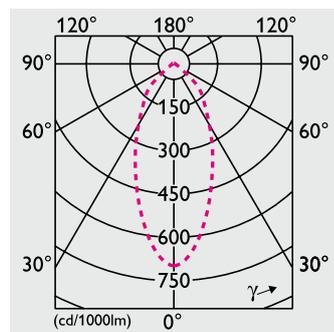
--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°



--- 0-180° — 90-270°

12
Narrow beam rotational symmetric optic for down lighting and high-impact accent lighting. Made of anodised aluminum with 99% reflection. Intensity varies greatly with lamp type and power. For accent lighting with dramatic effects.

24
Medium beam rotationally symmetric optic for down lighting and strong accent lighting. Made of anodised aluminum with 99% reflection. Intensity varies greatly with lamp type and power. For accent lighting with theatrical effects and general lighting from higher ceilings.

36
Medium beam rotationally symmetric optic for down lighting and accent lighting. Made of anodised aluminum with 99% reflection. Intensity varies greatly with lamp type and power. For accent and general lighting in areas where high-quality light sources are required.

60
Wide-beam rotationally symmetric optic for down lighting. Made of anodised aluminum with 99% reflection. Intensity varies greatly with lamp type and power. For general lighting in retail areas, museums, hotels and lobby areas in offices and public buildings.

LOR	up to 67%
I _{max}	approx. 15 kcd/klm

LOR	up to 65%
I _{max}	approx. 2 kcd/klm

LOR	up to 60%
I _{max}	approx. 1 kcd/klm

LOR	up to 60%
I _{max}	approx. 0.75 kcd/klm

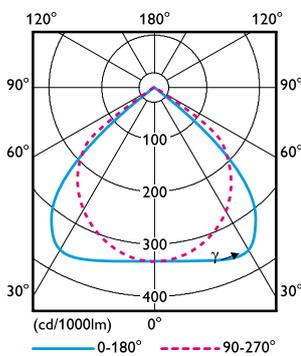
Technical data

The technical data in this catalogue is limited to the main diagrams and data that indicate the beam characteristics. For functional lighting design the polar intensity diagram is given and for accent lighting design both the polar intensity and beam diagram are provided.

For lighting calculations all necessary data is given in the photometric database, which is accessible via www.lightingsoftware.philips.com, and used in conjunction with calculation programs like DIALUX and RELUX.

Several types of photometric templates are available, which contain all relevant photometric data, diagrams, key figures and tables, depending on the type of luminaire and its application.

Polar intensity diagram

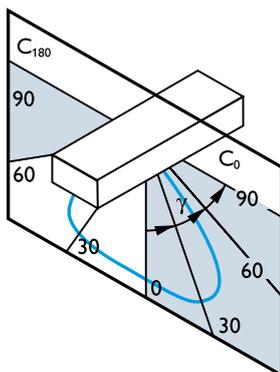


The polar intensity diagram provides a rough idea of the shape of the light distribution of a luminaire. In the polar intensity diagram, the luminous intensity is presented in the form of curves and given in candela per 1000 lumen (cd/1000 lm) of the nominal lamp flux of the lamp(s) applied.

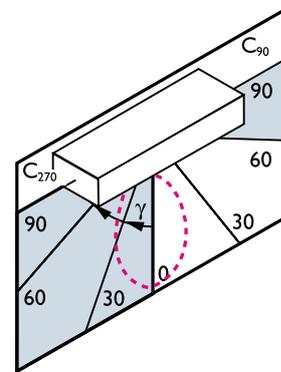
For accent lighting the polar intensity diagram curves may be expressed in candelas for the lamp type indicated.

The diagram shows the light distribution in two planes:

- The continuous (blue) line:
In the vertical plane through the width axis of the luminaire, the C0-C180 plane is indicated as:



- The dotted (red) line:
In the vertical plane through the length axis of the luminaire, the C90-C270 plane is indicated as:



In cases where the light distribution of a luminaire is rotation-symmetrical, as for downlights, projectors and industrial high-bay luminaires, it is expressed in one C-plane only (solid, blue line). Notice that for asymmetrical light distributions two planes are insufficient for calculation purposes. Despite this, in the polar intensity diagram, only two planes will be given, as this is internationally accepted.

Light Output Ratio (LOR)

The light output ratio is the measure of a luminaire that indicates the total lighting efficiency of its optical parts. The value is measured and composed of the upward and downward light contribution in relation to the total amount of light emitted by the lamp(s) of a luminaire under standard operating conditions.

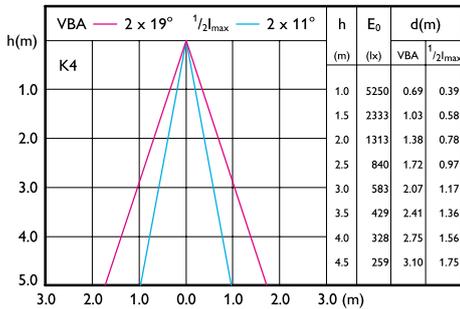
Luminaire luminance (L)

The luminance of the luminous parts, optics and cover of the luminaire is measured and or calculated at intervals of 15 degrees and at elevation angles of 65, 75 and 85 degrees to obtain the average luminaire luminance. The average luminaire luminance shall not exceed the limits specified in EN 12464-1 for the particular tasks and activities in question for the maximum lamp and luminaire output.

Unified Glare Rating Reference (UGR_R)

The UGR reference rating of a luminaire is the Unified Glare Rating value obtained from the UGR table at room reflection factors 0.70, 0.50 and 0.20 and for room dimensions 4H x 8H, crosswise and endwise. The highest of both values should be lower than or equal to the value of the particular UGR class, i.e. 16, 19, 22, 25 or 28, which defines the overall UGR reference rating of a luminaire.

Beam diagram



The beam diagram shows the characteristics of the light beam produced by the luminaire/lamp combination for projectors, downlights, reflector lamps and fibre-optic terminations. The diagram gives the Visual Beam Angle (VBA), the beam spread angle ($\frac{1}{2}I_{max}$) and the sharpness of the contour as indicated by the K value, a measure for the contrast of the light beam.

Additionally, the diagram gives the user information on the diameter of the visual light patch, the diameter of the area of which the boundary has a luminous intensity equal to 50% of the maximum illuminance, and the diameter of the area of which the boundary has an illuminance equal to 50% of the illuminance measured in the centre of the beam ($\frac{1}{2}E_0$). These diameters are presented for a range of vertical distances below the luminaire.

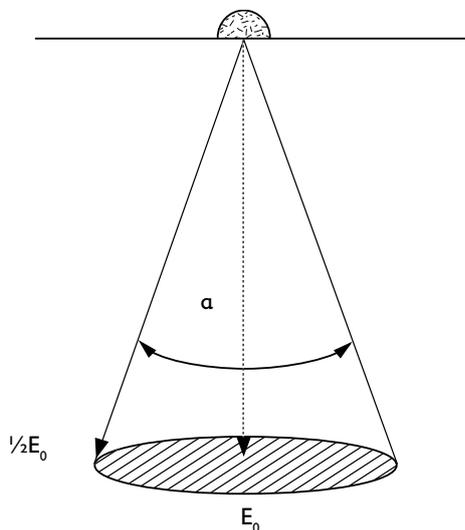
The illuminance in the centre of the beam (E_0) is available for the same range of vertical distances below the luminaire.

Visual beam angle

The VBA specifies the angle at which the contour of the beam is clearly visible. In contrast to the beam spread angle, the VBA reflects what is perceived when a person looks at the visual light patch.

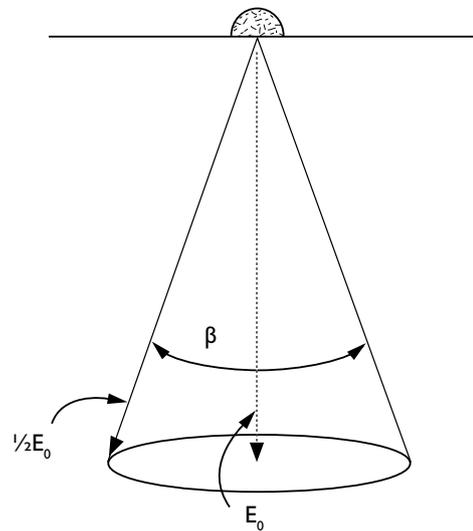
Beam width

The angle α at $\frac{1}{2}E_0$ reflects the angle at which the illuminance has dropped down to 50% of the maximum value measured in the beam centre.

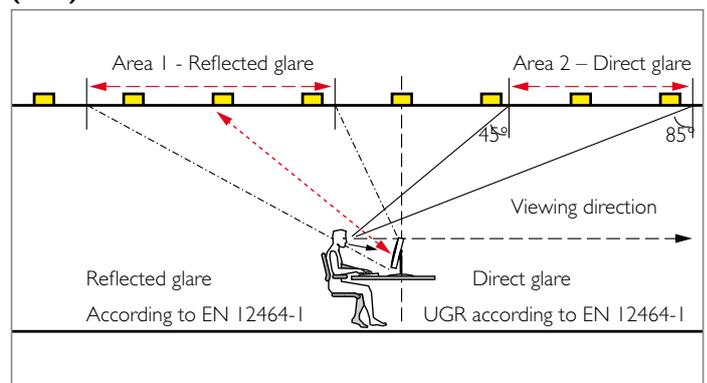


Beam spread

The beam-spread angle β at $\frac{1}{2}I_{max}$ reflects the angle over which the luminous intensity drops down to 50% of its peak value. The beam-spread angle does not reflect the visual appearance of the visual light patch.



Lighting of workstations with Display Screen Equipment (DSE)



Glare and glare-reduction techniques are important aspects in interior and especially in office and industrial lighting. Since the 1970s the lighting industry and standardization institutes have developed various methods to evaluate glare. Additional to this, the lighting industry has developed advanced optical techniques to reduce the glare to the required levels.

A clear distinction should be made between:

- direct glare caused by luminaires and other sources of light, and
- reflected glare caused by a combination of a bright light source and its reflection in a glossy surface (see drawing).

Standards in lighting have been developed to restrict both types of glare.

With the introduction of computer screens, especially the early models, there were highly reflective dark screens with bright characters that gave rise to problems in office environments. Subsequently, methods to analyze reflected glare in computer screens have been developed for direct lighting.

Direct lighting uses luminaires designed to emit most of their light output directly onto the working plane. Luminaires for direct lighting can be surface-mounted, recessed into the ceiling or suspended. They are generally visible as individual bright elements in the space, and can appear as a distinct and distracting object when reflected on a display screen. In cases where the screen displays bright characters (words and numbers, etc.) on a dark background, as was originally the case with the first-generation VDUs, the reflected image is seen against this dark background. However, if the information is displayed in dark characters on a light background, as in most modern screens and software programs, the reflections will be less conspicuous. To avoid glare problems CEN has established luminance limits for luminaires and for typical screen qualities. These are shown in Table I.

Screen classes in accordance with ISO 9241-7	I	II	III
Screen quality	Good	Medium	Poor
Average luminaire luminances reflected in the screen	$\leq 1000 \text{ cd/m}^2$		$\leq 200 \text{ cd/m}^2$

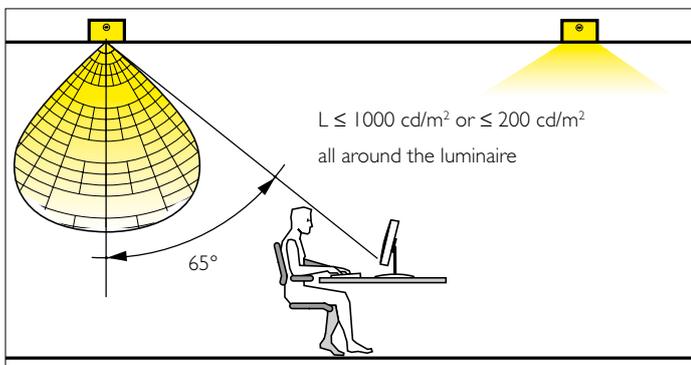
Table I. Screen classes in accordance with ISO 9241-7

Note:

- a) The appropriate luminance limit for luminaires (according to European standard EN 12464-1) can be selected when the nature of the screens and software to be used is known. If this information is not known or is not definite, the lower limit of 200 cd/m^2 should be selected.
- b) The DSE and, in some circumstances the keyboard, may suffer from reflections that cause disability and/or discomfort glare. It is therefore necessary to select, locate and arrange the luminaires to avoid high-brightness reflections. The lighting designer should determine the mounting zone that is causing disturbance, then choose equipment and plan mounting positions which will not cause any disturbing reflections.

Luminaire luminance limits with downward flux

Table I gives the limits of the average luminance of a luminaire at elevation angles of 65° and above from the perpendicular, radially around the luminaires, for workplaces with display screens. The displays are usually positioned vertically or inclined up to a 15° tilt angle.



Note:

For certain special places, for example where sensitive screens or variable inclination are used, these illuminance limits should be applied for lower luminaire elevation angles (e.g. 55°).



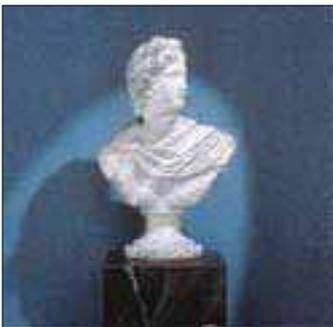
1. Noticeable visual effect
(factor 2:1)



2. Low theatrical effect (factor 5:1)



3. Theatrical effect (factor 15:1)



4. Dramatic effect (factor 30:1)
Can only be achieved with relatively low general lighting levels.



5. Very dramatic effect (factor 50:1)
Can only be achieved with relatively low general lighting levels.

Accent factor

The visual effect achieved when an object is highlighted to reveal its three-dimensional shape is determined by two items, i.e. the luminance between the object and its surrounding background, called contrast, and the light and shadow effects in the object itself caused by the shape and texture and the position of the spotlight, called modeling. The main lighting characteristics of a light source that determine the contrast are the diameter or size and the sharpness of the contour of the visual beam.

When planning accent lighting, it is important to determine the required effect or accent factor, which may vary from 'noticeable' to 'very dramatic'. What is important here is the relationship between the amount of general lighting in the direct vicinity of the object and the brightness of the spot on the object. The accent factor is calculated by dividing the lighting level in the spot by the general lighting level in the horizontal plane, approximately 1 meter above the floor in the direct vicinity of the object.

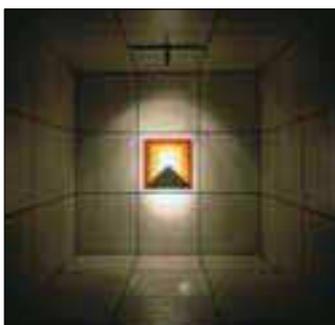
Lighting level in the spot (on illuminated object)		
Accent factor =	_____	
	General lighting level (in horizontal plane)	
To obtain satisfactory effects in situations where the level of general lighting is high or there is incident daylight, powerful accent lighting should be used.		
Figure	Accent factor	Effect
1	2:1	Noticeable
2	5:1	Low theatrical
3	15:1	Theatrical
4	30:1	Dramatic
5	50:1	Very dramatic



K1 is a profile spot without spill light; this effect is achieved by equipping the luminaire with a mechanical diaphragm or optical device that cuts off the spill light; in this way, beams of different shapes can be produced. This class can have high- or low-intensity beams, depending on the lamp power and efficiency of the system.



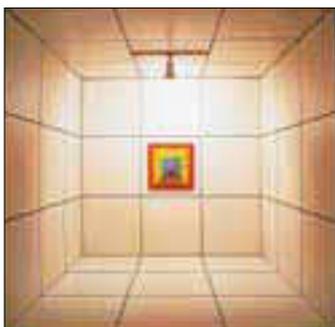
K2 is a spot which stands out due to its sharp transition to a minimal amount of spill light; this type of beam is excellent for creating theatrical and dramatic effects. This class is usually associated with very high-intensity beams.



K3 shows a hard transition from a high-intensity spot to spill light; the spill light is seen as a narrow ring of light around the spot. This class is usually associated with high-intensity beams and is very suitable for creating theatrical effects.



K4 creates a soft shift from a relatively strong spot to a great amount of spill light; the spill light assists considerably in lighting the general surroundings.



K5 is a uniformly wide beam without a visible spot and is suitable for general or supplementary lighting.

Beam characteristics – K-beam categories

Accent lighting requires a controlled beam of light, which is achieved using a lamp and reflector, or a reflector lamp. The ultimate effect is largely determined by the characteristics of the beam. The important factors are the intensity, the shape and the dimensions of the spot of light created by the beam and the amount of spill light. Spill light is the amount of light allowed to spread outside the actual beam.

