

# Pin & Sleeve Devices

Series 309-1 and 309-2 IEC Configuration

## INDEX

**North American Watertight Pin & Sleeve Devices**  
 Overview . . . . .O2, O3  
 20 & 30 Amp Devices . . . . .O4  
 60 & 100 Amp Devices . . . . .O5  
 Dimensions . . . . .O6, O7  
 Specifications . . . . .O8, O9

**PowerSwitch® by Leviton**  
**North American Watertight Mechanical Interlocks**  
 Overview . . . . .O10, O11  
 20 & 30 Amp Devices . . . . .O12  
 60 & 100 Amp Devices . . . . .O13  
 Dimensions . . . . .O14  
 Specifications . . . . .O15

**International-Rated Pin & Sleeve Devices**  
 16, 32, 63 & 125 Amp Devices . . . . .O16  
 Specifications . . . . .O17  
 Dimensions . . . . .O18–O20

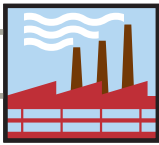
**Pin & Sleeve Products**  
 Back Boxes . . . . .O21  
 Accessories . . . . .O22

**Making the Right Connection:**  
 Color Code and Clock Position . . . . .O23  
 Leviton Catalog Numbering System . . . . .O23

**PowerSwitch® by Leviton**  
**Watertight Safety Disconnect Switches**  
 Overview . . . . .O24  
 30, 60 & 100 Amp Devices . . . . .O25  
 Specifications . . . . .O26  
 Dimensions . . . . .O27, O28  
 Accessories . . . . .O28

Pin & Sleeve Devices Index





## PIN & SLEEVE DEVICE FEATURES

### Industrial Grade North American Watertight Pin & Sleeve Devices IEC 309-1 & 309-2

#### The Watertight Line: North American-Rated Devices

*Superior Connection...Superior Protection*

#### Features and Benefits

- Rugged housing, made of superior performance Valox 357, provides maximum corrosion protection and makes the device resistant to impact and abuse; greater resistance to temperature extremes, V-0 flame rated and superior UV stability.
- Contact carrier resists arcing and internal heat build-up; 60 and 100 amp contact/pin carriers are made of reinforced nylon for even greater strength and temperature resistance.
- Solid brass terminal screws on 20A, 30A & 60A devices provide maximum clamping pressure.
- Stainless steel terminal screws and terminals on 100A devices provide corrosion resistance in caustic environments.
- Dependable, clean brass construction for long life, reliable electrical contact, maximum conductivity, and corrosion resistance.
- Watertight Chloroprene onion skin grommet provides a precise, reliable seal at the cable entry point.
- Ground, neutral and phase terminals are clearly identified by color coding or letters and numbering on both front & back side.
- Multiple contact points assure a continuously reliable electrical connection.

#### UL Rated for both 50 and 60 Hz Applications.

2 YEAR LIMITED  
WARRANTY



Accepts liquid-tight conduit with adapter accessory—See page O21



Engineered to IP67  
Watertight Standards  
North American Rated Devices  
20, 30, 60 & 100 Amp

Heavy-Duty  
Valox 357 Exterior  
Cord Clamp

Reinforced Nylon  
Contact Carrier

Clean Brass Pins

Terminal Screws  
Stainless Steel (100A)  
Solid Brass (20-60A)

5100P7W

Super-Durable  
Valox 357 Housing

Watertight Chloroprene  
Onion Skin Grommet

5100C7W

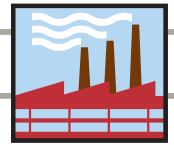
Front Terminals,  
Raised Lettering,  
Identification

Rear Terminals, Raised  
Lettering, Identification

Calibrated, Self-Adjusting  
Contacts

Valox® is a registered trademark of GE.





## Industrial Grade North American Watertight Pin & Sleeve Devices



### Super Tough Housing

- Provides maximum protection from abuse and environment
- Heavy-wall molding of Valox 357 resists impact, heat, flame and chemicals
- Superior performance in low-to-high ambient temperature extremes (-40°C to 60°C)
- Excellent UV stability for superior outdoor performance (UL1682)
- V-0 flammability rating
- Fully insulated
- Color-coded by voltage for easy identification



### Pin & Contact Carrier 60 & 100 Amp

- Protects pins & contacts, holding them firmly in place
- Pin Carrier and Contact Carrier constructed of glass fiber reinforced nylon for maximum impact resistance and maximum protection of pins and contacts
- Superior arc-tracking resistance
- Excellent heat-resistance and flame-resistance
- Chamfered wire entry makes wiring easier



### External Cord Clamp

- Protects terminals from strain
- Accommodates a wide variety of cord sizes
- Excellent impact strength
- Excellent UV stability for superior outdoor performance (UL1682)
- V-0 flammability rating



### Pin & Contact Carrier 20 & 30 Amp

- Pin Carrier and Contact Carrier constructed of nylon for maximum impact resistance and maximum protection of pins and contacts
- Terminal screws are aligned on a single plane for easier access
- Internal hinged cord clamp adds strain-relief and swings aside when wiring terminals
- Large diameter combination head terminal screws



### Internal Cord Clamp

- Secondary method for eliminating strain on terminals and conductors
- True IEC 309-1 & 309-2 acceptance
- Constructed of sturdy thermoplastic for tough environments
- Removes easily for user convenience



### Pins

- Designed for manageable insertion/withdrawal force
- Clean brass construction resists corrosion, provides superior contact and low electrical resistance
- Rounded tips reduce insertion force and decrease wear on the contact surface area



### Spring Loaded Cover, Cover Arm, & Locking Rings

- Rings lock plug to connector
- Spring loaded cover closes automatically
- "Performance grade" Stainless Steel cover spring for superior corrosion-resistance and long life
- Excellent UV stability for outdoor use
- V-0 flammability rating
- Interior arm design in 60 and 100 amp helps eliminate breakage



### Sleeves (Contacts)

- Designed for manageable insertion/withdrawal force
- Clean brass construction resists corrosion, provides superior contact and low electrical resistance
- Self-adjusting, machine-calibrated contacts for accurate contact pressure designed for superior wiping and cleaning action
- Made from high performance Swedish Industrial Standard (SIS) Brass 5170-04
- Positioned at sleeve entrance, stainless steel spring enables pin cleaning at earliest point of entry



### Gasket/Grommet

- Prevents moisture, dust, and contaminants from entering housing or pin/contact carrier
- Solid Chloroprene for positive seal and excellent chemical/corrosion-resistance
- Onion skin design on grommet provides precise watertight fit, eliminating the need to choose from multiple grommets that may not fit the cable jacket precisely



### Terminal Screws

- Engineered to provide maximum holding power and lowest electrical resistance
- Accepts a wide range of conductors
- Double screws ensure secure connection
- Direct bearing pressure terminals for 20, 30 and 60 Amp ratings; pressure clamp termination for 100 Amp devices
- Stainless steel terminal screws and terminals for top performance on 100 Amp