A 'hard-edged' beam is a light beam with little or no spill light that gives a sharply defined contrast. It lends itself to very dramatic lighting effects.

A 'soft-edged' beam has a higher degree of spill light and will result in a lower contrast with the surrounding area. The effects are much softer than those obtained with a hard-edged beam. To help you make the right selection, Philips has a beam classification for its reflector lamps and lamp/reflector combinations, which identify five K-beam categories. The ultimate effect is influenced by the contrast between the ambient lighting and the lighting intensity of the beam.

Identifying the five K-beam categories

The illustrations here give a good impression of the effects of the various types of light beams identified by the Philips K-beam classification. The light beams create these effects without any supplementary lighting.

Average illuminance

Illuminance averaged over a specified surface.

Unit: lux (lx) = lm/m²

Symbol: E_{av}

Ballast

Electrical device used with discharge lamps for stabilising the current in the discharge.

Beam spread

Angle in the plane through the beam axis over which the luminous intensity drops to a stated percentage (e.g. 50%) of its peak intensity.

Brightness

Attribute of visual sensation according to which an area appears to emit more or less light. Brightness according to the definition is also an attribute of color. In British recommendations the term “brightness” is now reserved for descriptions of color. Luminosity should be used in other instances.

Candela

The standard unit of light intensity, abbreviated to “cd”, which is one lumen per steradian.

CDM

See MASTERColour CDM.

Color change

The facility to change the color temperature of a lighting installation makes it possible to create a more comfortable working environment or to introduce dynamic lighting effects.

Color rendering

Ability of a light source to render colors naturally, without distorting the hues seen under a full spectrum radiator (like daylight or incandescent lamps). The color rendering index (CRI) ranges from 0 to 100. For further details see ‘Specification data lamps’.

Color rendering index CRI

See Color rendering.

Color temperature

Temperature in kelvin of a full spectrum radiator most closely approximate to the color appearance of a light source at the same brightness. For further details of Philips lamps see under ‘Specification data lamps’.

Unit: kelvin, K

Symbol: T_c

Contrast C (between two parts of a visual field)

The relevant luminance difference between two parts in accordance with the formula:

$$C = \frac{L1 - L2}{L2}$$

Where the size of the two parts differs greatly and where:

L1 = luminance of the smallest part (object)

L2 = luminance of the largest part (background).

DALI

Digital Addressable Lighting Interface, a standardized communication interface to regulate lighting levels and to switch electronic HFD ballasts on and off.

Daylight linking

Using natural light saves energy and is beneficial to individual users. Daylight linking is a technique that regulates the light output of luminaires in accordance with daylight conditions, thus maintaining a constant level of indoor lighting and ensuring comfort at all times.

Diffuser

Optical element used to mix light rays to improve uniformity or reduce glare. An opal cover is an example of a diffuser.

Direct lighting

Lighting by means of luminaires with a light distribution such that 90 – 100% of the emitted luminous flux reaches the working plane directly, assuming that this plane is unbounded.

Disability glare

Glare that impairs vision.

Discomfort glare

Glare that causes discomfort without necessarily impairing vision.

Dust-proof luminaire

Luminaire constructed so that dust of a specified nature and fineness cannot enter when it is used in a dust-laden atmosphere.

Fresnel lens or reflector

A Fresnel lens or reflector is an optical element of reduced height. By means of discrete steps, the basic shape is flattened yet the optical characteristics are retained.

Glare

See disability glare and discomfort glare, and the chapter entitled ‘Information - Lighting technique’.

Halogen lamp

Incandescent lamp in which the inclusion of halogens in the gas filling and a high-temperature quartz envelope promote the tungsten halogen cycle, permitting a higher filament temperature. The result is a higher color temperature and a significantly extended life.

Halogen HV

“High voltage” 230V halogen lamp, which does not require a ballast or a transformer.

Halogen LV

“Low voltage” 6V, 12V or 24V halogen lamp. An electronic or electromagnetic transformer is required to operate low-voltage halogen lamps and is often integrated into the luminaire.

HFD

Electronic regulating ballast which enables the light to be dimmed. Ballast functions according to the DALI protocol.

HFD-T

Electronic regulating DALI ballast for various fluorescent lamps. With this new-style electronic ballast standard push-buttons can be used to dim the light output down to 3%. The lamp can also be switched on or off using the push-button control.

Ballast functions according to the DALI protocol.

HFM

Compactly built electronic ballast for various compact fluorescent lamp types. See also ‘Specification data luminaires’.

HFP

Electronic ballast for various fluorescent lamp types with warm-start principle. See also ‘Specification data luminaires’.

HFR

Electronic regulating ballast for various fluorescent lamp types by which light dimming is possible. The main ranges of HFR ballasts allow step-less dimming down to 3%. See also ‘Specification data luminaires’.

Horizontal illuminance (E_{hor})

Illuminance incident on the horizontal surface.

Unit: lux (lx) = lm/m²

Symbol: E_{hor}

HPI Plus lamp

Metal-halide high-intensity discharge lamp combining high luminous efficacy with white light of moderate color rendering. Main indoor applications are big industrial halls and lighting of discount stores, hyper-/supermarkets and DIY shops. HPI Plus lamps are usually applied in high-bay luminaires and floodlights.

Illuminance

The luminous flux density at the surface being lit. The illuminance in the full summer sun is approx. 100 000 lux. Recommended illuminances for work places range from 200 lux for rough work to 2000 lux for detailed or critical work.

Unit: lux (lx) = lm/m²

Symbol: E

Infrared remote control

In offices and meeting rooms where the lighting requirement changes frequently, wireless infrared control offers the flexibility to set the lighting and change it at any time.

Indirect lighting

Lighting by means of luminaires with a light distribution such that not more than 10 per cent of the emitted luminous flux reaches the working plane directly, assuming that this plane is unbounded.

Induction lighting QL

Electrode-less induction lighting system characterized by good light quality, high luminous efficacy and a phenomenal life (60 000 hours).

Jet-proof luminaire

Luminaire constructed to withstand a direct jet of water from any direction.

LED

Light Emitting Diode used as a light source. Solid-state semiconductor device that converts electrical energy directly into light of a specific color or white light.

Light output ratio (LOR)

Ratio of the total light emitted by a luminaire to the total light output of the lamp(s) it contains measured at standard operating conditions.

Lumen depreciation

The decline in the light output of a light source during its lifetime.

Luminaire

Appliance that distributes, filters or transforms the light given by a light source (LED or lamp), and which contains all the necessary elements for fixing and protecting the light source(s) and facilitates their power supply and operating conditions.

Luminance

The light intensity per square meter of apparent area of the light source, luminaire or illuminated surface. Where surfaces are lit, the luminance depends upon both lighting level and reflection characteristics of the luminous surface.

Unit: cd/m²

Symbol: L

Luminous efficacy

The quantity of light that a light source emits per unit of electrical energy consumed. Notice that the luminous efficacy can be specified for a light source or for a lighting system (lamp and ballast).

The luminous efficacy of a system is lower than that of the light source.

Unit: lm/W

Luminous flux

The total light output emitted by a light source. Also the total light falling on a surface. The light output of a light source is measured in lumen.

Unit: lumen

Symbol: ϕ

Luminous intensity

The luminous flux in a given direction, e.g. from a floodlight or projector.

Unit: candela (cd) = one lumen per steradian

Symbol: I

Lux

The standard unit of illuminance of a surface being lit. One lux equals one lumen per square meter.

Maintained emergency lighting

Emergency lighting where the lamps are operated from the normal supply during standard conditions. In an emergency situation the emergency lamp (usually one lamp in luminaires of two or more lamps) remains in operation.

Maintained illuminance

Value below which the average illuminance on the specified surface is not allowed to fall. The maintained illuminance is specified at the end of the maintenance cycle, taking into consideration the maintenance factor.

It is one of the main specification elements for the lighting designer. In the various standards the maintained illuminance is specified for various activities.

Unit: lux

Symbol: E_m

Maintenance factor

Correction factor used in lighting design to compensate for the rate of lumen depreciation, caused by lamp ageing (lumen depreciation and lamp failure) and dirt accumulation (luminaire and environment).

It determines the maintenance cycle needed to ensure that illuminance does not fall below the maintained value.

MASTERColour CDM lamp

Series of metal-halide discharge lamps with excellent color rendering and a warm or neutral color impression. MASTERColour lamps, also

available as reflector lamps, are applied in projectors and downlights for shop and office applications.

Mercury lamp

High-intensity discharge lamp for use in industry and large public spaces. Higher quality light characteristics are obtained by applying metal-halide lamps.

Metal-halide lamp

Single- or double-ended discharge lamp for use in industry, public spaces and shops. Metal-halide lamps combine a natural white color with a pleasant light and a high luminous intensity.

Movement detection

Sensing of occupancy by movement detection ensures lights are activated only when needed and enables the lighting in a specific area to be controlled.

Non-maintained emergency lighting

Emergency lighting where the emergency lighting lamps come into operation only when the power supply to normal lighting fails.

OLC

Omnidirectional Lighting Control, a Philips-patented series of optics for TL5 and TL-D lamps offering optimal lighting efficiency in combination with excellent glare and luminance control all around the luminaire.

Optic

A device that changes the direction of a beam of light, usually by reflection, diffusion or refraction by a lens. The optic may include louvers for reduction of glare.

PL lamp

Single-ended compact fluorescent lamp in which the discharge tube is folded into two, four or six limbs. PL lamps are characterized by unusually high light output for their length. They are applied in compact luminaires for professional and domestic use. Also available with integrated ballast.

Power factor

Ratio of the circuit power in watts over the product of the root-mean-square values of voltage and current. For sinusoidal waveforms, it is equal to the cosine of the angle of phase difference between voltage and current. For electronic ballasts the power factor is 0.95 so that no additional phase compensation is required.

QL lamp

See Induction lighting.

Refractor

Optical element used to concentrate light rays to focus or improve the direction of light. A prismatic cover is an example of a refractor.

RGB

Red, green and blue, used to specify the colors of a light source.

SDW-T

White SON or SDW-T lamps offer a high luminous efficacy in combination with warm-white light. The color rendering is excellent. SDW-T lamps are applied in shops and public spaces where the atmosphere should be warm and cosy.

Sodium lamp, SON lamp

High-pressure discharge lamp with a yellowish color appearance and an extremely high efficiency. SON and SON Comfort lamps, with improved color characteristics, are mainly applied in high-bay industrial applications.

Solid-state lighting

Description of a lighting device that does not contain moving parts or parts that can break, rupture, shatter, leak or contaminate the environment (such as a lamp).

Starter

Device for starting a discharge lamp, in particular a fluorescent lamp, that preheats the electrodes and/or causes a voltage surge in combination with the series ballast.

Switching and dimming control

As more and more light sources can be dimmed economically, lighting controls need to provide both switching and light regulating capabilities.

TL5

Linear double-ended fluorescent lamp with a diameter of 16 mm. In combination with OLC optics and high-frequency ballasts the TL5 system offers a superb performance, both in terms of lighting technology and energy consumption.

TL-D

Linear double-ended fluorescent lamp with a diameter of 26 mm. Available in a range of colors and color rendering characteristics.

Uniformity ratio

Ratio of the minimum over the average illuminance for a specified area (E_{\min}/E_{ave}). When defined as such, the uniformity ratio is also the ratio of the minimum over the maximum illuminance for a specified surface area (E_{\min}/E_{\max}).

Utilisation factor

Utilisation factor (UF) of a lighting installation represents the percentage of the luminous flux of the lamp(s) that reaches the defined working plane. UF can be seen as the efficiency of the lighting installation. UF is used to calculate the number of luminaires required.

Vertical illuminance

Illuminance incident on the vertical surface.

Unit: lux (lx) = lm/m²

Symbol: E_{vert}

Visual guidance

The sum of the measures taken to give the user of a space an unambiguous and immediately recognisable picture of the course of the path ahead. Visual guidance is important in shops and other public buildings. The lighting designer takes the demands for visual guidance into consideration.

TYPE	PAGE	TYPE	PAGE	TYPE	PAGE	TYPE	PAGE
320TSW	10.30	BBG440	5.78	BWH356	6.197	DCP300	7.36
320ZSW	10.31	BBG441	5.78			Dueta	5.66
321TSW	10.30	BBG442	5.78	C		DWP333	7.32
331TSW	10.34	BBG450	5.79	Cabana	7.20		
332TSW	10.34	BBG451	5.79	CareGlow	6.196	E	
3-circuit Square	6.98	BBG700	5.74	CBX500	5.54	EBC206	6.187
460GMS	9.36	BBG731	6.193	CBX502	5.54	ECS100	6.199
460TMS	9.35	BBW300	6.183	Celino, free floor-standing	4.12	Efix Projector Micro	6.70
470GMS	9.32	BBW301	6.183	Celino, recessed	2.25	Efix, recessed	2.86
470TMS	9.31	BCG200	6.195	Celino, suspended and		Efix, suspended and	
470ZMS	9.32	BCG400	6.86	surface-mounted	3.32	surface-mounted	3.82
471TMS	9.31	BCG401	6.86	Celino, wall-mounted	3.116	Efix, wall-mounted	6.144
475TMS	9.31	BCG402	6.86	Centura2	3.100	Europa 2	5.62
4IS110	10.8	BCG421	6.174	ColourChaser	11.38	eW Cove	6.166
4IS120	10.14	BCG422	6.174	ColourWheel	11.38	eW Downlight	5.94
4ME350	7.6	BCG431	6.175	Converters	11.39	eW Profile Powercore	9.6
4ME450	7.6	BCG432	6.175	CPK440	6.124		
4ME550	7.9	BCG440	6.88	CPK450	6.125	F	
4ME750	7.10	BCG441	6.88	CPK630	6.118	FBH020	5.101
600ZCW	10.31	BCG442	6.88			FBH022	5.100
9IS110	10.10	BCG620	6.142	D		FBR600	5.112
9ME100	7.6	BCG700	6.15	DBC270	5.117	FBS105	2.106
		BCG702	6.15	DBC271	5.117	FBS120	5.63
A		BCG731	6.191	DBP300	7.37	FBS122	5.63
ActiLume	11.16	BCG732	6.190	DCMD100	11.28	FBS160	2.98
Adante	6.138	BCS103	6.199	DCMD110	11.28	FBS163	2.102
Amazon	5.116	BCS106	6.199	DCMD111	11.28	FBS261	5.16
Amazon LED	6.184	BCS109	6.199	DCMD121	11.28	FBS270	5.18
Arano, free floor-standing	4.8	BCS112	6.199	DCMD122	11.29	FBS271	5.18
Arano, suspended and		BCS401	5.96	DCMD124	11.29	FBS280	5.22
surface-mounted	3.42	BCX400	6.168	DCMD125	11.29	FBS290	5.28
Arano, wall-mounted	3.114	BCX410	6.169	DCMD126	11.29	FBS291	5.28
		BCX411	9.7	DCMD150	11.30	FBS295	5.28
B		BCX420	9.5	DCMD170	11.30	FBS296	5.28
Batten LED	6.198	BCX430	6.165	DCMD180	11.30	FBS297	5.28
BBC206	6.186	BCX440	6.160	DCMD200D	11.30	FBS330	2.80
BBC211	6.186	BCX444	6.161	DCMD302	11.31	FCG620	6.142
BBC212	6.186	BCX450	6.162	DCMD303	11.31	FCH481	3.108
BBG300	6.178	BDG400	6.90	DCMD400	11.32	FCS291	5.28
BBG301	6.178	Bolero	6.76	DCMD401	11.32	FCS296	5.28
BBG310	6.179	BPG301	6.171	DCMD416	11.32	FCS398	3.92
BBG311	6.179	BPG620	6.142	DCMD425	11.32	FCW196	10.26
BBG320	6.180	BPG700	6.109	DCMD440	11.33	FFS644	4.10
BBG321	6.180	BPG732	6.192	DCMD444	11.33	FFS684	4.14
BBG400	5.78	BWG331	5.106	DCMD450	11.33	FFS764	4.6
BBG401	5.78	BWG332	5.106	DCMD472	11.33	Finess	3.94
BBG402	5.78	BWG333	5.106	DCMD494	11.33	Fiorenza	6.16
BBG410	5.78	BWG401	6.91	DCMD502	11.34	Flexible tube LED	6.194
BBG411	5.78	BWH355	6.197	DCMD9242	11.34	FPG620	6.142

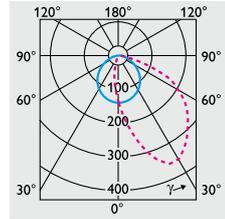
TYPE	PAGE	TYPE	PAGE	TYPE	PAGE	TYPE	PAGE
FPK380	7.16	Impala, PL-L	2.98	LRC1025/10	11.13	MBS264	5.44
FPK440	6.124	Impala, TL-D	2.92	LRC1030/10	11.13	MBX500	5.54
FPK450	6.125	Indolight, PL-L/PL-S	2.80	LRC1035/10	11.13	MBX510	5.58
FPK561	6.114	Indolight, TL5	2.62	LRC5059/00	11.8	MBX512	5.58
FPK562	6.114	Indolight, TL-D	2.74	LRC5099/00	11.8	MCN602	6.78
FPK630	6.118	Instra	9.34	LRC5141/10	11.8	MCN603	6.78
Fugato	5.14	IRT8098/00	11.16	LRC5143/10	11.9	MCN604	6.78
FWG200	6.153	IRT8099/00	11.20	LRC5423/10	11.8	MCN690	6.52
FWG210	6.153	IRR8125/10	11.21	LRC9600/00	11.38	MCS241	6.72
FWG220	6.153	Isolux-M	10.6	LRC9601/00	11.38	MCS410	6.81
FWG230	6.153	Isolux-P	10.12	LRC9610/00	11.38	MCS420	6.81
FWG240	6.153	iW Cove Powercore	6.164	LRC9630/00	11.39	MCS430	6.81
FWG250	6.153	iW Profile g ²	9.4	LRC9631/00	11.39	MCS440	6.81
FWG261	6.146			LRC9632/00	11.39	MCS450	6.81
FWG262	6.146	K		LRD8000/00	11.22	MCS501	6.68
FWG263	6.146	KBS280	5.22	LRG201	6.94	MCS502	6.66
FWG264	6.146	KPK630	6.118	LRG202	6.94	MCS541	6.40
FWG620	6.140	KPK640	6.118	LRH1070/00	11.12	MCS551	6.44
FWH035	6.157			LRH5100/10	11.9	MCS553	6.46
FWW035	6.157	L		LRL8102/00	11.16	MCS610	6.62
		Latina	5.98	LRM1070/00	11.12	MCS612	6.60
G		LBS244	5.38	LRM1080/00	11.12	MCS700	6.20
Gamea	6.116	LBS250	5.40	LRM8117/00	8.39	MCS702	6.22
GBP300	7.37	LBS252	5.40	LRM8118/00	11.16	MCS703	6.30
GBS120	5.64	LBS262	5.44	LRS242	6.74	MCS705	6.18
GBS122	5.64	LBS264	5.44	LRS502	6.66	Medison	9.12
GBS245	6.121	LBX510	5.58	LRS541	6.40	Megalux	7.4
GBS261	5.26	LCC1070/00	11.12	LRS551	6.44	MINI 300 Cube	7.34
GBS271	5.26	LCS242	6.74	LRS553	6.46	MINI 300 Stealth	7.30
General-purpose Products	11.18	LCS5010/00	11.9	LRS612	6.60	Minorail Express	6.104
GMS022	9.24	LCS502	6.66	LRS700	6.20	Modella	3.104
GMS028	9.28	LCS5200/00	11.9	LRS703	6.30	Monza	6.80
GMS122	9.16	LCS541	6.40	LRX201	6.94	MPK188	6.128
GMW065	10.39	LCS551	6.44	LWG541	6.136	MPK380	7.16
Gondola	6.152	LCS553	6.46			MPK440	6.124
GPK150	7.23	LCS612	6.60	M		MPK450	6.125
GPK380	7.19	LCS700	6.20	Magneos	6.64	MPK460	6.124
Grazer LED	6.172	LCS703	6.30	Marker LED	6.176	MPK541	6.112
		LCU8020/00	11.22	Maxos	8.4	MPK561	6.114
H		Lineco	9.22	MBR600	5.114	MPK562	6.114
HPK150	7.22	Linesense	11.16	MBS100	5.70	MPK630	6.118
HPK188	6.128	LiteWand LED	6.170	MBS200	5.69	MPK640	6.118
HPK380	7.17	LMM Modules	11.8	MBS201	5.68	MRN602	6.78
HPK440	6.124	LMM Network Components	11.9	MBS244	5.38	MRN603	6.78
HPK450	6.125	LMM Software	11.9	MBS250	5.40	MRN604	6.78
HPK460	6.124	LPK541	6.112	MBS252	5.40	MRN690	6.52
		LRC1010/10	11.13	MBS254	5.40	MRS241	6.72
I		LRC1015/10	11.13	MBS260	5.44	MRS410	6.81
iColor Cove	6.158	LRC1020/10	11.13	MBS262	5.44	MRS420	6.81

TYPE	PAGE	TYPE	PAGE	TYPE	PAGE	TYPE	PAGE
MRS430	6.81	QBS570	5.90	SPK450	6.125	TCS740	3.30
MRS440	6.81	QBWI63	5.90	SPK630	6.118	TCS760	3.22
MRS450	6.81	QBX500	5.58	SPK640	6.118	TCS770	3.24
MRS501	6.68	QBX502	5.58	Spot LED Dynamic, pendant	6.108	TCW215	10.22
MRS502	6.66	QCN690	6.54	Spot LED Dynamic, projector	6.14	TCW216	10.18
MRS541	6.40	QCS243	6.75	Spot LED Dynamic, recessed	5.72	TCW596	10.24
MRS551	6.44	QCS400	6.81	Spot LED, projectors	6.84	Tetrix	8.64
MRS553	6.46	QCS614	6.58	Spot LED, recessed,		TFS644	4.10
MRS610	6.62	QCS701	6.28	semi-recessed	5.76	TFS764	4.6
MRS612	6.60	QCX500	6.150	SRN600	6.78	TFS772	4.6
MRS700	6.20	QPX500	6.132	SRN601	6.78	ThinMark	3.58
MRS702	6.22	QPX501	6.132	SRN690	6.52	TMS022	9.23
MRS703	6.30	QRN690	6.54	Strato	3.10	TMS028	9.26
MRS705	6.18	QRS243	6.75	SuperOmni	3.106	TMS122	9.15
MultiDim	11.28	QRS400	6.81			TMW065	10.36
Musa	6.56	QRS614	6.58	T		TMX204	9.18
MWG541	6.136	QRS701	6.28	TBS105	2.104	TPH710	3.12
MWG561	6.137	QWG200	6.153	TBS160	2.94	TPS262	3.84
MWG562	6.137	QWG210	6.153	TBS260	2.86	TPS498	3.64
MWG620	6.140	QWG620	6.140	TBS315	2.64	TPS580	3.60
				TBS318	2.68	TPS640	3.44
O		R		TBS324	10.40	TPS642	3.44
Occuswitch	11.12	RCS750	6.100	TBS326	10.40	TPS644	3.44
Odyssey	5.108	RCS800	6.106	TBS330	2.74	TPS646	3.56
Oiva	9.30	Rotaris, recessed	2.18	TBS340	2.72	TPS680	3.34
Origami	6.188	Rotaris, suspended and surface-mounted	3.26	TBS460	2.34	TPS682	3.34
				TBS461	2.38	TPS740	3.28
P		S		TBS464	2.46	TPS745	3.28
Pacific	10.16	Savio, free floor-standing	4.4	TBS471	2.38	TPS760	3.18
Pendola	6.122	Savio, recessed	2.10	TBS490	2.52	TPS762	3.18
Pentura	9.14	Savio, suspended and surface-mounted	3.14	TBS600	2.56	TPS764	3.18
Pentura Mini	9.8	Savio, wall-mounted	3.110	TBS690	2.26	TPS770	3.20
Pentura Mini CC	9.10	SBS100	5.70	TBS692	2.28	TPS772	3.20
PerformaLux	7.14	SBS200	5.69	TBS740	2.20	Transformers	5.118
		SBS201	5.68	TBS741	2.22	Trios	11.13
Q		SBX500	5.54	TBS760	2.10	TTX150	8.66
QBD161	5.86	SCN600	6.78	TBS770	2.10	TTX400	8.32
QBD167	5.86	SCN601	6.78	TCH128	9.9	TTX410	8.54
QBD570	5.86	SCN690	6.52	TCH129	9.11	Twiggi	10.28
QBR600	5.110	Scrabble gridlights, surface-mounted	6.148	TCH481	3.108	Twinny	10.32
QBS100	5.70	Scrabble, gridlights recessed	5.52	TCS054	9.13	TWS640	3.115
QBS162	5.90	Scrabble, gridlights suspended	6.130	TCS125	3.105	TWS680	3.117
QBS164	5.90	SmartForm	2.30	TCS160	3.101	TWS760	3.112
QBS166	5.90	Solo	6.156	TCS198	3.95		
QBS168	5.90	SPK440	6.124	TCS260	3.86	U	
QBS200	5.69			TCS398	3.70	Unibay	6.126
QBS252	5.40			TCS640	3.48	UnicOne Projector	6.38
QBS260	5.44			TCS649	3.53	UnicOne Uplight Micro	6.134
QBS264	5.44			TCS680	3.38	UnicOne, pendant	6.110

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V		ZCW596	10.25				
VWL015	11.43	ZCX410	6.169				
VWL025	11.43	ZCX411	9.7				
VWL035	11.43	ZCX420	9.5				
		ZCX440	6.160				
		ZCX450	6.162				
W		ZCZ643	6.121				
Wall marker LED	6.182	ZKL560	5.118				
		ZKL920	5.118				
X		ZMS022	9.24				
X-tendolight, surface-mounted, PL-S/PL-L	3.9	ZMS028	9.28				
X-tendolight, surface-mounted, TL5	3.68	ZMS122	9.15				
X-tendolight, suspended	3.62	ZMW065	10.39				
		ZMX204	9.20				
		ZNV920	5.56				
Z		ZNX500	5.56				
Zadora spotlight	6.92	ZPG631	6.121				
Zadora, recessed	5.84	ZPG641	6.121				
ZBC206	6.187	ZPH301	3.67				
ZBG300	6.181	ZPH401	3.67				
ZBG310	6.181						
ZBG320	6.181						
ZBP300	7.37						
ZBR600	5.111						
ZBS250	5.50						
ZBS254	5.50						
ZBS260	5.50						
ZBS261	5.26						
ZBS262	5.50						
ZBS264	5.50						
ZBS270	5.26						
ZBS271	5.26						
ZBS280	5.26						
ZBS290	5.36						
ZBS291	5.36						
ZBS297	5.36						
ZBS300	2.17						
ZBS740	3.30						
ZCG200	6.195						
ZCG241	6.175						
ZCH481	3.109						
ZCS398	3.67						
ZCS400	6.83						
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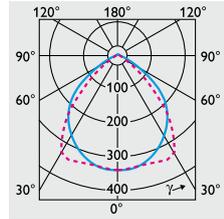
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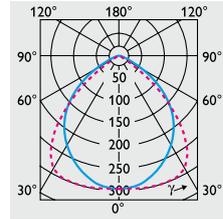
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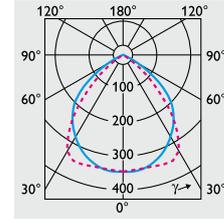
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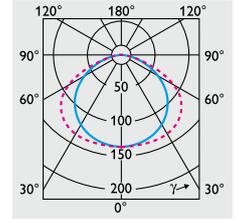
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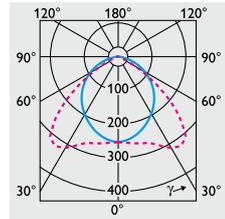
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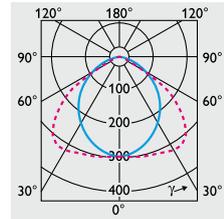
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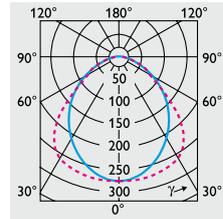
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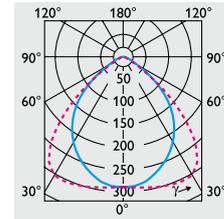
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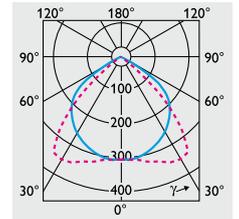
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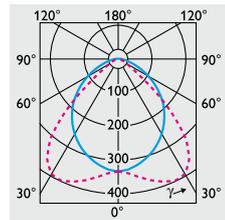
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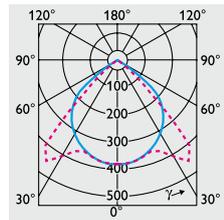
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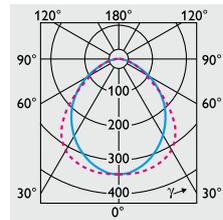
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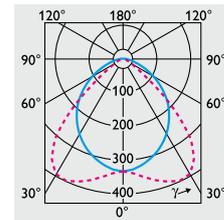
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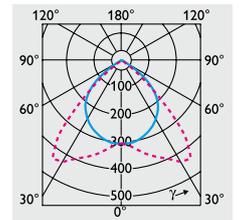
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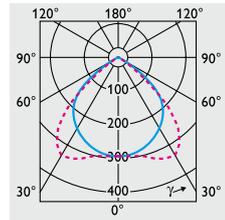
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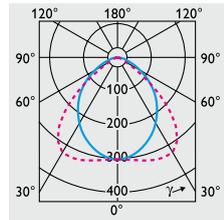
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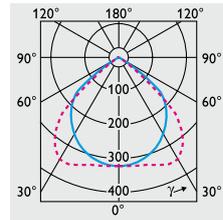
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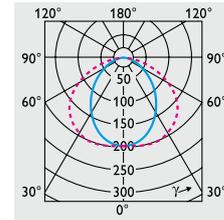
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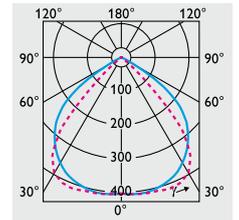
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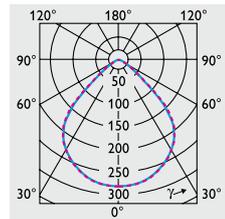
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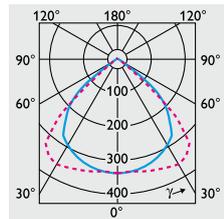
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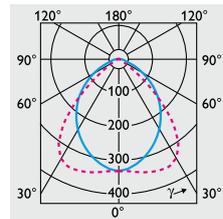
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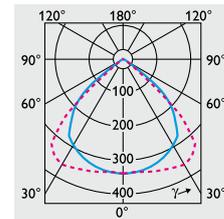
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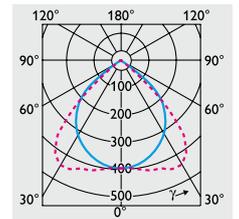
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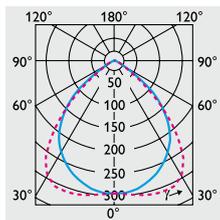
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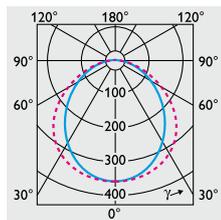
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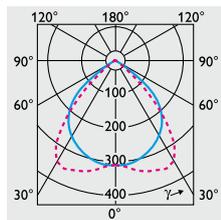
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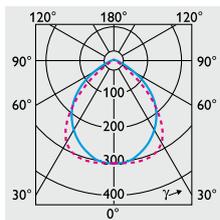
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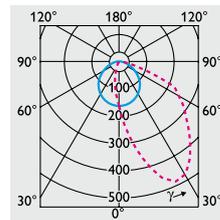
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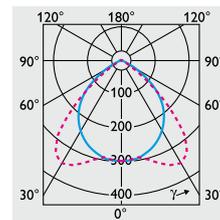
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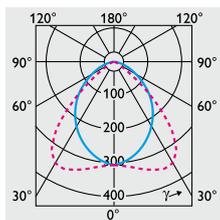
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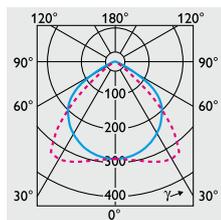
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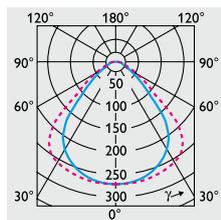
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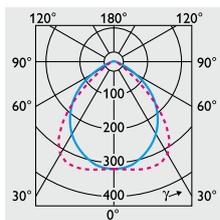
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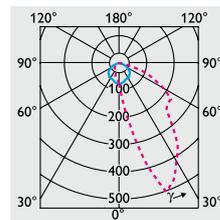
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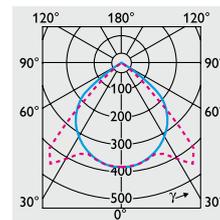
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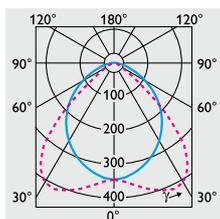
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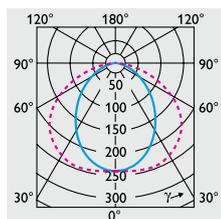
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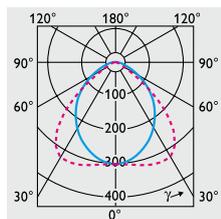
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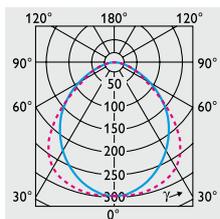
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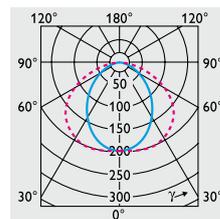
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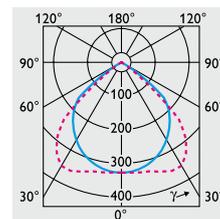
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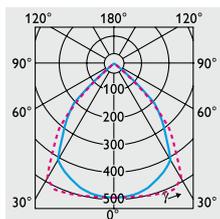
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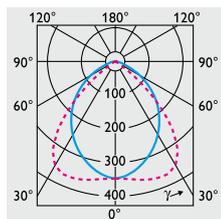
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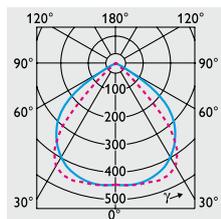
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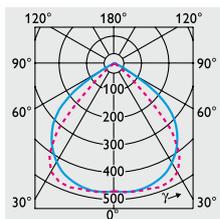
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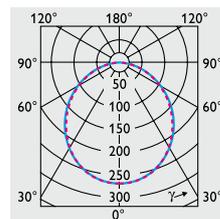
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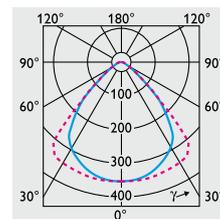
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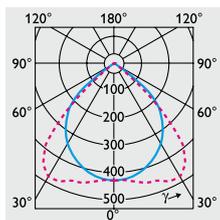
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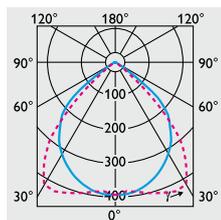
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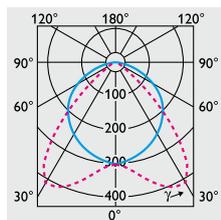
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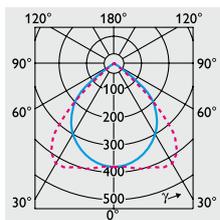
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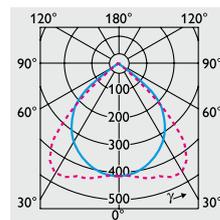
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2xTLS-14W
D6