20 AMP • 30 AMP

# Industrial Grade North American Watertight Pin & Sleeve Devices

IEC 309-1 & 309-2

20 AMP and 30 AMP Watertight Pin & Sleeve Devices



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY



PLUG — 320P4W



CONNECTOR — 320C4W



RECEPTACLE — 420R9W



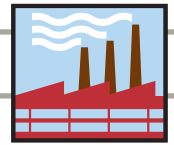
INLET — 420B9W



BACK BOX — BX230-V

AMPS	WIRING	VOLTAGE AC	CONNECTOR/RECEPTACLE	PLUG/INLET	PLUG	CONNECTOR	RECEPTACLE	INLET	BACK BOX
20	2p3w	125			320P4W	320C4W	320R4W	320B4W	BX230-V
	2p3w	250			320P6W	320C6W	320R6W	320B6W	BX230-V
	2p3w	480			320P7W	320C7W	320R7W	320B7W	BX230-V
	3p4w	125/250			420P12W	420C12W	420R12W	420B12W	BX230-V
	3p4w	3Ø250			420P9W	420C9W	420R9W	420B9W	BX230-V
	3p4w	3Ø480			420P7W	420C7W	420R7W	420B7W	BX230-V
	3p4w	3Ø600			420P5W	420C5W	420R5W	420B5W	BX230-V
	4p5w	3ØY120/208			520P9W	520C9W	520R9W	520B9W	BX230-V
	4p5w	3ØY277/480			520P7W	520C7W	520R7W	520B7W	BX230-V
	4p5w	3ØY347/600			520P5W	520C5W	520R5W	520B5W	BX230-V
30	2p3w	125			330P4W	330C4W	330R4W	330B4W	BX230-V
	2p3w	250			330P6W	330C6W	330R6W	330B6W	BX230-V
	2p3w	480			330P7W	330C7W	330R7W	330B7W	BX230-V
	3p4w	125/250			430P12W	430C12W	430R12W	430B12W	BX230-V
	3p4w	3Ø250			430P9W	430C9W	430R9W	430B9W	BX230-V
	3p4w	3Ø480			430P7W	430C7W	430R7W	430B7W	BX230-V
	3p4w	3Ø600			430P5W	430C5W	430R5W	430B5W	BX230-V
	4p5w	3ØY120/208			530P9W	530C9W	530R9W	530B9W	BX230-V
	4p5w	3ØY277/480			530P7W	530C7W	530R7W	530B7W	BX230-V
	4p5w	3ØY347/600			530P5W	530C5W	530R5W	530B5W	BX230-V

Additional information for Back Boxes and Accessories can be found on pages O21 & O22.



# Industrial Grade North American Watertight Pin & Sleeve Devices

IEC 309-1 & 309-2

## 60 AMP and 100 AMP Watertight Pin & Sleeve Devices



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY



PLUG — 4100P12W

CONNECTOR — 4100C12W

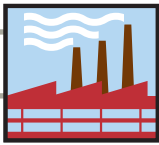
RECEPTACLE — 360R6W

INLET — 360B7W

BACK BOX — BX100-V

AMPS	WIRING	VOLTAGE AC	CONNECTOR/RECEPTACLE	PLUG/INLET	PLUG	CONNECTOR	RECEPTACLE	INLET	BACK BOX
60	2p3w	125			360P4W	360C4W	360R4W	360B4W	BX60-V
	2p3w	250			360P6W	360C6W	360R6W	360B6W	BX60-V
	2p3w	480			360P7W	360C7W	360R7W	360B7W	BX60-V
	3p4w	125/250			460P12W	460C12W	460R12W	460B12W	BX60-V
	3p4w	3Ø250			460P9W	460C9W	460R9W	460B9W	BX60-V
	3p4w	3Ø480			460P7W	460C7W	460R7W	460B7W	BX60-V
	3p4w	3Ø600			460P5W	460C5W	460R5W	460B5W	BX60-V
	4p5w	3ØY120/208			560P9W	560C9W	560R9W	560B9W	BX60-V
	4p5w	3ØY277/480			560P7W	560C7W	560R7W	560B7W	BX60-V
	4p5w	3ØY347/600			560P5W	560C5W	560R5W	560B5W	BX60-V
100	2p3w	125			3100P4W	3100C4W	3100R4W	3100B4W	BX100-V
	2p3w	250			3100P6W	3100C6W	3100R6W	3100B6W	BX100-V
	2p3w	480			3100P7W	3100C7W	3100R7W	3100B7W	BX100-V
	3p4w	125/250			4100P12W	4100C12W	4100R12W	4100B12W	BX100-V
	3p4w	3Ø250			4100P9W	4100C9W	4100R9W	4100B9W	BX100-V
	3p4w	3Ø480			4100P7W	4100C7W	4100R7W	4100B7W	BX100-V
	3p4w	3Ø600			4100P5W	4100C5W	4100R5W	4100B5W	BX100-V
	4p5w	3ØY120/208			5100P9W	5100C9W	5100R9W	5100B9W	BX100-V
	4p5w	3ØY277/480			5100P7W	5100C7W	5100R7W	5100B7W	BX100-V
	4p5w	3ØY347/600			5100P5W	5100C5W	5100R5W	5100B5W	BX100-V

Additional information for Back Boxes and Accessories can be found on pages O21 & O22.



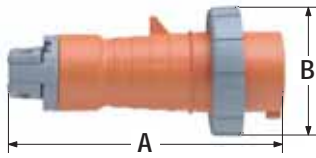
# PLUG & CONNECTOR DIMENSIONS

## Industrial Grade North American Watertight Pin & Sleeve Devices

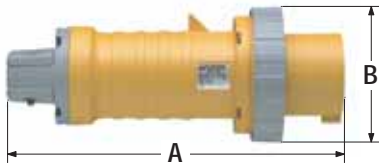


Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY



20A, 30A PLUG



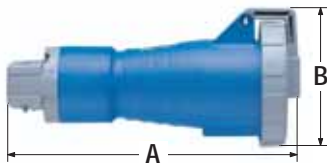
60A, 100A PLUG

### Plug Dimensions

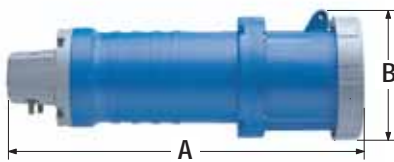
CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE
320P	20	inch	5.83	2.80	.350 –.860
		mm	148	71	9 – 22
420P	20	inch	6.46	3.11	.350 –.860
		mm	164	79	9 – 22
520P	20	inch	6.61	3.43	.437 –1.187
		mm	168	87	11 – 30
330P	30	inch	6.85	3.70	.437 –1.187
		mm	174	94	11 – 30
430P	30	inch	6.85	3.70	.437 –1.187
		mm	174	94	11 – 30
530P	30	inch	7.40	3.98	.437 –1.450
		mm	188	101	11 – 37
360P	60	inch	10.83	4.49	.670 –1.625
		mm	275	114	17 – 41
460P	60	inch	10.83	4.49	.670 –1.625
		mm	275	114	17 – 41
560P	60	inch	10.83	4.49	.670 –1.625
		mm	275	114	17 – 41
3100P	100	inch	12.3	5	.950 –1.875
		mm	312	127	24 – 48
4100P	100	inch	12.3	5	.950 –1.875
		mm	312	127	24 – 48
5100P	100	inch	12.3	5	.950 –1.875
		mm	312	127	24 – 48

### Connector Dimensions

CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE
320C	20	inch	6.73	3.19	.350 –.860
		mm	171	81	9 – 22
420C	20	inch	7.36	3.46	.350 –.860
		mm	187	88	9 – 22
520C	20	inch	7.95	3.82	.437 –1.187
		mm	202	97	11 – 30
330C	30	inch	7.95	4.02	.437 –1.187
		mm	202	102	11 – 30
430C	30	inch	7.95	4.02	.437 –1.187
		mm	202	102	11 – 30
530C	30	inch	8.27	4.29	.437 –1.450
		mm	210	109	11 – 37
360C	60	inch	11.26	4.41	.670 –1.625
		mm	286	112	17 – 41
460C	60	inch	11.26	4.41	.670 –1.625
		mm	286	112	17 – 41
560C	60	inch	11.26	4.41	.670 –1.625
		mm	286	112	17 – 41
3100C	100	inch	12.8	4.84	.950 –1.875
		mm	325	123	24 – 48
4100C	100	inch	12.8	4.84	.950 –1.875
		mm	325	123	24 – 48
5100C	100	inch	12.8	4.84	.950 –1.875
		mm	325	123	24 – 48

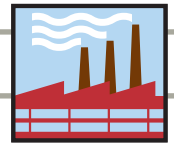


20A, 30A CONNECTOR



60A, 100A CONNECTOR

# INLET & RECEPTACLE DIMENSIONS

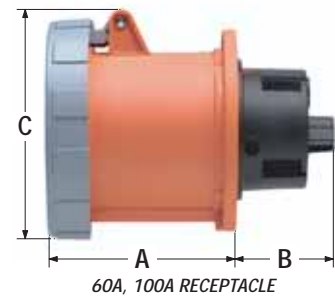
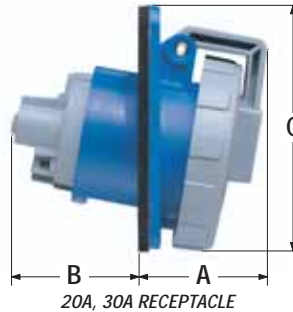
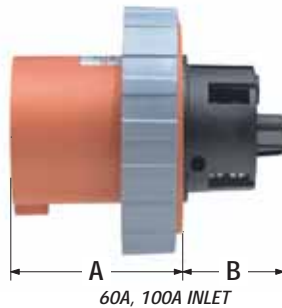
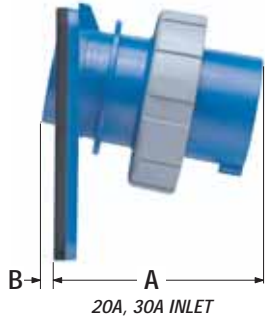


## Industrial Grade North American Watertight Pin & Sleeve Devices



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY

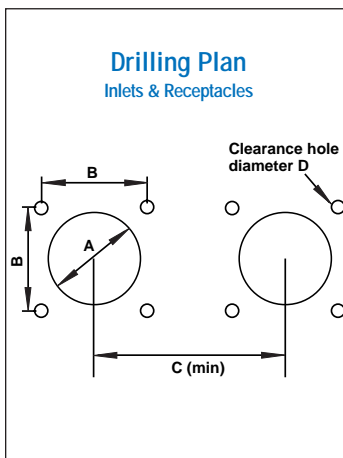


### Inlet Dimensions

CATALOG NO.	AMPS	UNIT	A	B
320B	20	inch	1.85	0.39
		mm	47	10
420B	20	inch	2.09	0.39
		mm	53	10
520B	20	inch	2.32	0.39
		mm	59	10
330B	30	inch	2.36	0.47
		mm	60	12
430B	30	inch	2.36	0.47
		mm	60	12
530B	30	inch	2.64	.47
		mm	67	12
360B	60	inch	3.15	1.97
		mm	80	50
460B	60	inch	3.15	1.97
		mm	80	50
560B	60	inch	3.15	1.97
		mm	80	50
3100B	100	inch	3.50	2.21
		mm	89	56
4100B	100	inch	3.50	2.21
		mm	89	56
5100B	100	inch	3.50	2.21
		mm	89	56

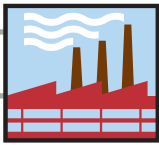
### Receptacle Dimensions

CATALOG NO.	AMPS	UNIT	A	B	C
320R	20	inch	1.77	2.24	3.74
		mm	45	57	95
420R	20	inch	1.77	2.24	3.74
		mm	45	57	95
520R	20	inch	1.85	2.24	3.90
		mm	47	57	99
330R	30	inch	2.20	2.40	4.10
		mm	56	61	104
430R	30	inch	2.20	2.40	4.10
		mm	56	61	104
530R	30	inch	2.20	2.44	4.37
		mm	56	62	111
360R	60	inch	3.50	1.89	4.37
		mm	89	48	111
460R	60	inch	3.50	1.89	4.37
		mm	89	48	111
560R	60	inch	3.50	1.89	4.37
		mm	89	48	111
3100R	100	inch	3.94	2.28	4.80
		mm	100	58	122
4100R	100	inch	3.94	2.28	4.80
		mm	100	58	122
5100R	100	inch	3.94	2.28	4.80
		mm	100	58	122



DEVICE SIZE		A		B		C (min)		D	
		inches	mm	inches	mm	inches	mm	inches	mm
20A; 3-wire:	Receptacle	3.26	83	3.12	79.5	3.94	100	0.185	4.7
	Inlet	3.26	83	3.12	79.5	3.94	100	0.185	4.7
20A; 4-wire:	Receptacle	3.26	83	3.12	79.5	4.33	110	0.185	4.7
	Inlet	3.26	83	3.12	79.5	4.33	110	0.185	4.7
20A; 5-wire:	Receptacle	3.26	83	3.12	79.5	4.92	125	0.236	6.0
	Inlet	3.26	83	3.12	79.5	4.92	125	0.185	4.7
30A; 3-wire:	Receptacle	3.26	83	3.12	79.5	5.12	130	0.236	6.0
	Inlet	3.26	83	3.12	79.5	5.12	130	0.185	4.7
30A; 4-wire:	Receptacle	3.26	83	3.12	79.5	5.12	130	0.236	6.0
	Inlet	3.26	83	3.12	79.5	5.12	130	0.185	4.7
30A; 5-wire:	Receptacle	3.26	83	3.12	79.5	5.71	145	0.236	6.0
	Inlet	3.26	83	3.12	79.5	5.71	145	0.185	4.7
60A	All	2.76	70	2.40	61	6.69	170	0.224	5.7
100A	All	3.47	88	2.80	71	7.87	200	0.280	7.1

Pin & Sleeve Devices



# TECHNICAL INFORMATION

## Industrial Grade North American Watertight Pin & Sleeve Devices



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
**WARRANTY**



- Listed to UL 1682 and 1686
- Certified to CSA Standard C22.2 number 182.1
- Classified to IEC Standards 309-1 and 309-2 for both North American-rated and International-rated voltages and services
- CE marking per low-voltage directives 73/23/EEC, 93/68/EEC



4100P12W

4100C12W

### Material Specifications

#### Inlets

PART	MATERIAL
Housing	Valox 357
Locking Ring	Valox 357
Mounting Flange	Valox 357
Contact Carrier	Nylon for 20 and 30 Amp devices; Reinforced nylon for 60 and 100 Amp devices
Phase, Ground Pins	Brass
20, 30, 60A Terminal Screws	Brass
100A Terminal Screws	Stainless Steel
Sealing Gasket	Solid Chloroprene

#### Connectors

PART	MATERIAL
Housing	Valox 357
Internal Cord Clamp Asmby	Thermoplastic
External Cord Clamp Asmby	Valox 357
Gland Cap	Valox 357
Grommet	Chloroprene Onion Skin
Cover with Arm	Valox 357
Arm Spring	"Performance Grade" Stainless Steel
Cover Eyelet	Nickel-Plated Brass
Sealing Gasket	Solid Chloroprene
Contact Carrier	Nylon for 20 and 30 Amp devices; Reinforced nylon for 60 and 100 Amp devices
Phase, Ground Sleeve	Brass
Sleeve Spring	Stainless Steel
20, 30, 60A Terminal Screws	Brass
100A Terminal Screws	Stainless Steel
Internal Screws	Zinc-plated Steel
External Screws	Acid-proof Stainless Steel