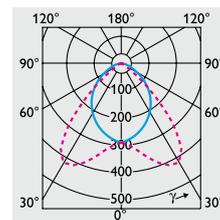
UGR < 17 (acc. EN12464-1)
LVW1067900

TBS600
2xTLS-14W
D7



UGR < 17 (acc. EN12464-1)
LVW1067900

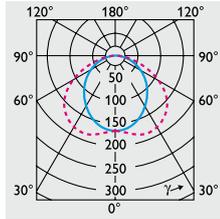
TBS600
2xTLS-14W
M2



LVW1236200

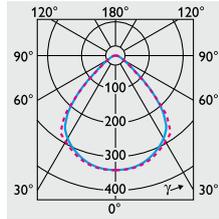
Recessed
luminaires

TBS600
2xTL5-28W
OD



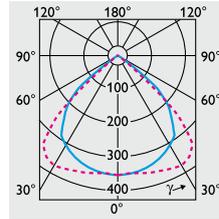
LVW1258500

TBS690
1xTL5-28W
AC-MLO



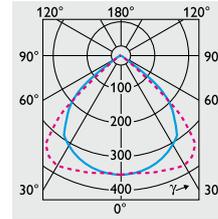
LVW1476100

TBS690
1xTL5-28W
C8



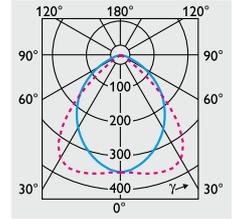
UGR < 18 (acc. EN12464-1)
LVW1390100

TBS690
1xTL5-28W
D8



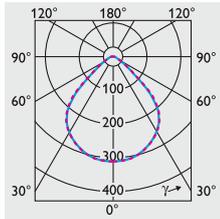
UGR < 18 (acc. EN12464-1)
LVW1390100

TBS690
1xTL5-28W
M2



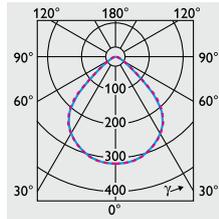
UGR < 18 (acc. EN12464-1)
LVW1390100

TBS760
2xTL5-28W
AC-MLO



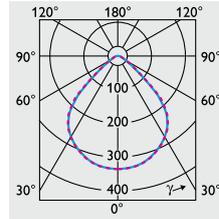
UGR < 14 (acc. EN13464-1)
LVW1478300

TBS760
4xTL5-14W
AC-MLO



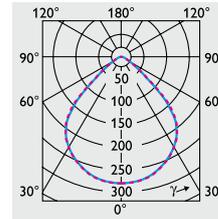
UGR < 14 (acc. EN12464-1)
LVW1478300

TBS770
3xTL5-14W
AC-MLO



UGR < 15 (acc. EN12464-1)
LVW1479000

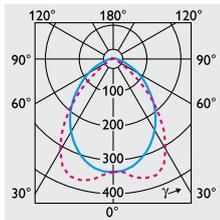
TBS770
6xTL5-14W
AC-MLO



UGR < 14 (acc. EN12464-1)
LVW1479000

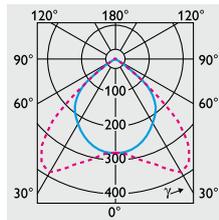
Suspended and
surface-mounted
luminaires

FCH481
4xPL-L55W
M2



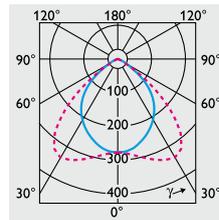
LVX65541a

FCS398
2xPL-L18W
C6



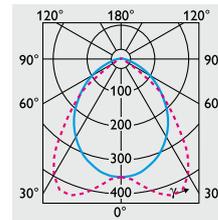
UGR < 19 (acc. EN12464-1)
LVW1198400

FCS398
2xPL-L18W
M6



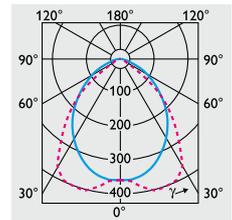
LVW1198600

TCH481
2xTL5-49W
M2



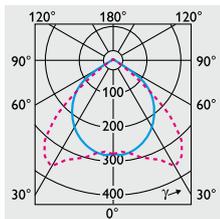
LVX63932A

TCH 481
3xTL5-49W
M2



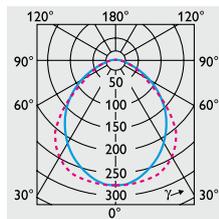
LVX64664A

TCS198
1xTL-D36W
C6-1000



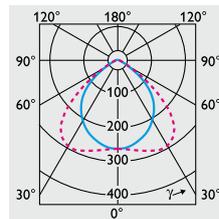
UGR < 17 (acc. EN12464-1)
LVN8909200

TCS198
1xTL-D36W
L1



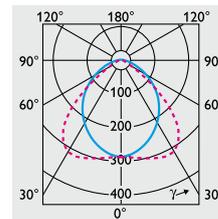
LVW11411600

TCS198
2xTL-D18W
M6



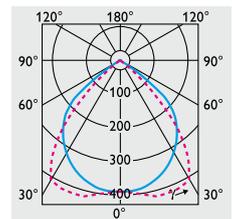
UGR < 17 (acc. EN12464-1)
LVW1150200

TCS198
4xTL-D18W
M2



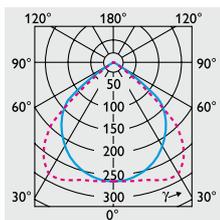
LVW8890400

TCS260
1xTL5-28W
C6



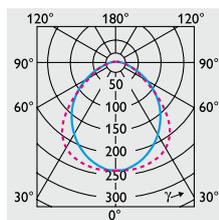
UGR < 17 (acc. EN12464-1)
LVW1486000

TCS398
1xTL-D18W
C6



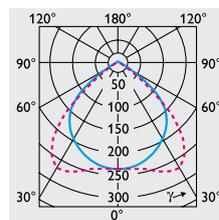
UGR < 15 (acc. EN12464-1)
LVW1155600

TCS398
1xTL-D18W
L1



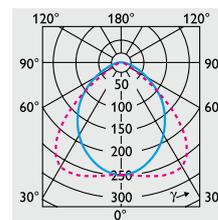
LVW1120200

TCS398
1xTL-D18W
M6



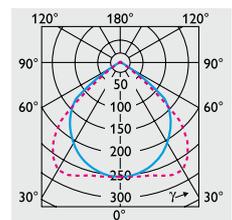
UGR < 15 (acc. EN12464-1)
LVW1188600

TCS398
1xTL-D18W
M-DGN



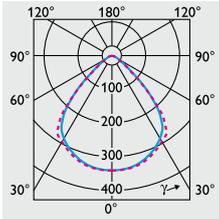
LVW1117500

TCS398
2xTL-D18W
D6



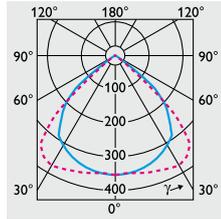
UGR < 15 (acc. EN12464-1)
LVW1155600

TBS692
1xTL5-28W
AC-MLO



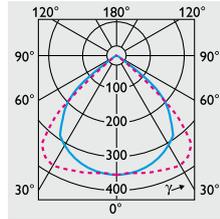
UGR < 18 (acc. EN12464-1)
LVW1476100

TBS692
1xTL5-28W
C8



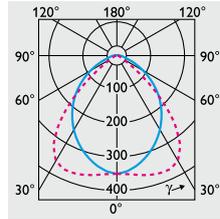
UGR < 18 (acc. EN12464-1)
LVW1390100

TBS692
1xTL5-28W
D8



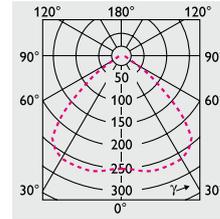
UGR < 18 (acc. EN12464-1)
LVW1390100

TBS692
1xTL5-28W
M2



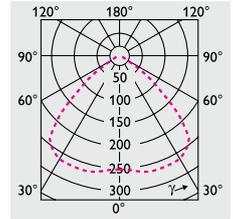
LVW1463900

TBS740
1xTL5C60W



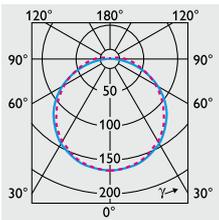
UGR < 16 (acc. EN12464-1)
LVW1342200

TBS741
1xTL5C60W



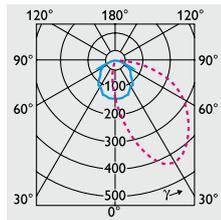
UGR < 16 (acc. EN12464-1)
LVW1342300

TCS125
2xTL-D18W
O



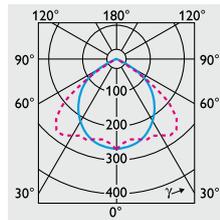
KET0200008

TCS160
1xTL-D36W
A



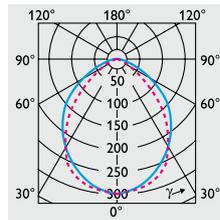
LVW1489400

TCS160
2xTL-D36W
C5



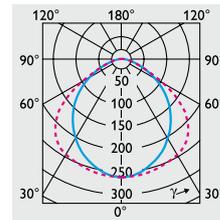
LVW1488700

TCS160
2xTL-D36W
C3



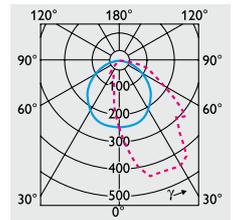
LVW1489000

TCS160
4xTL-D18W
L1



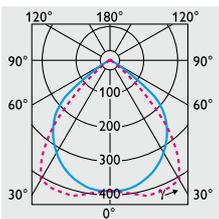
LVW1489100

TCS198
1xTL-D36W
A



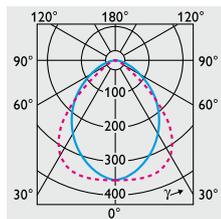
LVN8901800

TCS260
1xTL5-28W
D6



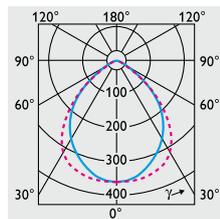
UGR < 17 (acc. EN12464-1)
LVW1486000

TCS260
1xTL5-28W
M2



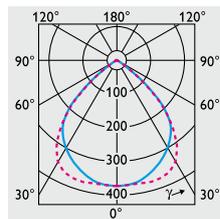
UGR < 20 (acc. EN12464-1)
LVW1486400

TCS260
1xTL5-28W
M6



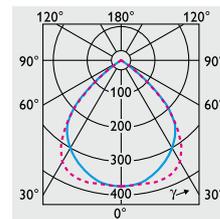
UGR < 17 (acc. EN12464-1)
LVW1486300

TCS260
2xTL5-28W
C6



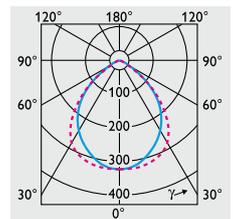
UGR < 18 (acc. EN12464-1)
LVW1486100

TCS260
2xTL5-28W
D6



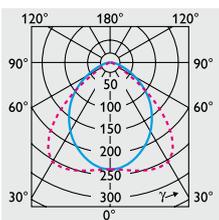
UGR < 18 (acc. EN12464-1)
LVW1486100

TCS260
2xTL5-28W
M6



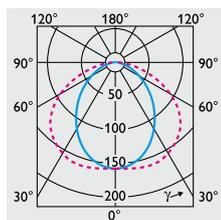
UGR < 19 (acc. EN12464-1)
LVW1486300

TCS398
2xTL-D18W
M2



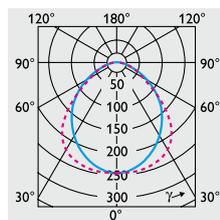
LVW1117500

TCS398
2xTL-D18W
OD



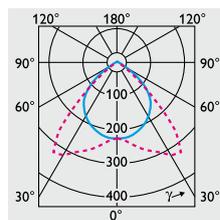
LVW1236700

TCS398
3xTL5-14W
L1



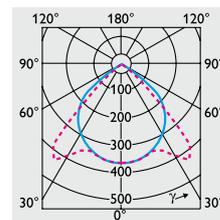
LVW1120200

TCS398
3xTL5-14W
M6



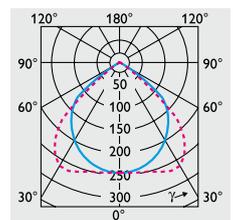
UGR < 13 (acc. EN12464-1)
LVW1171700

TCS398
3xTL5-14W
C6



UGR < 14 (acc. EN12464-1)
LVW1171800

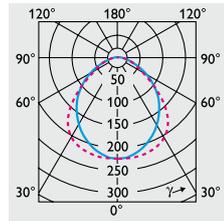
TCS398
3xTL-D18W
C6



UGR < 13 (acc. EN12464-1)
LVW1155600

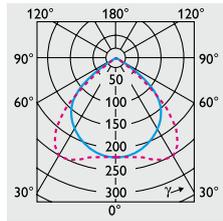
Suspended and surface-mounted luminaires