#### Plugs

PART	MATERIAL
Housing	Valox 357
Locking Ring	Valox 357
Sealing Gasket	Solid Chloroprene
Internal Cord Clamp Asmby	Thermoplastic
External Cord Clamp Asmby	Valox 357
Gland Cap	Valox 357
Grommet	Chloroprene Onion Skin
Contact Carrier	Nylon for 20 and 30 Amp devices; Reinforced nylon for 60 and 100 Amp devices
Ground, Phase Pins	Brass
20, 30, 60A Terminal Screws	Brass
100A Terminal Screws	Stainless Steel
Internal Screws	Zinc-plated Steel
External Screws	Acid-proof Stainless Steel

#### Receptacles

PART	MATERIAL
Housing	Valox 357
Mounting Flange	Valox 357
Cover with Arm	Valox 357
Arm Spring	"Performance Grade" Stainless Steel
Cover Eyelet	Nickel-Plated Brass
Sealing Gasket	Solid Chloroprene
20, 30, 60A Terminal Screws	Brass
100A Terminal Screws	Stainless Steel
Phase, Ground Sleeves	Brass
Sleeve Spring	Stainless Steel

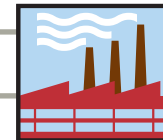
Valox® is a registered trademark of GE.

### STANDARDS & CERTIFICATIONS

#### Pin & Sleeve: Inlets, Connectors, Plugs, Receptacles

UL 1682 & 1686	CSA C22.2 No. 182.1	NOM	CE	IEC 309-1 & 309-2
E164321 & E164322	LR700925	✓	✓	✓





# Industrial Grade North American Watertight Pin & Sleeve Devices



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY

## Performance Specifications – UL 1682 & 1686

### Electrical

Dielectric Voltage	Devices rated ≤ 300V: 2000V for 1 min. Devices rated >300V: 3000V for 1 min.								
Insulation Resistance	500 V for 1 min. Insulation Resistance ≥ 5 megohms								
Ground Path Current	Apply high current for short time (See Table 1) and maintain continuity								
Overload	150% of rated current and 100% of rated voltage for 50 cycles (Power factor 0.75–0.80)								
Current Interrupting	Certified for current interrupting at full-rated current and voltage								
Temperature Rise	Max 30°C rise at full rated current (after overload)								
Resistance to Arcing	Continuation of overload for additional 200 cycles								
Endurance with Load	<table border="1"> <thead> <tr> <th>Device</th> <th># Cycles with Load</th> </tr> </thead> <tbody> <tr> <td>20A</td> <td>5000 Rated Current, Voltage</td> </tr> <tr> <td>30A, 60A</td> <td>1000 Rated Current, Voltage</td> </tr> <tr> <td>100A</td> <td>250 Rated Current, Voltage</td> </tr> </tbody> </table> (Power Factor 0.75 – 0.80)	Device	# Cycles with Load	20A	5000 Rated Current, Voltage	30A, 60A	1000 Rated Current, Voltage	100A	250 Rated Current, Voltage
Device	# Cycles with Load								
20A	5000 Rated Current, Voltage								
30A, 60A	1000 Rated Current, Voltage								
100A	250 Rated Current, Voltage								

### Mechanical

Mold Stress Relief	70°C for 7 hrs								
Humidity	32°C, 93% humidity, 168 hrs								
Cable Secureness	Pull force and apply torque for 1 minute (See Table 2)								
Impact	Drop from 30" 8 times after conditioning to -25°C, for 6 hrs								
Crush	250 lbs for 1 min after -25°C for 6 hrs								
Withdrawal Force	Pull for one minute (See Table 3)								
Strength of Insulating Base and Support	110% of specified tightening torque on terminal screws								
Endurance	<table border="1"> <thead> <tr> <th>Device</th> <th>Total # Cycles (connect &amp; disconnect)</th> </tr> </thead> <tbody> <tr> <td>20A</td> <td>5000</td> </tr> <tr> <td>30A, 60A</td> <td>2000</td> </tr> <tr> <td>100A</td> <td>500</td> </tr> </tbody> </table>	Device	Total # Cycles (connect & disconnect)	20A	5000	30A, 60A	2000	100A	500
Device	Total # Cycles (connect & disconnect)								
20A	5000								
30A, 60A	2000								
100A	500								
Polarization Integrity	Matching devices will not mate so that ground is energized even when polarization feature is removed and 40-lb insertion force applied								

### Environmental

Flammability	V2 or better on 20 and 30 amp devices per UL 94 or CSA 22.2 No 0.6 ; V-0 on 60 & 100 amp devices
Resistance to Corrosion Moisture Resistance per UL 1682	Ferrous parts immersed in 10% ammonium chloride solution Watertight: Device immersed for 24 hrs in 5 cm of 25°C water Splashproof: 1" dia. water stream at 15 PSI from 10 ft. for 5 minutes
UV Resistance	Exposed plastic materials are UV stabilized



460P7W

460C12W

### Short-Time Grounding Test Currents

Device Rating, Amperes	Minimum Size Equipment Grounding Conductor (Copper)		Time, Seconds	Test Current, Amperes
	AWG	(mm <sup>2</sup> )		
20	12	(3.3)	4	470
30	10	(5.3)	4	750
60	10	(5.3)	4	750
100	8	(8.4)	4	1180

Ground-path integrity is of critical importance to safe operation of industrial equipment. Leviton pin and sleeve devices are tested by applying a test current through their ground path that far exceeds the device rating. All devices are properly wired and connected to line current at rated values. Then the ground path is subjected to a dramatic, sudden increase in current for 4 seconds. In all cases, the ground pin, sleeve, and terminals of the devices must sustain the test current, continue to function properly, and show no evidence of damage or deterioration in any electrical or mechanical elements of the ground path. Test current values and test parameters are displayed in the above chart.

### Cord Secureness Test Values

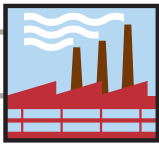
Device Rating Amperes	Force		Torque		Maximum Displacement	
	lb	N	ft-lb	N • M	inches	mm
20	30	133	0.4	0.54	≤3/32	2.38
30	75	333	0.5	0.68	≤3/32	2.38
60	150	667	1.0	1.4	≤3/32	2.38
100	150	667	2.0	2.7	≤3/32	2.38

Heavy cord stress is typical of industrial applications. To assure you of top performance, Leviton pin and sleeve devices are subjected to a punishing series of tests to confirm they can absorb heavy cord pulls. The cord conductors wired to devices are simultaneously twisted and pulled. Values for the applied twisting torque and force of pull are shown above. In all cases, the cord displacement is less than 3/32 inches.

### Minimum Withdrawal Force

Device Rating, Amperes	Minimum Withdrawal Force	
	lb	N
20	5	22
30	6	27
60	15	67
100	20	89

In industrial settings, inadvertent disconnection of power can be troublesome at best, dangerous at worst, and unacceptable in any case. To verify that Leviton pin and sleeve plugs and connectors remain securely connected, they are tested to establish the minimum force required for withdrawal. In establishing these minimum withdrawal forces, the plugs and connectors are properly mated, but not locked with locking rings or other mechanical means. The pins and sleeves provide the only resistance to the force of withdrawal. In all cases, the values in the table above show the minimum force required to separate the plugs and connectors.



## MECHANICAL INTERLOCK FEATURES

### Industrial Grade North American Watertight Mechanical Interlocks IEC 309-1 & 309-2

Type 3R, 4X & 12K  
IP67



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY



560MI7W  
60 Amp



420MI9W  
20 Amp



420MF9W  
20 Amp, Fused

Fused Models Accept  
"Class J" Time-Delay  
Fuses

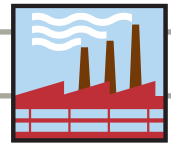
## PowerSwitch® Mechanical Interlocks

- 20 Amp Non-Fused & Fused
- 30 Amp Non-Fused & Fused
- 60 Amp Non-Fused & Fused
- 100 Amp Non-Fused

PowerSwitch Mechanical Interlock devices incorporate a disconnect safety switch and IEC receptacle in a non-metallic watertight enclosure. The interlock mechanism prevents making and breaking of power under load. "The switch cannot be actuated to the *ON* position until an IEC compatible plug is fully inserted, and the plug cannot be removed until the switch is in the *OFF* position."

The complete IEC 309-1 and 309-2 system of plugs, connectors, inlets and mechanical interlock devices can be used for both retrofit and new installations enhancing safety and performance in critical power connections.

# MECHANICAL INTERLOCK FEATURES



## Industrial Grade North American Watertight Mechanical Interlocks

2 YEAR LIMITED WARRANTY

Liquid-tight conduit fitting can be installed for top or bottom feed

- One fitting supplied:
- 20-30 Amp – 3/4"
  - 60 Amp – 1 1/4"
  - 100 Amp – 1 1/2"

Stainless steel screws are captive and will not fall out when cover is opened

Impact, UV and chemical-resistant Valox enclosure rated to UL and IEC watertight standards

- Type 3R, 4X & 12K
- IP67

Fused Models Accept "Class J" Time-Delay Fuses



420MF9W

Red "pistol grip" handle provides visual confirmation of switch's status

Integrated lockout handle meets OSHA safety regulations



Handle with padlock installed

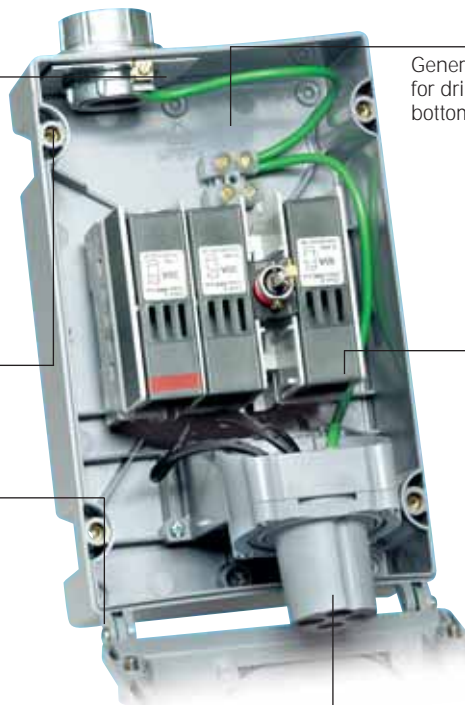
Circuit identification pad for means of identifying specific equipment loads

Color-coded receptacle cover indicates voltage rating of device and seals against water and other contaminants when not in use

Pre-wired grounding plate connects to metal conduit grounding system

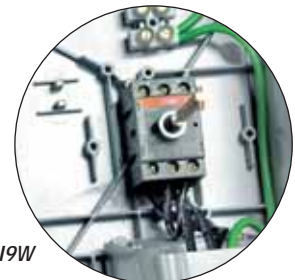
Brass threaded inserts will not strip, provide higher torque, and form tighter seal between back box and cover

Rugged hinge mechanism pivots 180° for easy access during installation and maintenance



420MF9W

Generous wiring space for drip loop or top to bottom wiring



420MI9W

Compact non-fused mechanical interlocks are easy to wire

- Disconnect switch with integrated fuse holder offers proven performance in a compact package
- Fused cartridges accept "Class J" fuses (not included)
  - One factory installed auxiliary contact (normally opened – 10 Amp). Additional auxiliary contact available (normally closed — 10 Amp)
  - Easily accessible neutral and ground terminal blocks

Pre-wired IEC receptacle accepts all manufacturer's IEC 309-2 plugs



### STANDARDS & CERTIFICATIONS

#### Mechanical Interlocks

UL 231 & UL1686	UL 98 Fused	UL 508 Non-Fused	CSA C22.2 No. 182.1 & 14	NOM	CE	IEC 309-1 & 309-2
	E171391		LR700925	✓	✓	✓



20 AMP • 30 AMP

# Industrial Grade North American Watertight Mechanical Interlocks

Non-Fused & Fused



420MF9W



2 YEAR LIMITED WARRANTY



Fused Models Accept "Class J" Time-Delay Fuses

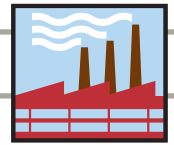
Type 3R, 4X & 12K  
IP67

AMPS	WIRING	VOLTAGE AC	RECEPTACLE CONFIG.	PLUG CONFIG.	NON-FUSED		FUSED		USE PLUG CAT. NO.
					MECHANICAL INTERLOCK	HP RATING	MECHANICAL INTERLOCK	HP RATING	
20	2p3w	240			320MI6W	3	—	—	320P6W
	2p3w	480			320MI7W	5	—	—	320P7W
	3p4w	125/250			420MI12W	*	420MF12W	*	420P12W
	3p4w	3Ø240			420MI9W	5	420MF9W	5	420P9W
	3p4w	3Ø480			420MI7W	10	420MF7W	10	420P7W
	3p4w	3Ø600			420MI5W	15	420MF5W	15	420P5W
	4p5w	3ØY120/208			520MI9W	5	—	—	520P9W
	4p5w	3ØY277/480			520MI7W	10	—	—	520P7W
	4p5w	3ØY347/600			520MI5W	15	—	—	520P5W
30	2p3w	240			330MI6W	5	—	—	330P6W
	2p3w	480			330MI7W	10	—	—	330P7W
	3p4w	125/250			430MI12W	*	430MF12W	*	430P12W
	3p4w	3Ø240			430MI9W	10	430MF9W	7.5	430P9W
	3p4w	3Ø480			430MI7W	20	430MF7W	15	430P7W
	3p4w	3Ø600			430MI5W	25	430MF5W	20	430P5W
	4p5w	3ØY120/208			530MI9W	10	—	—	530P9W
	4p5w	3ØY277/480			530MI7W	20	530MF7W	15	530P7W
	4p5w	3ØY347/600			530MI5W	25	530MF5W	20	530P5W

\*Consult factory for your specific application.