TCS398
3xTL-D18W
L1



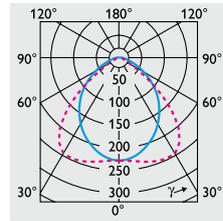
LVW1120200

TCS398
3xTL-D18W
M6



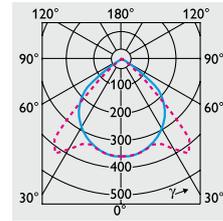
UGR < 13 (acc. EN12464-1)
LVW1188600

TCS398
3xTL-D18W
M-DGN



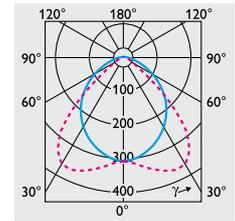
LVW1117500

TCS398
4xTL5-14W
D6



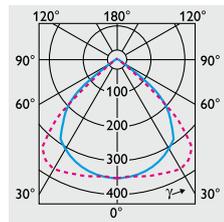
UGR < 15 (acc. EN12464-1)
LVW1171800

TCS398
4xTL5-14W
M2



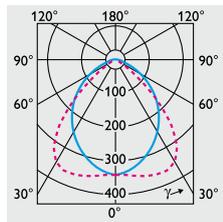
LVW1267300

TCS640
2xTL5-28W
D8



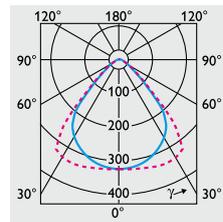
UGR < 18 (acc. EN12464-1)
LVW1390100

TCS640
3xTL5-14W
M2



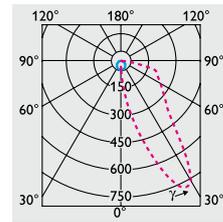
LVW1463900

TCS640
4xTL5-14W
AC-MLO



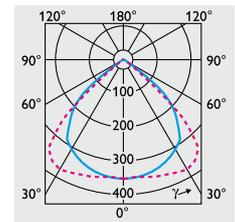
UGR < 14 (acc. EN12464-1)
LVW1475500

TCS649
1xTL5-28W
A



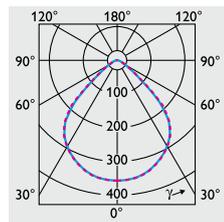
LVW1466500

TCS680
1xTL5-28W
C8



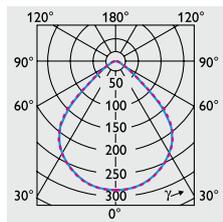
UGR < 18 (acc. EN12464-1)
LVW1390100

TCS770
3xTL5-28W
AC-MLO



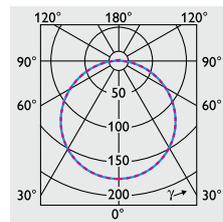
UGR < 16 (acc. EN12464-1)
LVW1479000

TCS770
6xTL5-14W
AC-MLO



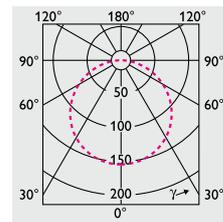
UGR < 14 (acc. EN12464-1)
LVW1479000

TPH710
8xTL5-28W
SKY



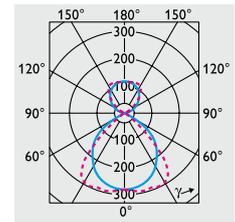
LVSV706300

TPH710
12xTL5-28W
RAINBOW



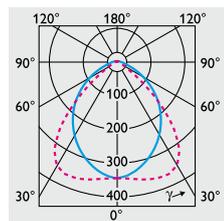
UGR < 20 (acc. EN12464-1)
LVSV706200

TPS260
1xTL5-28W
C6



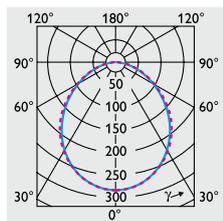
UGR < 14 (acc. EN12464-1)
LVW1486600

TPS580
1xTL5-28W
M2



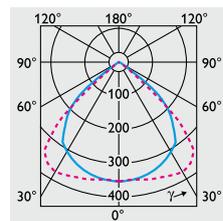
LVW1463900

TPS580
1xTL5-28W
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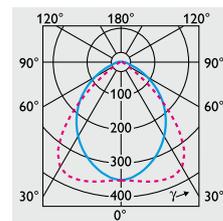
LVW1488500