Pin & Sleeve Devices

0  
12



# Industrial Grade North American Watertight Mechanical Interlocks

Non-Fused & Fused



Fused Models Accept  
"Class J" Time-Delay Fuses



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY

Type 3R, 4X & 12K  
IP67

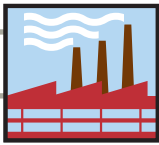
560MI7W

AMPS	WIRING	VOLTAGE AC	RECEPTACLE CONFIG.	PLUG CONFIG.	NON-FUSED		FUSED		USE PLUG CAT. NO.
					MECHANICAL INTERLOCK	HP RATING	MECHANICAL INTERLOCK	HP RATING	
60	2p3w	240			360MI6W	10	360MF6W	*	360P6W
	2p3w	480			360MI7W	20	—	—	360P7W
	3p4w	125/250			460MI12W	*	460MF12W	*	460P12W
	3p4w	3Ø240			460MI9W	20	460MF9W	15	460P9W
	3p4w	3Ø480			460MI7W	40	460MF7W	30	460P7W
	3p4w	3Ø600			460MI5W	40	460MF5W	50	460P5W
	4p5w	3ØY120/208			560MI9W	20	560MF9W	15	560P9W
	4p5w	3ØY277/480			560MI7W	40	—	—	560P7W
	4p5w	3ØY347/600			560MI5W	40	—	—	560P5W

Type 3R, 4X & 12K  
IP67

AMPS	WIRING	VOLTAGE AC	RECEPTACLE CONFIG.	PLUG CONFIG.	NON-FUSED		
					MECHANICAL INTERLOCK	HORSEPOWER RATING	USE PLUG CAT. NO.
100	2p3w	125			3100MI4W	5	3100P4W
	2p3w	240			3100MI6W	15	3100P6W
	2p3w	480			3100MI7W	25	3100P7W
	3p4w	125/250			4100MI12W	*	4100P12W
	3p4w	3Ø240			4100MI9W	30	4100P9W
	3p4w	3Ø480			4100MI7W	50	4100P7W
	3p4w	3Ø600			4100MI5W	50	4100P5W
	4p5w	3ØY120/208			5100MI9W	25	5100P9W
	4p5w	3ØY277/480			5100MI7W	50	5100P7W
	4p5w	3ØY347/600			5100MI5W	50	5100P5W

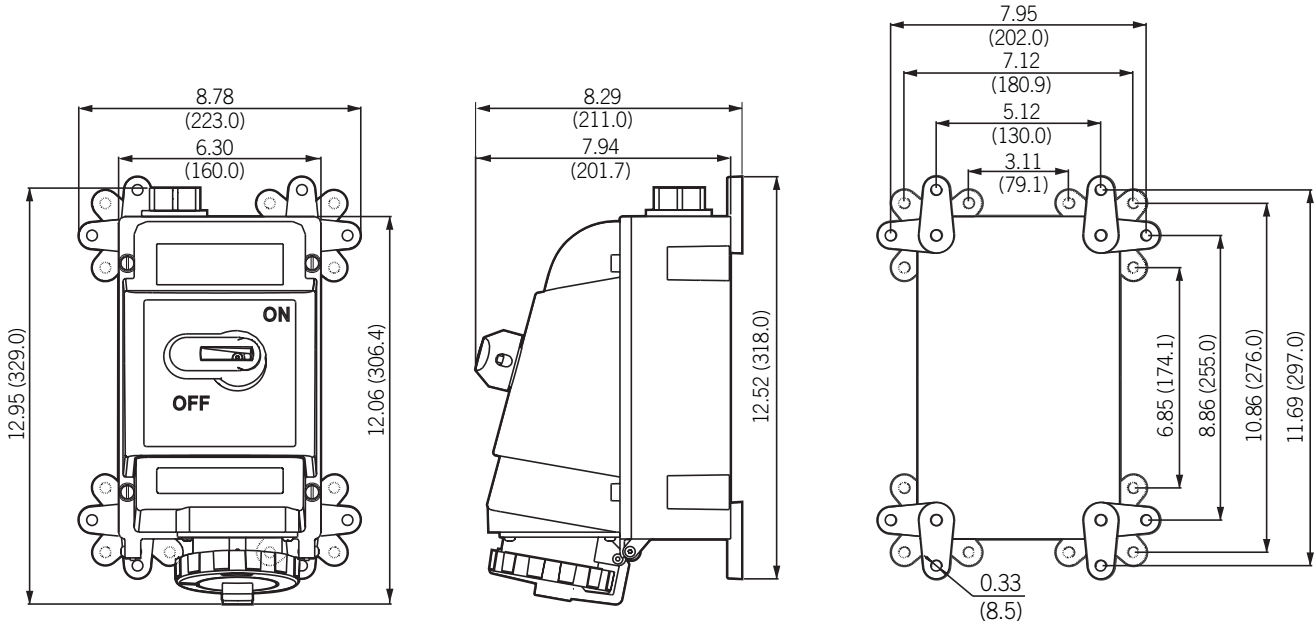
\*Consult factory for your specific application.



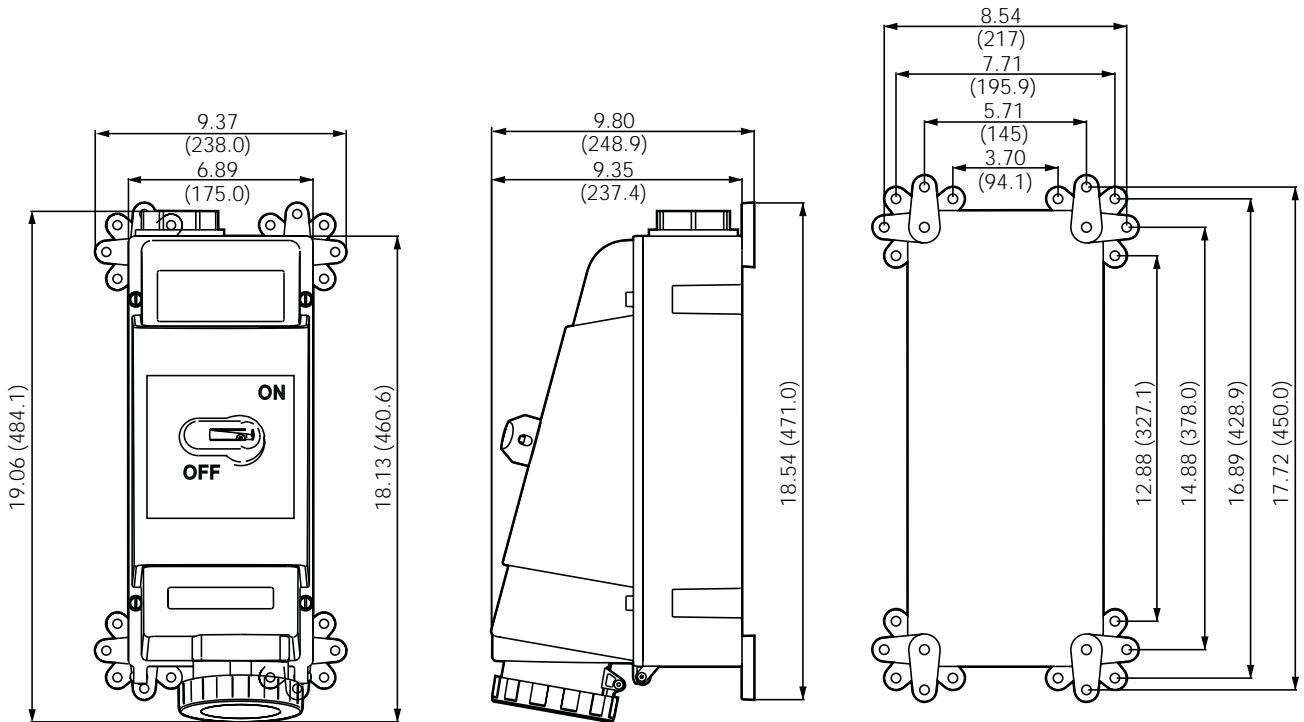
# MECHANICAL INTERLOCK DIMENSIONS

## Industrial Grade North American Watertight Mechanical Interlocks Non-Fused & Fused

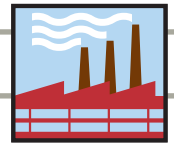
2 YEAR LIMITED  
WARRANTY



20 AMP & 30 AMP FUSED AND NON-FUSED



60 AMP FUSED & NON-FUSED & 100 AMP NON-FUSED



# Industrial Grade North American Watertight Mechanical Interlocks

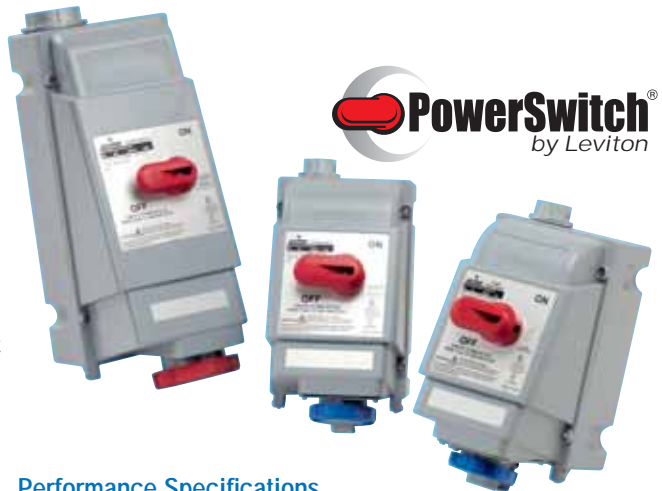
20, 30, 60 and 100 AMP



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY

- Enclosures are rated Type 3R, 4X & 12K, IP67
- Listed to UL 231 and 1686
- Certified to CSA Standard C22.2 number 182.1 & 14
- Classified to IEC Standards 309-1 and 309-2 for both North American-rated voltages and services
- CE marking per low-voltage directives 73/23/EEC, 93/68/EEC
- Switches are listed to UL 508 for Non-Fused and UL98 for Fused models (including 100 Amp Non-Fused)



## Material Specifications

### 20 and 30 Amp Devices

PART	MATERIAL
Housing Cover	Valox 357
Housing Base	Valox 357
Cover with Arm	Valox 357
Locking Ring	Valox 357
Cover Arm Eyelet	Nickel-Plated Brass
Housing Gasket	Solid Chloroprene
Sealing Gasket	Solid Chloroprene
Handle	Valox 357
Actuator Shaft	Valox 357
Locking Mechanism	Zinc-Coated Steel
Contact Carrier	Nylon
Phase and Ground Sleeves	Brass
Ground Contact	Brass
Conduit Grounding Plate	Zinc-Coated Steel
Conduit Hub (1")	Die-Cast Zinc
Switch	Reinforced Nylon
Switch Terminal Contacts	Brass
Internal Screws	Zinc-Coated Steel
Housing Screws	Stainless Steel

### Additional Components for 60 Amp Devices

PART	MATERIAL
Ground Bus	Brass
Neutral Bus	Brass
Actuator Shaft	Zinc-Coated Steel
Contact Carrier	Reinforced Nylon
Conduit Hub (1 1/2")	Die-Cast Zinc
Locking Mechanism	Valox 357

### Additional Components for 100 Amp Devices

PART	MATERIAL
Ground Terminal	Plated Brass/Steel
Ground Terminal Block	Nylon
Neutral Terminal	Plated Brass/Steel
Neutral Terminal Block	Nylon
Terminal Shaft Key	Die-Cast Aluminum
Actuator Shaft	Zinc-Coated Steel
Contact Carrier	Reinforced Nylon
Conduit Hub (2")	Die-Cast Zinc
Switch	Reinforced Nylon
Locking Mechanism	Valox 357

Valox® is a registered trademark of GE.

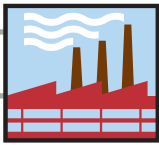
## Performance Specifications

ELECTRICAL			
Ground Path Integrity	Device 20 A 30 A	Current Applied 40 A 60 A	Duration 2 min 2 min
	60 A 100 A	120 A 200 A	4 min 6 min
Current Interrupting	Certified for current interrupting at full-rated current and voltage		
Endurance	6000 operations at rated current and voltage (Power factor 0.75 – 0.80)		
Dielectric	1000 V plus twice rated voltage for 1 minute		

MECHANICAL	
Mold Stress Relief	70°C for 7 hours
Knockout Test	Remains in place with 20 lb push
Crush	100 lb
Impact	1.2 lb steel ball dropped from 5 ft
Cold Impact	Same as above, after conditioning to -35°C
Strength of Insulating Base and Support	110% of specified tightening torque on terminal screws
Pullout	18 lb pull on internal wires

ENVIRONMENTAL	
Flammability	No 0.6; V-0 for watertight enclosure
Rain (3R) per UL 50	Water spray @ 5 psi from all sides for 1 hr
Hosedown (4X) per UL 50	Water spray @ 65 gal/min for 5 min.
Dust (12K) per UL 50	Cement Dust Circulated @ 1000 ft/minute for 5 minutes
Gasket Aging	70°C for 168 hours
UV Resistance	Exposed plastic materials are UV stabilized
Operating Temperature	-40°C to +60°C (-40°F to +140°F)

STANDARDS & CERTIFICATIONS						
Mechanical Interlocks						
UL231 & UL1686	UL 98 Fused	UL 508 Non-Fused	CSA C22.2	NOM	CE	IEC 309-1 & 309-2
✓	✓	✓	✓	✓	✓	✓



16 AMP • 32 AMP • 63 AMP • 125 AMP

## Industrial Grade International-Rated Pin & Sleeve Devices



SP516P6

SP516C6

SP516R6

SP516B6

### International-Rated Devices

Leviton offers international-rated pin and sleeve devices available in 16, 32, 63 and 125 Amps. These IEC 309-1 and 309-2 compliant devices are ideal for use overseas where voltage and amperage requirements differ from North American standards, but where rigorous performance, quality, and reliability criteria need to be met.

16, 32 and 63 Amp devices have an environmental classification of splashproof (IP44), and 125 Amp devices are classified as watertight (IP67).

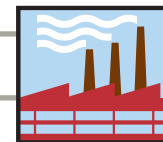
### Ordering Information\*

AMPS	WIRING	VOLTAGE AC	CONNECTOR/RECEPTACLE	PLUG/INLET	PLUG	CONNECTOR	RECEPTACLE	INLET
16	2p3w	100 – 130			SP316P4	SP316C4	SP316R4	SP316B4
	2p3w	250			SP316P6	SP316C6	SP316R6	SP316B6
	3p4w	380 – 415			SP416P6	SP416C6	SP416R6	SP416B6
	4p5w	200/346 – 240/415			SP516P6	SP516C6	SP516R6	SP516B6
32	2p3w	100 – 130			SP332P4	SP332C4	SP332R4	SP332B4
	2p3w	250			SP332P6	SP332C6	SP332R6	SP332B6
	3p4w	380 – 415			SP432P6	SP432C6	SP432R6	SP432B6
	3p4w	30380 – 30440			432P3WL†	432C3WL†	—	—
	4p5w	200/346 – 240/415			SP532P6	SP532C6	SP532R6	SP532B6
63	2p3w	250			SP363P6	SP363C6	SP363R6	SP363B6
	3p4w	380 – 415			SP463P6	SP463C6	SP463R6	SP463B6
	4p5w	200/346 – 240/415			SP563P6	SP563C6	SP563R6	SP563B6
125	2p3w	250			3125P6W	3125C6W	3125R6W	3125B6W
	3p4w	380 – 415			4125P6W	4125C6W	4125R6W	4125B6W
	4p5w	200/346 – 240/415			5125P6W	5125C6W	5125R6W	5125B6W

\*Consult the factory for availability before placing your order. These are specialty order items and are not regularly stocked.