TPS640
1xTL5-28W
C8



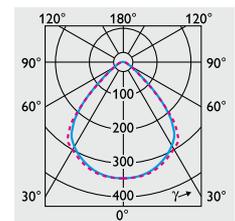
UGR < 18 (acc. EN12464-1)
LVW1390100

TPS640
1xTL5-28W
M2



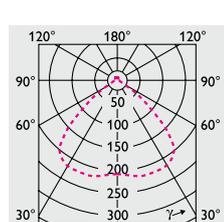
LVW1463900

TPS640
2xTL5-28W
AC-MLO



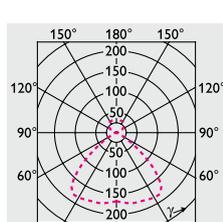
LVW1476100

TPS740
1xTL5C60W



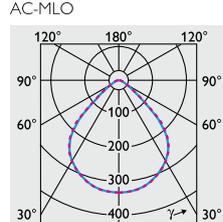
UGR < 15 (acc. EN12464-1)
LVW1342600

TPS745
1xTL5C60W



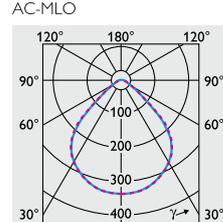
UGR < 13 (acc. EN12464-1)
LVW1342700

TPS760
2xTL5-28W
AC-MLO



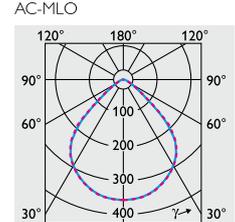
UGR < 14 (acc. EN12464-1)
LVW1478300

TPS760
4xTL5-14W
AC-MLO



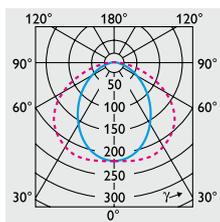
UGR < 14 (acc. EN12464-1)
LVW1478300

TPS770
3xTL5-28W
AC-MLO



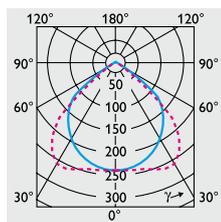
UGR < 16 (acc. EN12464-1)
LVW1479000

TCS398
4xTL5-14W
OD



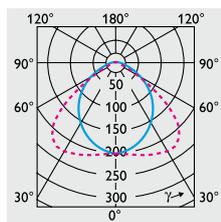
LVW1236700

TCS398
4xTL-D18W
D6



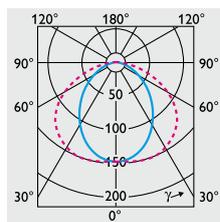
UGR < 14 (acc. EN12464-1)
LVW1155600

TCS398
4xTL-D18W
M2



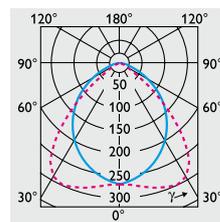
LVW1197700

TCS398
4xTL-D18W
OD



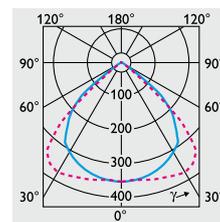
LVW1236700

TCS398
3xPL-L40W
M2



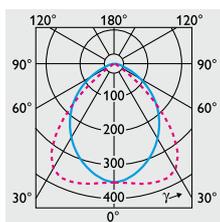
LVW1355200

TCS640
1xTL5-28W
C8



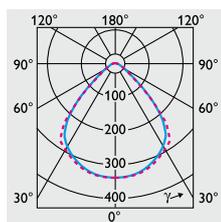
UGR < 18 (acc. EN12464-1)
LVW1390100

TCS680
1xTL5-28W
M2



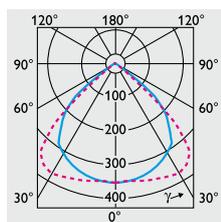
LVW1463900

TCS680
2xTL5-28W
AC-MLO



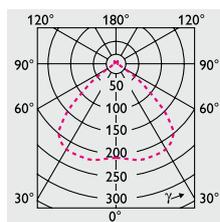
LVW1476100

TCS680
2xTL5-28W
D8



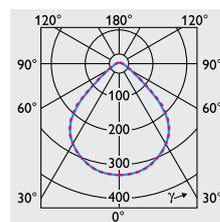
UGR < 18 (acc. EN12464-1)
LVW1390100

TCS740
1xTL5C60W



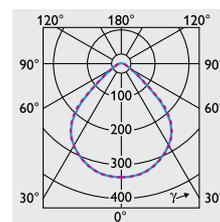
UGR < 15 (acc. EN12464-1)
LVW1342500

TCS760
2xTL5-28W
AC-MLO



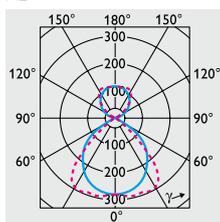
UGR < 14 (acc. EN12464-1)
LVW1478300

TCS760
4xTL5-14W
AC-MLO



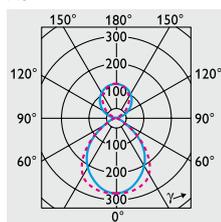
UGR < 14 (acc. EN12464-1)
LVW1478300

TPS260
1xTL5-28W
M2



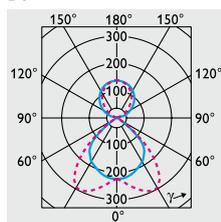
UGR < 17 (acc. EN12464-1)
LVW1487000

TPS260
2xTL5-28W
M6



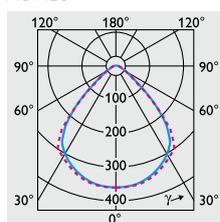
UGR < 16 (acc. EN12464-1)
LVW1486900

TPS260
2xTL5-54W
D6



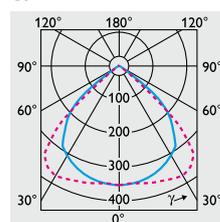
UGR < 17 (acc. EN12464-1)
LVW1486700

TPS580
1xTL5-28W
AC-MLO



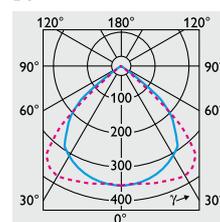
LVW1476100

TPS580
1xTL5-28W
C8



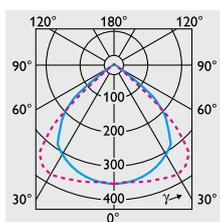
UGR < 18 (acc. EN12464-1)
LVW1390100

TPS580
1xTL5-28W
D8



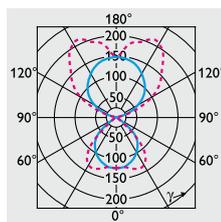
UGR < 18 (acc. EN12464-1)
LVW1390100

TPS640
2xTL5-28W
D8



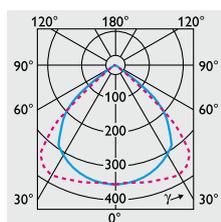
UGR < 18 (acc. EN12464-1)
LVW1390100

TPS646
3xTL5-28W
D8



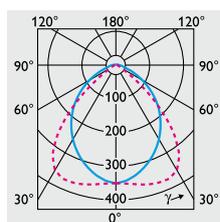
UGR < 12 (acc. EN12464-1)
LVF05043

TPS680
1xTL5-28W
C8



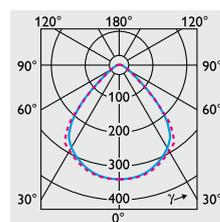
UGR < 18 (acc. EN12464-1)
LVW1390100

TPS680
1xTL5-28W
M2



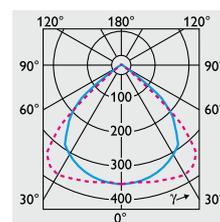
LVW1463900

TPS680
2xTL5-28W
AC-MLO



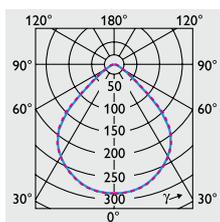
LVW1476100

TPS680
2xTL5-28W
D8



UGR < 18 (acc. EN12464-1)
LVW1390100

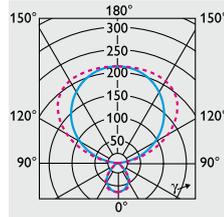
TPS770
6xTL5-14W
AC-MLO



UGR < 14 (acc. EN12464-1)
LVW1479000

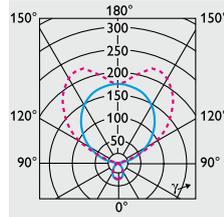
Free floor-standing luminaires

FFS644
2xPL-L80W
AC-MLO



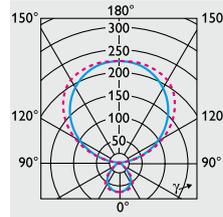
UGR < 5 (acc. EN12464-1)
LVW1514000

FFS684
2xPL-L80W
PC-MLO



UGR < 3 (acc. EN12464-1)
LVW1514400

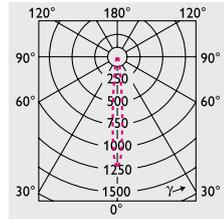
FFS764
3xPL-L55W
AC-MLO



UGR < 5 (acc. EN12464-1)
LVW1514500

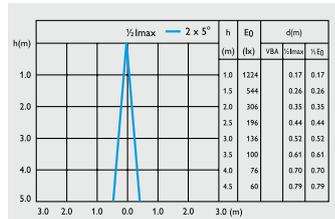
Downlights

BBG400
1xLED-K2 P14
NB



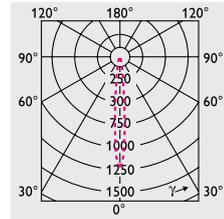
LVMA625300

BBG401
1xLED-K2 P14
NB

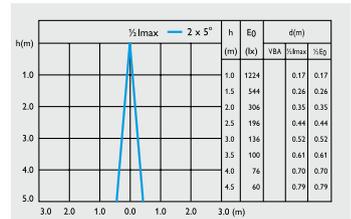


LVMA625300

BBG401
1xLED-K2 P14
NB

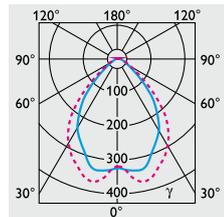


LVMA625300



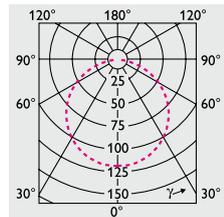
LVMA625300

FBS120
2xPL-C/4P18W
P



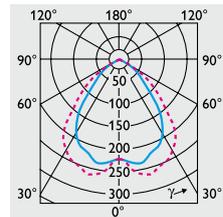
UGR < 19 (acc. EN12464-1)
LVL0307200

FBS120
2xPL-C/4P18W
O



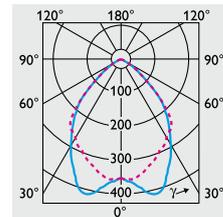
UGR < 24 (acc. EN12464-1)
LVL0306900

FBS120
2xPL-C/4P18W
PG



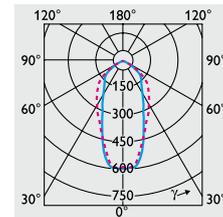
UGR < 20 (acc. EN12464-1)
LVL0306500

FBS261
1xPL-C/4P18W
C



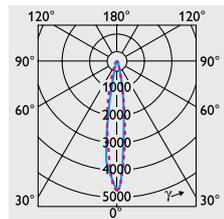
UGR < 18 (acc. EN12464-1)
LVL0448800

FBS271
1xPL-C/4P18W
C



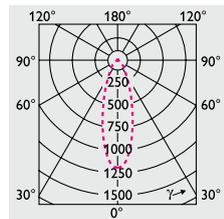
UGR < 19 (acc. EN12464-1)
LVL0450600

MBS262
1xCDM-T35W
12



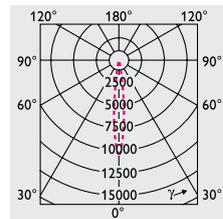
LVL0418800

MBX500
1xCDM-T35W
MB36



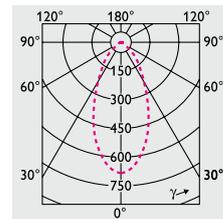
UGR < 17 (acc. EN12464-1)
LVL0000168

MBX500
1xCDM-T35W
NB12



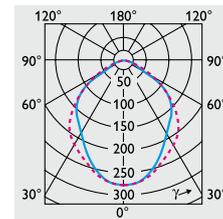
UGR < 21 (acc. EN12464-1)
LVL0002300

MBX500
1xCDM-T35W
WB60



UGR < 21 (acc. EN12464-1)
LVL0021700

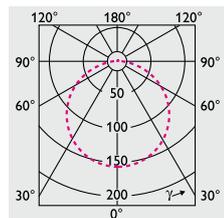
QBS100
1xHAL-TDC150W



UGR < 28 (acc. EN12464-1)
LVL0083300

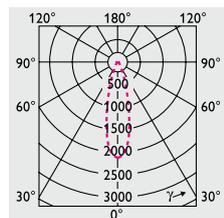
Projectors and decorative luminaires

BBG731
3xLED-LXN
VWH



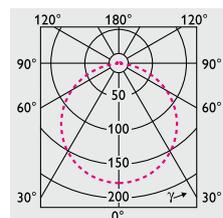
UGR < 13 (acc. EN12464-1)
LVM0558800

BCG400
1xLED-K2 P14
MB



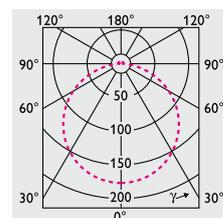
UGR < 6 (acc. EN12464-1)
LVMA625400

BCG730
9xLED-LXN
VWH



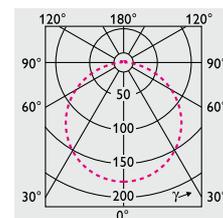
UGR < 14 (acc. EN12464-1)
LVM0558800

BCG731
3xLED-LXN
VWH



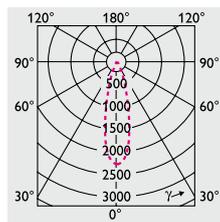
UGR < 13 (acc. EN12464-1)
LVM0558800

BCG732
9xLED-LXN
VWH



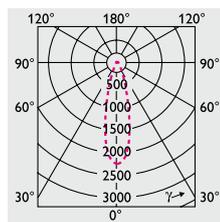
UGR < 13 (acc. EN12464-1)
LVM0558800

BBG410
1xLED-K2 P14
MB



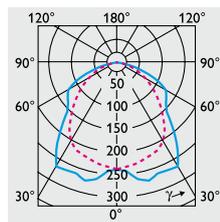
UGR < 9 (acc. EN12464-1)
LVMA625400

BBG411
1xLED-K2 P14
MB



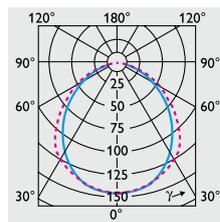
UGR < 9 (acc. EN12464-1)
LVMA625400

FBH020
2xPL-C/2P18W



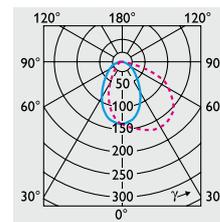
UGR < 27 (acc. EN12464-1)
LVE0455100

FBH022
2xPL-C/2P18W



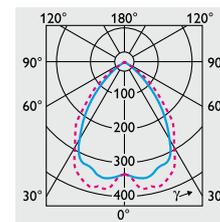
UGR < 25 (acc. EN12464-1)
LVE0499400

FBR600
1xPL-C/2P13W
M



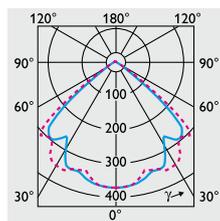
LVL9806300

FBS120
2xPL-C/4P18W
L



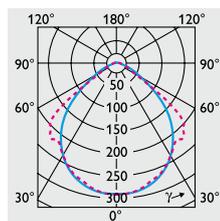
UGR < 18 (acc. EN12464-1)
LVL0307400

FBS280
2xPL-T/4P42W
C



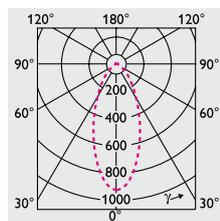
UGR < 23 (acc. EN12464-1)
LVN8906400

MBS200
1xCDM-TD70W



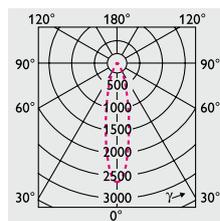
UGR < 28 (acc. EN12464-1)
LVL0132800

MBS201
1xCDM-T70W



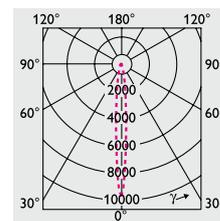
UGR < 23 (acc. EN12464-1)
LVL045610C

MBS244
1xCDM-Tm20W
MB24



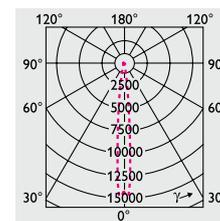
UGR < 18 (acc. EN12464-1)
LVL0018500

MBS254
1xCDM-TC70W
12



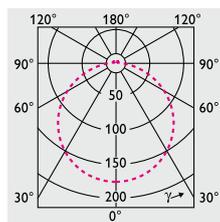
UGR < 15 (acc. EN12464-1)
LVL0556500

MBS260
1xCDM-T70W
12



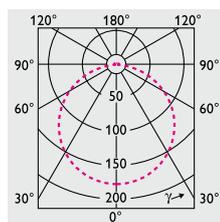
UGR < 12 (acc. EN12464-1)
LVL0425300

BCG760
36xLED-LXN
VH



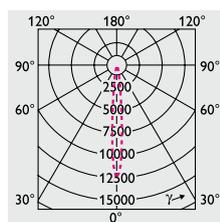
UGR < 14 (acc. EN12464-1)
LVM0558800

BCG762
36xLED-LXN
VH



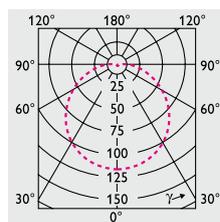
UGR < 13 (acc. EN12464-1)
LVM0558800

BDG400
1xLED-K2 P14
NB



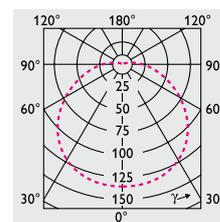
UGR < 7 (acc. EN12464-1)
LVMA625300

FWG200
2xPL-C/2P18W



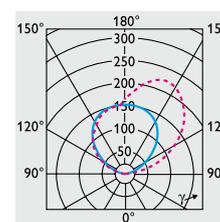
UGR < 22 (acc. EN12464-1)
LVE0461100

FWG210
1xPL-C/2P18W



UGR < 22 (acc. EN12464-1)
LVE0461200

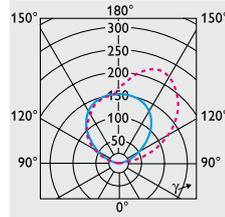
FWG620
2xPL-C/2P26W
A DG



LVL9915200

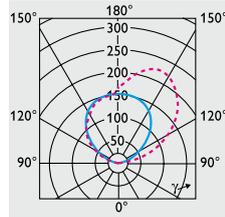
Projectors and decorative luminaires

FWG620
2xPL-C/2P26W
A DG



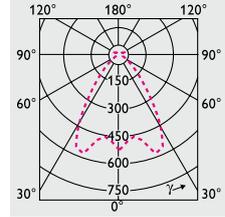
LVL9915200

FWG622
2xPL-C/4P26W
A DG



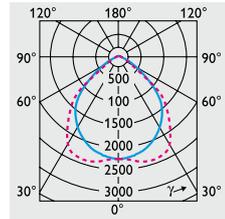
LVL9915200

HPK460
1xHPL-N250W
542 P-D635-NB

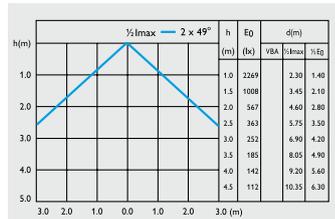


UGR < 14 (acc. EN12464-1)
LVL0069200

MCS420
1xCDM-TD70W

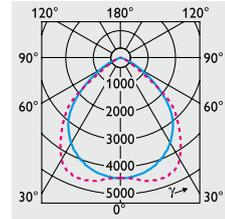


LVE0380600

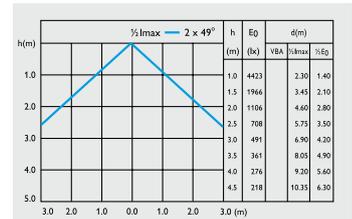


LVE0380600

MCS430
1xCDM-TD150W

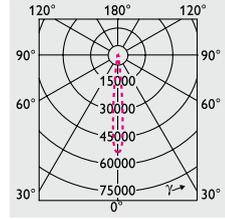


LVE0375500

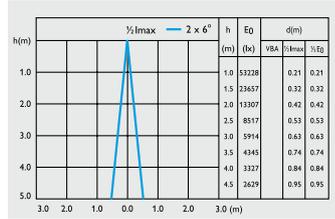


LVE0375500

MCS612
1xCDM-TC35W
12

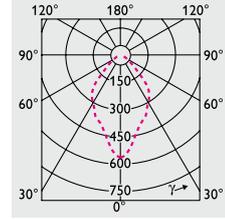


LVL0227700



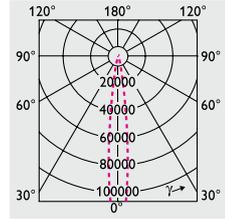
LVL0227700

MPK630
1xCDM-T70W
M-D325

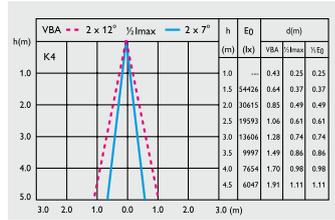


UGR < 21 (acc. EN12464-1)
LVL9954900

MRN604
1xCDM-T150W
12

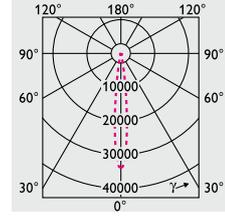


DL56060000

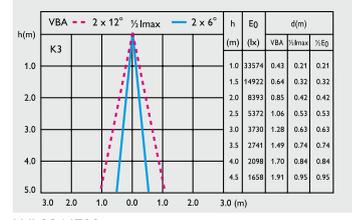


DL56060000

MRN690
1xCDM-T35W
12-24 P12

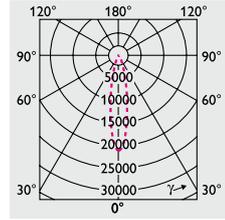


LVL9844700

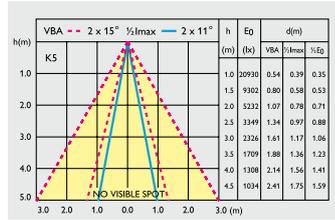


LVL9844700

MRS502
1xCDM-TC70W
24

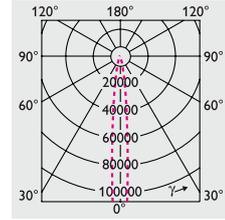


0-180° 90-270°

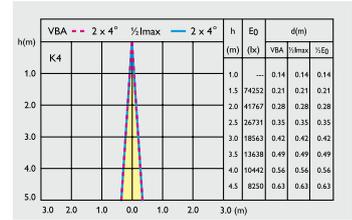


RVL0637300

MRS610
1xCDM-T150W
6

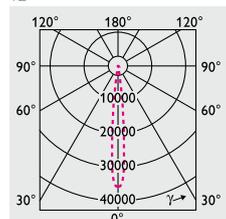


0-180° 90-270°

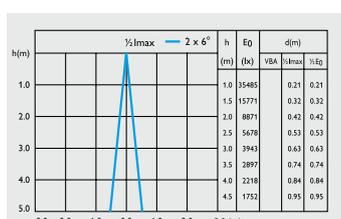


LVL0210000

LCS612
1 x HAL-C-SU100W
12

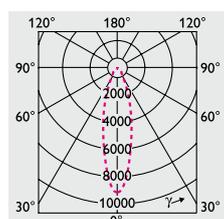


LVL0227700

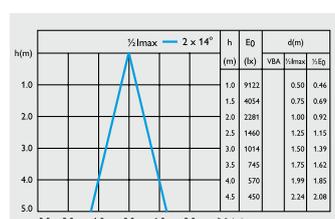


LVL0227700

MCS410
1 x SDW-T100W

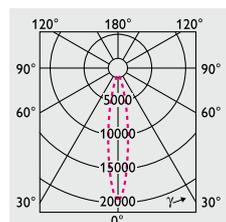


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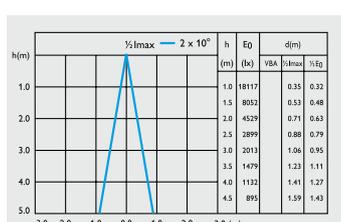


LVE0375700

MCS440
1 x CDM-T70W

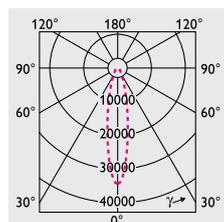


LVE0376100

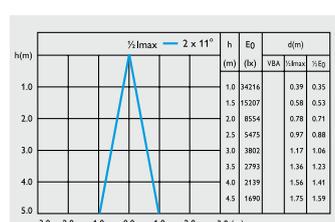


LVE0376100

MCS450
1 x CDM-T150W

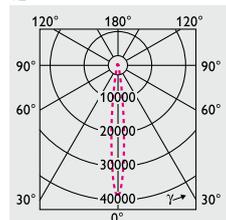


LVE0375600

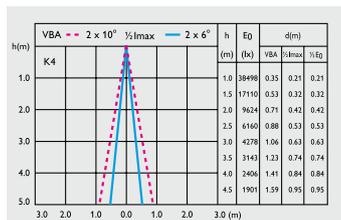


LVE0375600

MRN602
1 x CDM-T35W
12

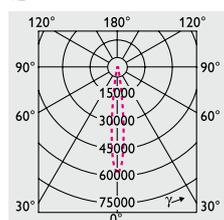


DL56059000

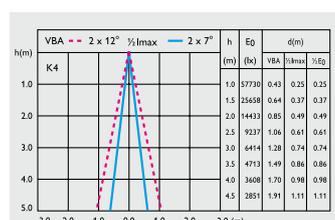


DL56059000

MRN603
1 x CDM-T70W
12

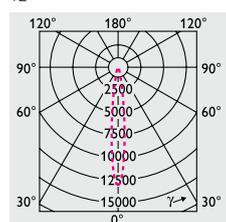


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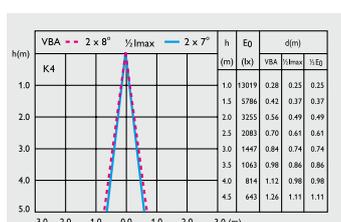


DL56060000

MRS241
1 x CDM-Tm20W
12

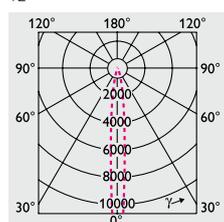


LVE1585600

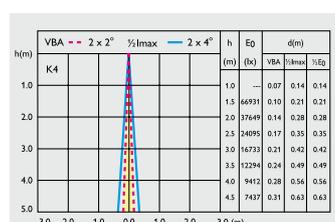


LVE1585600

MR5501
1 x CDM-T150W
12

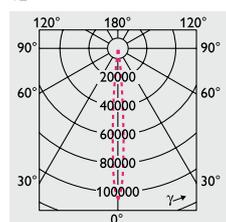


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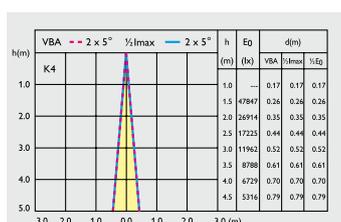


LVL0641900

MRS700
1 x CDM-TC70W
12

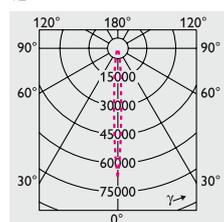


--- 0-180° — 90-270°

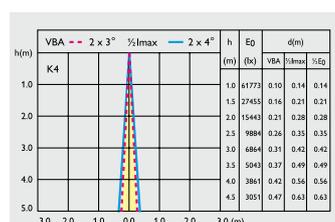


LVL0341501

MRS702
1 x SDW-TG100W
12



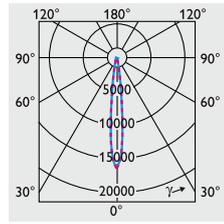
--- 0-180° — 90-270°



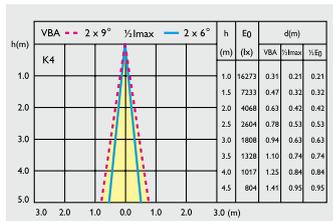
LVL0403102

Projectors and decorative luminaires

MRS705
1xCDM-Tm20W
12

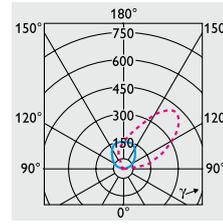


--- 0-180° — 90-270°



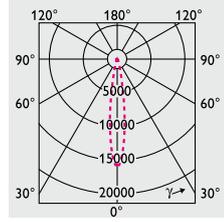
LVL0525600

MWG620
1xCDM-TD70W
A DG

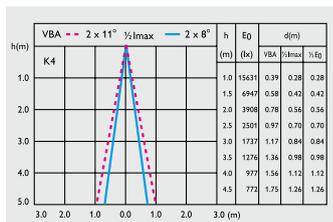


LVL9914600

SRN600
1xSDW-T50W
12

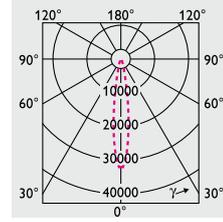


DL56058000

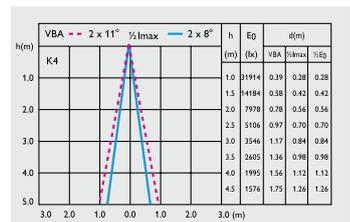


DL56058000

SRN601
1xSDW-T100W
12



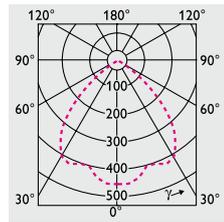
DL56058000



DL56058000

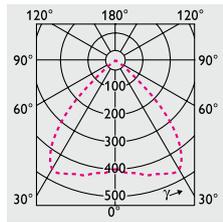
High-bay and low-bay luminaires

4ME350
1xCDO-ET100W
+9ME100 R D350



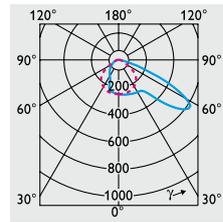
UGR < 20 (acc. EN12464-1)
LVM0634400

4ME550 P-WB
1xQL165W
+9ME100 R D550



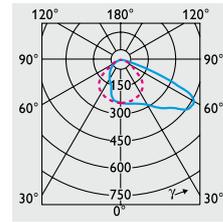
UGR < 17 (acc. EN12464-1)
LVSV805600

DBP300
1xCDM-TD150W
A-MB



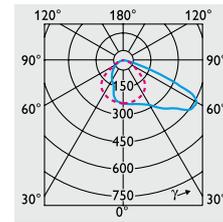
UGR < 16 (acc. EN12464-1)
LVE0285700

DGP300
1xCDM-T250W
A-MB



LVM0576200

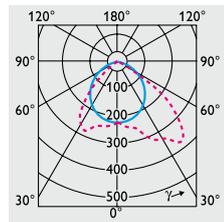
DGP333
1xCDM-T250W
A-MB



LVM0575100

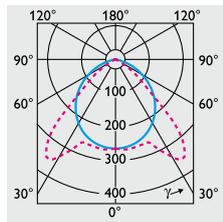
Light-line systems

4MX014 IP63
1xTL-D58W
A



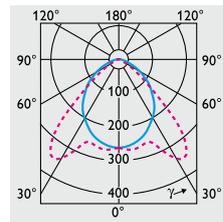
LVSV535200

4MX014 IP63
1xTL-D58W
WB



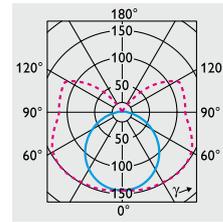
UGR < 20 (acc. EN12464-1)
LVSV535100

4MX014 IP63
1xTL-D58W
WB+4MX093 1/2 58 L-IP63



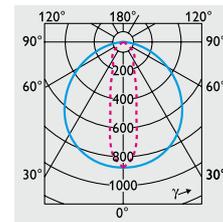
UGR < 19 (acc. EN12464-1)
LVSV536000

4MX091
1 x TL-D36W
830



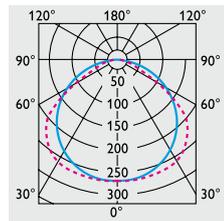
UGR < 29 (acc. EN12464-1)
LVS8195000

4MX091
1xTL-D36W
+4MX092 C-NB



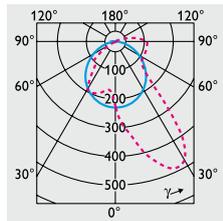
UGR < 22 (acc. EN12464-1)
LVS8225000

4MX091
1xTL-D36W
+4MX092 T



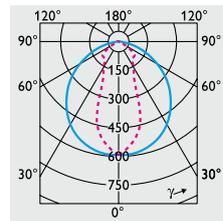
UGR < 22 (acc. EN12464-1)
LVS8199000

4MX091
1xTL-D36W
+4MX092 T-A



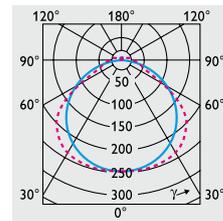
LVSV608700

4MX091
1xTL-D36W
+4MX092 T-NB



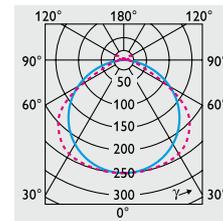
UGR < 22 (acc. EN12464-1)
LVS8205000

4MX091
1xTL-D36W
+4MX092 T-P



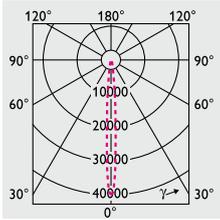
UGR < 22 (acc. EN12464-1)
LVS8307000

4MX091
1xTL-D36W
+4MX092 T-S-D/I

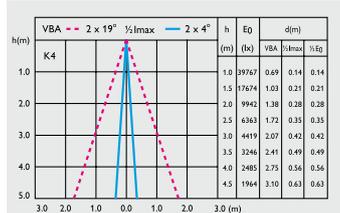


UGR < 22 (acc. EN12464-1)
LVS8318000

QRN690
1xHAL-C-SU100W
6

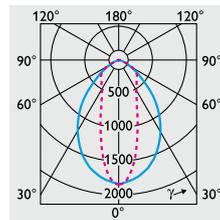


LVL9844000

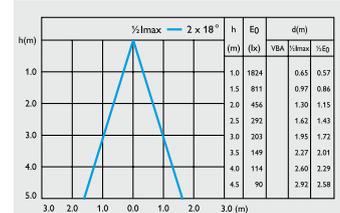


LVL9844000

QRS614
1xHAL-TDC150W
WB

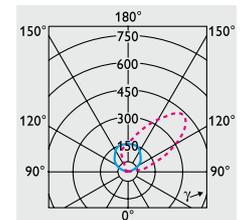


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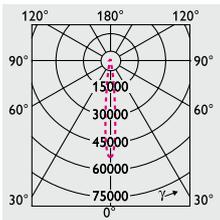
LVL3296000

QWG620
1xHAL-TDS300W
A DG

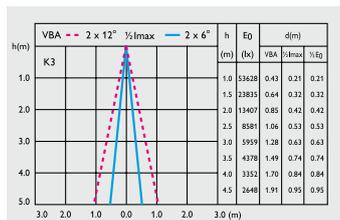


LVL9909000

SRN690
1xSDW-T100W
12-24 P12

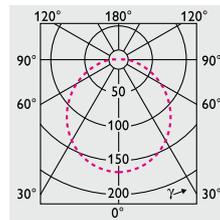


LVL9854100



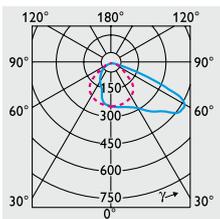
LVL0210900

TCG620
1xTL5C40W
DG



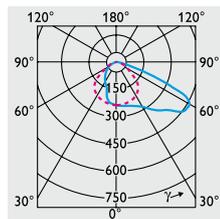
UGR < 20 (acc. EN12464-1)
LVL9921700

DVP333
1xCDM-T250W
A-MB



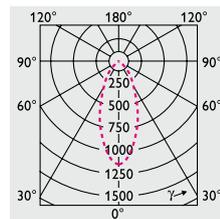
LVM0576600

DWP333
1xCDM-T250W
A-MB



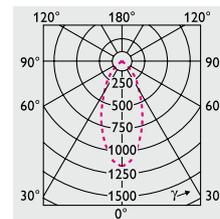
LVM0576400

GPK380 GC
1xHPI-P250W-BU SGR
NB



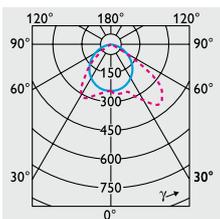
UGR < 18 (acc. EN12464-1)
LVM0795100

HPK150
1xHPI-P250W-BU SGR
P-NB +GPK150 R



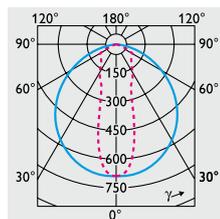
UGR < 19 (acc. EN12464-1)
LVM0473000

4MX091
1xTL-D36W
+4MX092 D-A



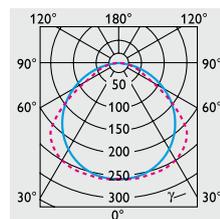
LVS8228000

4MX091
1xTL-D36W
+4MX092 D-NB



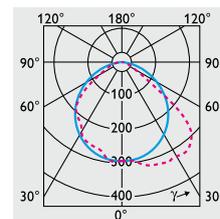
UGR < 21 (acc. EN12464-1)
LVS8224000

4MX091
1xTL-D36W
+4MX092 F



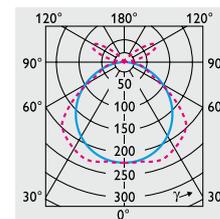
UGR < 22 (acc. EN12464-1)
LVS9037000

4MX091
1xTL-D36W
+4MX092 F-A



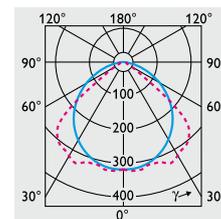
LVS9040000

4MX091
1xTL-D36W
+4MX092 F-S-D/I



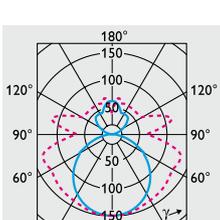
UGR < 21 (acc. EN12464-1)
LVS9038000

4MX091
1xTL-D36W
+4MX092 F-WB



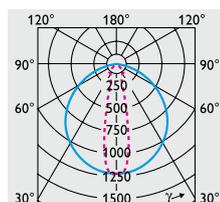
UGR < 22 (acc. EN12464-1)
LVS9039000

4MX091
2xTL-D36W



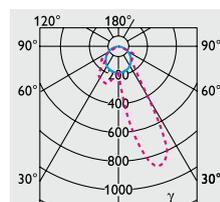
UGR < 29 (acc. EN12464-1)
LVS8196000

4MX691
1xTL5-49W
+4MX692 C-NB



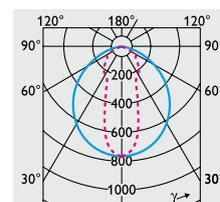
UGR < 23 (acc. EN12464-1)
LVS8307000

4MX691
1xTL5-49W
+4MX692 D-A



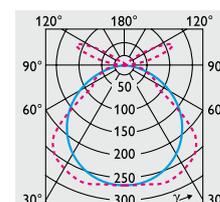
LVS8864-43

4MX691
1xTL5-49W
+4MX692 D-NB



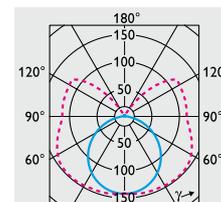
UGR < 22 (acc. EN12464-1)
LVS8858-43

4MX691
1xTL5-49W
+4MX692 F-S-D/I



UGR < 21 (acc. EN12464-1)
LVS8820-43

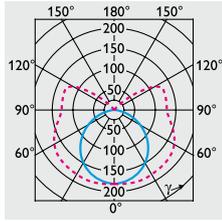
4MX091 IP64
1xTL-D36W



UGR < 29 (acc. EN12464-1)
LVS8815000

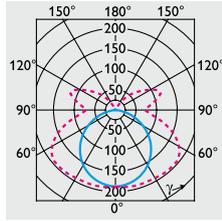
Light-line systems

TMX400
1xTL5-14W



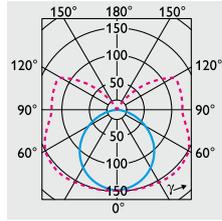
UGR < 26 (acc. EN12464-1)
LVN8798000

TMX400
2xTL5-14W



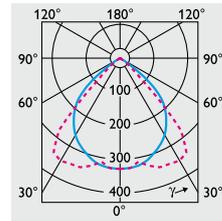
UGR < 27 (acc. EN12464-1)
LVN8797000

TMX400
1xTL-D36W



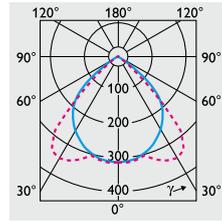
UGR < 26 (acc. EN12464-1)
LVN8720100

TMX400
1xTL-D36W
+GMX450 +GGX450 C6



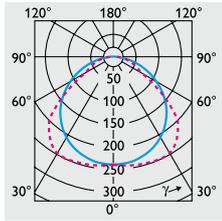
UGR < 15 (acc. EN12464-1)
LVN8722000

TMX400
1xTL-D36W
+GMX450 +GGX450 D6



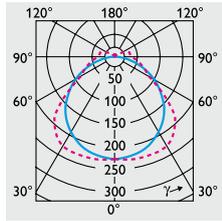
UGR < 15 (acc. EN12464-1)
LVN8722100

TMX400
1xTL-D36W
+GMX450



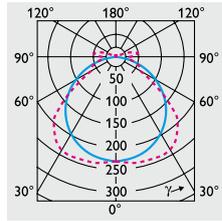
UGR < 22 (acc. EN12464-1)
LVN8721400

TMX400
1xTL-D36W
+GMX450 RP



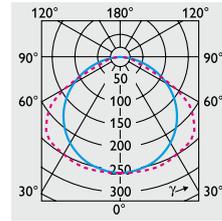
UGR < 22 (acc. EN12464-1)
LVN8723700

TMX400
1xTL-D36W
+GMX450 RS



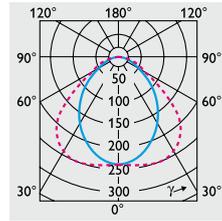
UGR < 21 (acc. EN12464-1)
LVN8724400

TMX400
1xTL-D36W
+GMX430



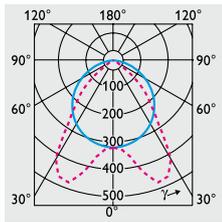
UGR < 21 (acc. EN12464-1)
LVN8725300

TMX400
1xTL-D36W
+GMX450 +GGX450 L



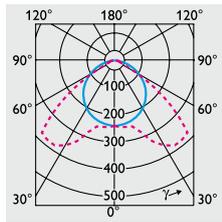
UGR < 20 (acc. EN12464-1)
LVN8721700

TMX400
1xTL5-49W
+GMX555 MB C-BD20



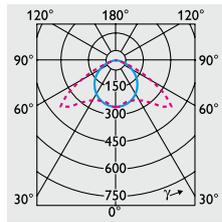
UGR < 22 (acc. EN12464-1)
LVN8865400

TMX400
1xTL5-49W
+GMX555 MB C-BD40



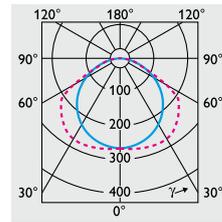
UGR < 23 (acc. EN12464-1)
LVN8865500

TMX400
1xTL5-49W
+GMX555 MB C-BD50



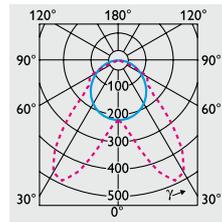
UGR < 24 (acc. EN12464-1)
LVN890240C

TMX400
1xTL5-49W
+GMX555 WB



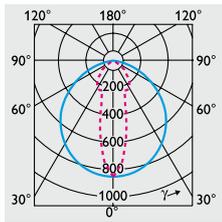
UGR < 24 (acc. EN12464-1)
LVN8865300

TMX400
1xTL5-49W
+GMX562 HB-BD20



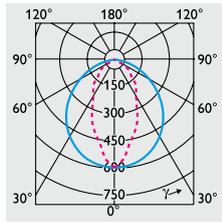
UGR < 22 (acc. EN12464-1)
LVN8903900

TMX400
1xTL-D58W
+GMX460 C-NB



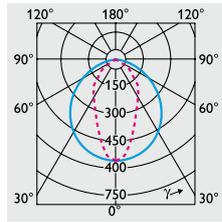
UGR < 21 (acc. EN12464-1)
LVN8725500

TMX400
1xTL-D58W
+GMX465 HB-NB



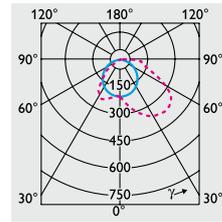
UGR < 21 (acc. EN12464-1)
LVN8751400

TMX400
1xTL-D58W
+GMX465 M-NB



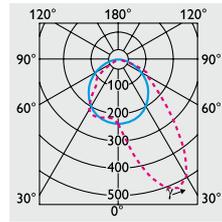
UGR < 21 (acc. EN12464-1)
LVN8747900

TMX400
1xTL-D58W
+GMX466 HB-A



LVN8902700

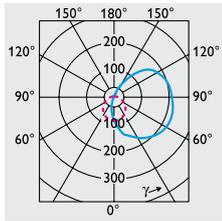
TMX400
1xTL-D58W
+GMX467 M-A



LVN8725400

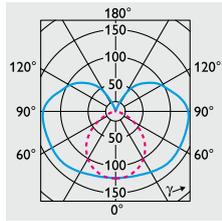
Battens

GMS022
1xTL-D36W
GMS022 R-A



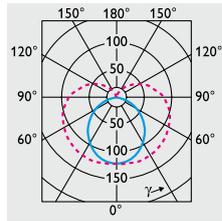
UGR < 28 (acc. EN12464-1)
LVE0450001

TCH128
1xTL5-14W



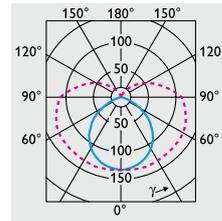
UGR < 28 (acc. EN12464-1)
LVE0450001

TCS054
1xTL-D15W
O



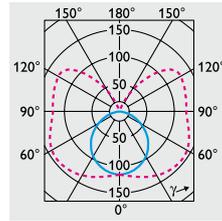
UGR < 26 (acc. EN12464-1)
LVN7774000

TCS054
1xTL-D36W
P



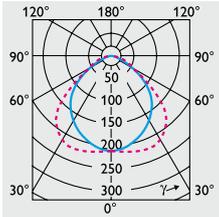
UGR < 26 (acc. EN12464-1)
LVN7774000

TMS022
1xTL-D15W



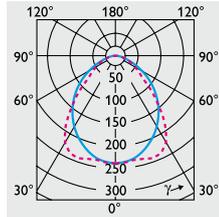
UGR < 26 (acc. EN12464-1)
LVN7774000

TMX400
1xTL-D36W
+GMX450 +GGX450 M5



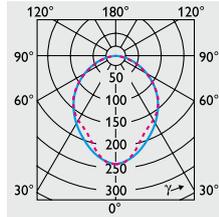
UGR < 19 (acc. EN12464-1)
LVN8721900

TMX400
1xTL-D36W
+GMX450 +GGX450 ML



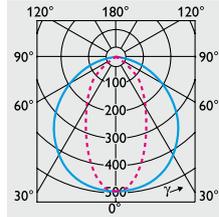
UGR < 19 (acc. EN12464-1)
LVN8721500

TMX400
1xTL-D36W
+GMX450 +GGX450 P



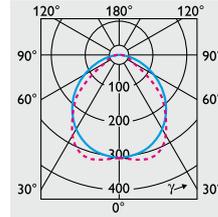
UGR < 20 (acc. EN12464-1)
LVN8774200

TMX400
1xTL-D36W
+GMX450 +GGX451 M-NB



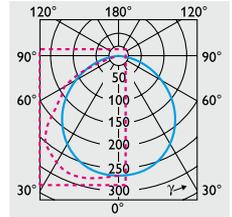
UGR < 21 (acc. EN12464-1)
LVN8772500

TMX400
1xTL-D36W
+GMX450 +GGX452 M-WB



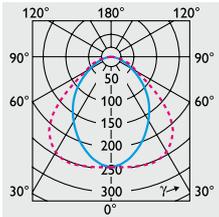
UGR < 21 (acc. EN12464-1)
LVN8751700

TMX400
1xTL-D36W
+GMX440



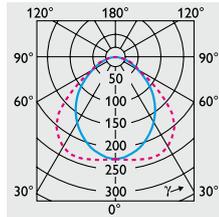
UGR < 21 (acc. EN12464-1)
LVN8794700

TMX400
1xTL-D36W
+GMX450 +GGX450 LP



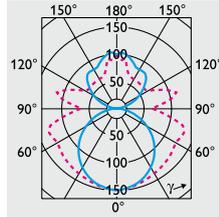
UGR < 19 (acc. EN12464-1)
LVN8721600

TMX400
1xTL-D36W
+GMX450 +GGX450 M2



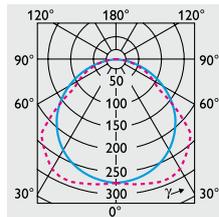
UGR < 19 (acc. EN12464-1)
LVN8721800

TMX400
2xTL-D36W



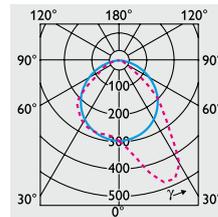
UGR < 26 (acc. EN12464-1)
LVN8720300

TMX400
1xTL5-49W
+GMX555 MB



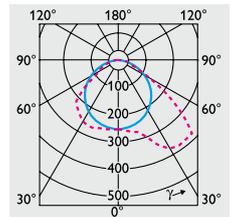
UGR < 23 (acc. EN12464-1)
LVN8865200

TMX400
1xTL5-49W
+GMX555 MB C-A20



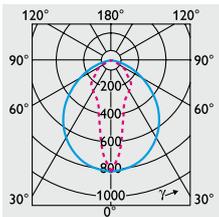
LVN8865600

TMX400
1xTL5-49W
+GMX555 MB C-A40



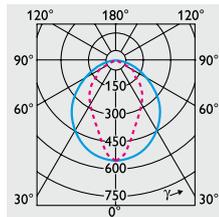
LVN8865700

TMX400
1xTL5-49W
+GMX565 HB-NB



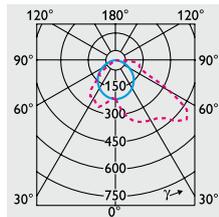
UGR < 21 (acc. EN12464-1)
LVN8843500

TMX400
1xTL5-49W
+GMX565 M-NB



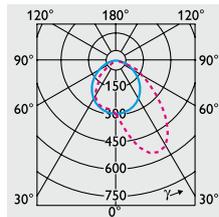
UGR < 21 (acc. EN12464-1)
LVN8840100

TMX400
1xTL5-49W
+GMX566 HB-A



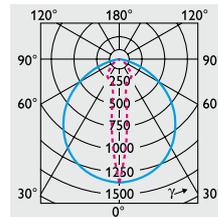
LVN8839500

TMX400
1xL5-49W
+GMX567 M-A



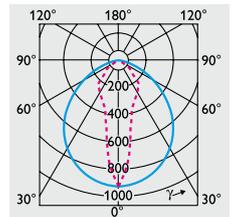
LVN882080c

TMX400
1xTL5-49W
+GMX570 C-NB



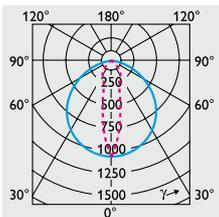
UGR < 23 (acc. EN12464-1)
LVN8798100

TMX400
1xTL5-49W
+GMX570 HB-NB



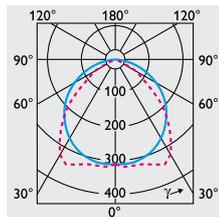
UGR < 21 (acc. EN12464-1)
LVN8815400

TMX400
1xTL-D58W
+GMX470 C-NB



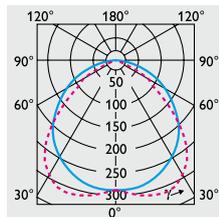
UGR < 22 (acc. EN12464-1)
LVN8762700

TMX400
2xTL-D58W
+GMX466 HB-WB



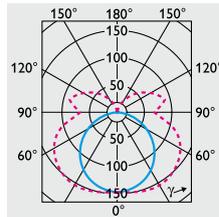
UGR < 24 (acc. EN12464-1)
LVN8729400

TMX400
2xTL-D58W
+GMX466 M-WB



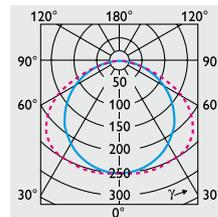
UGR < 23 (acc. EN12464-1)
LVN8729300

TMX400 F32
2xTL-D58W



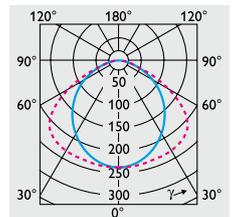
UGR < 27 (acc. EN12464-1)
LVN8900000

TTX150 581
1xTL-D58W



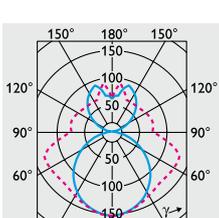
UGR < 24 (acc. EN12464-1)
LVV1314001

TTX150 581
1xTL-D58W
+GTX150 L



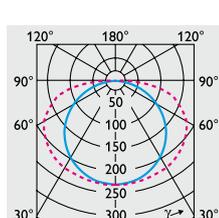
UGR < 22 (acc. EN12464-1)
LVV1343500

TMS022
2xTL-D18W



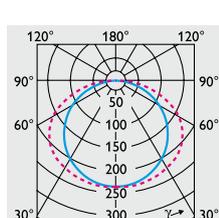
UGR < 26 (acc. EN12464-1)
LVN7776000

TMS028
1xTL-D36W



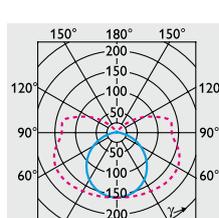
UGR < 25 (acc. EN12464-1)
LVN7943000

TMS028
2xTL-D36W



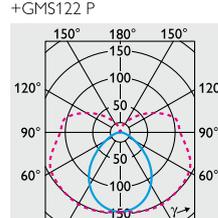
UGR < 25 (acc. EN12464-1)
LVN7944000

TMS122
1xTL5-14W



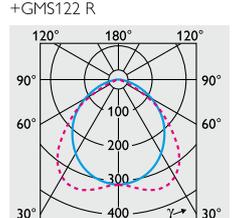
UGR < 27 (acc. EN12464-1)
LVG1249700

TMS122
1xTL5-14W
+GMS122 P



UGR < 25 (acc. EN12464-1)
LVG1249800

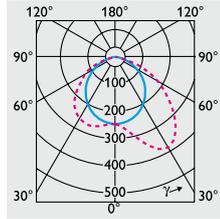
TMS122
1xTL5-14W
+GMS122 R



UGR < 21 (acc. EN12464-1)
LVG1249600

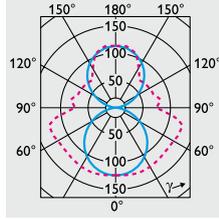
Battens

TMS122
1xTL5-14W
+GMS122 R-A



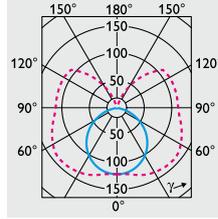
LVG1249500

TMX204
2xTL-D36W



UGR < 26 (acc. EN12464-1)
LVO8188000

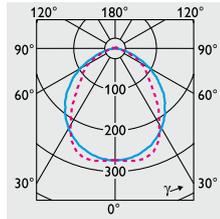
TMX204
1xTL-D36W



UGR < 25 (acc. EN12464-1)
LVO8187000

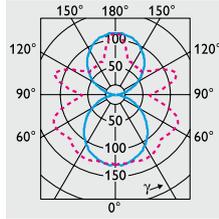
Waterproof
and cleanroom
luminaires

4IS110
1xTL-D58W
+R-PC



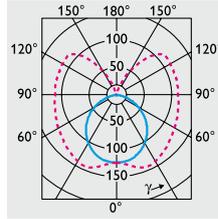
UGR < 21 (acc. EN12464-1)

4IS110
2xTL-D58W



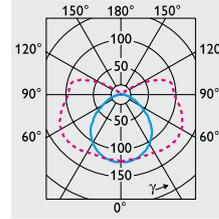
UGR < 33 (acc. EN12464-1)

4IS110
1xTL-D58W



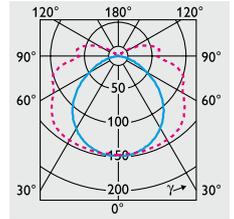
UGR < 32 (acc. EN12464-1)

4IS120
1xTL-D58W
PC



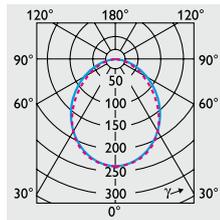
UGR < 30 (acc. EN12464-1)

4IS120
2xTL-D58W
PC



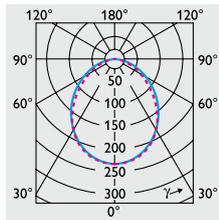
UGR < 29 (acc. EN12464-1)

TBS324
2xTLS-54W
O



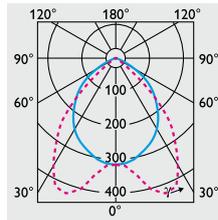
UGR < 21 (acc. EN12464-1)
LVW1517200

TBS326
2xTLS-54W
O



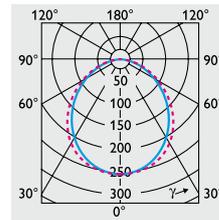
UGR < 21 (acc. EN12464-1)
LVW1521500

TBS326
4xTLS-14W
C5



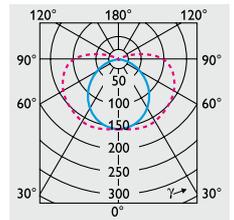
UGR < 16 (acc. EN12464-1)
LVW1521100

TBS326
4xTLS-14W
O



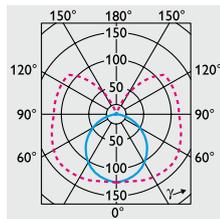
UGR < 20 (acc. EN12464-1)
LVW1518000

TCW215
1xTL-D18W



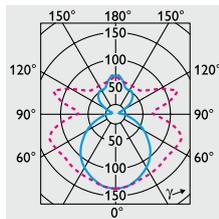
UGR < 24 (acc. EN12464-1)
LVN8816400

TMW065
1xTL-D18W



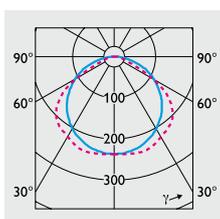
UGR < 25 (acc. EN12464-1)
LMK7270000

TMW065
2xTL-D18W



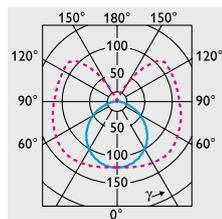
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LMK7350000

4IS130
1xTL-D58W
+R



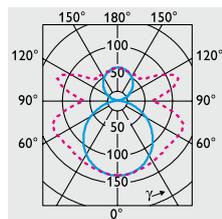
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4IS130
1xTL-D58W



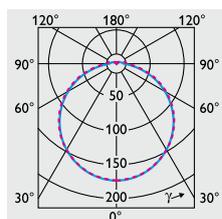
UGR < 32 (acc. EN12464-1)

4IS130
2xTL-D58W



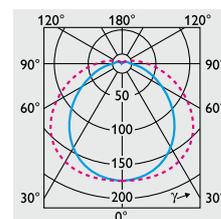
UGR < 28 (acc. EN12464-1)

FCW196
2xPL-L18W
O



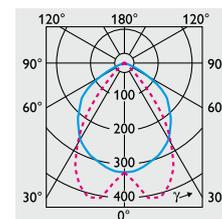
UGR < 20 (acc. EN12464-1)
LVN6583100

FCW196
2xPL-L18W
P



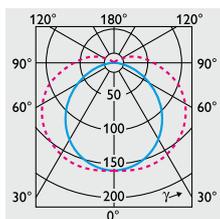
UGR < 22 (acc. EN12464-1)
LVN6582100

TBS324
2xTL5-54W
C5



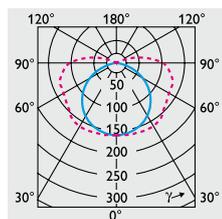
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LVW1518300

TCW215
2xTL-D18W



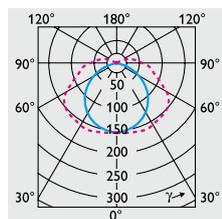
UGR < 24 (acc. EN12464-1)
LVN8816600

TCW216
1xTL-D18W



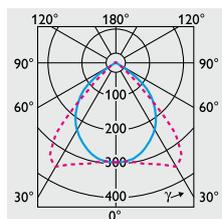
UGR < 24 (acc. EN12464-1)
LVN8816500

TCW216
2xTL-D18W



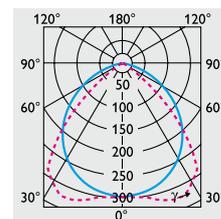
UGR < 24 (acc. EN12464-1)
LVN8816700

TCW596
1xTL-D58W
D6



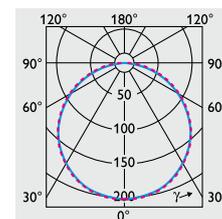
UGR < 16 (acc. EN12464-1)
LVN6511100

TCW596
1xTL-D58W
R



UGR < 21 (acc. EN12464-1)
LVN6741000

TCW596
1xTL-D58W
RO



UGR < 21 (acc. EN12464-1)
LVN0085460



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