†This device has North American 30 Amp construction and is used in refrigerated container applications.





# Industrial Grade International-Rated Pin & Sleeve Devices

- Classified to IEC Standards 309-1 and 309-2
- CE marking per low-voltage directives 73/23/EEC, 93/68/EEC



## Material Specifications

### Inlets

PART	MATERIAL FOR 16A, 32A INLETS	MATERIAL FOR 63A, 125A INLETS
Housing	Nylon	Valox 357
Mounting Flange	Nylon	_____
Locking Ring (125A)	_____	Valox 357
Contact Carrier	Nylon	Reinforced Nylon
Terminal Screws – Stainless Steel (125A)	Brass	Brass (63A)
Phase, Ground Pins	Brass	Brass

### Connectors

PART	MATERIAL FOR 16A, 32A CONNECTORS	MATERIAL FOR 63A, 125A CONNECTORS
Housing	Nylon	Valox 357
Cover	Nylon	Valox 357
Arm Spring	Stainless Steel	Stainless Steel
Contact Carrier	Nylon	Reinforced Nylon
Internal Cord Clamp	Nylon	Nylon
External Cord Clamp	_____	Valox 357
Grommet	EPDM Rubber	EPDM Rubber (63A), Chloroprene Onion Skin (125A)
Sealing Gasket (125A)	_____	Solid Chloroprene
Cover Eyelet	Nickel Plated Brass	Nickel Plated Brass
External Screws	_____	Acid-Proof Stainless Steel
Terminal Screws	Brass	Brass (63A), Stainless Steel (125A)
Phase, Ground Sleeve	Brass	Brass
Sleeve Spring	Stainless Steel	Stainless Steel
Internal Screws	Zinc-Plated Steel	Zinc-Plated Steel

### Plugs

PART	MATERIAL FOR 16A, 32A PLUGS	MATERIAL FOR 63A, 125A PLUGS
Housing	Nylon	Valox 357
Contact Carrier	Nylon	Reinforced Nylon
Internal Cord Clamp	Nylon	Nylon
External Cord Clamp	_____	Valox 357
Grommet	EPDM Rubber	EPDM Rubber (63A), Chloroprene Rubber (125A)
Sealing Gasket (125A)	_____	Solid Chloroprene
External Screws	_____	Acid-Proof Stainless Steel
Terminal Screws	Brass	Brass (63A), Stainless Steel (125A)
Phase, Ground Pins	Brass	Brass
Sleeve Spring	Stainless Steel	Stainless Steel
Internal Screws	Zinc-Plated Steel	Zinc-Plated Steel

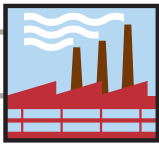
### Receptacles

PART	MATERIAL FOR 16A, 32A PLUGS	MATERIAL FOR 63A, 125A PLUGS
Housing	Nylon	Valox 357
Cover	Nylon	Valox 357
Mounting Flange	Nylon	_____
Arm Spring	_____	Stainless Steel
Contact Carrier	Nylon	Reinforced Nylon
Sealing Gasket (125A)	_____	Solid Chloroprene
Cover Eyelet	Nickel Plated Brass	Nickel Plated Brass
Terminal Screws	Brass	Brass (63A), Stainless Steel (125A)
Phase, Ground Sleeve	Brass	Brass
Sleeve Spring	Stainless Steel	Stainless Steel

Valox® is a registered trademark of GE.

STANDARDS & CERTIFICATIONS	
Pin & Sleeve: Inlets, Connectors, Plugs, Receptacles	
CE ✓	IEC 309-1 & 309-2 ✓

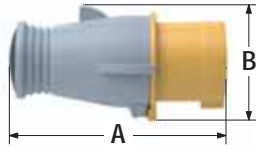
International-Rated Pin & Sleeve Devices



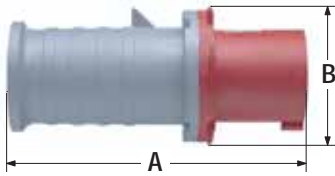
# PLUG & CONNECTOR DIMENSIONS

## Industrial Grade International-Rated Pin & Sleeve Devices

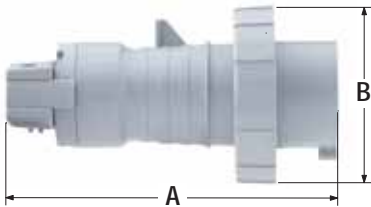
2 YEAR LIMITED  
WARRANTY



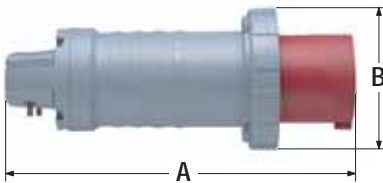
16A, 32A PLUG



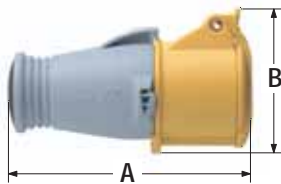
63A PLUG



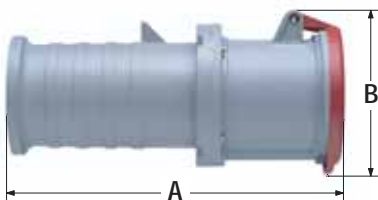
32A PLUG



125A PLUG



16A, 32A CONNECTOR



63A CONNECTOR

### Plug Dimensions

CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE (DIA.)
SP316P	16	inch	4.53	2.48	.350 –.860
		mm	115	63	9 – 22
SP416P	16	inch	5.51	2.83	.350 –.860
		mm	140	72	9 – 22
SP516P	16	inch	5.51	2.99	.437 –1.187
		mm	140	76	11 – 30
SP332P	32	inch	6.14	3.27	.437 –1.187
		mm	156	83	11 – 30
SP432P	32	inch	6.14	3.27	.437 –1.187
		mm	156	83	11 – 30
SP532P	32	inch	6.14	3.46	.437 –1.450
		mm	156	88	11 – 37
SP363P	63	inch	8.46	4.06	.670 –1.625
		mm	215	103	17 – 41
SP463P	63	inch	8.46	4.06	.670 –1.625
		mm	215	103	17 – 41
SP563P	63	inch	8.46	4.06	.670 –1.625
		mm	215	103	17 – 41

### Plug Dimensions

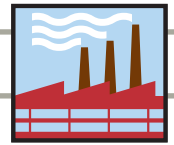
CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE (DIA.)
432P3WL	32	inch	5.79	3.70	.437 –1.450
		mm	147	94	11 – 37
3125P	125	inch	12.32	5.12	.950 – 1.875
		mm	313	130	24 – 48
4125P	125	inch	12.32	5.12	.950 – 1.875
		mm	313	130	24 – 48
5125P	125	inch	12.32	5.12	.950 – 1.875
		mm	313	130	24 – 48

### Connector Dimensions

CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE (DIA.)
SP316C	16	inch	4.88	2.95	.350 –.860
		mm	124	75	9 – 22
SP416C	16	inch	5.91	3.45	.350 –.860
		mm	150	85	9 – 22
SP516C	16	inch	5.98	3.50	.437 –1.187
		mm	152	89	11 – 30
SP332C	32	inch	6.73	3.66	.437 –1.187
		mm	171	93	11 – 30
SP432C	32	inch	6.73	3.66	.437 –1.187
		mm	171	93	11 – 30
SP532C	32	inch	6.73	3.89	.437 –1.450
		mm	171	99	11 – 37
SP363C	63	inch	8.82	4.41	.670 –1.625
		mm	224	112	17 – 41
SP463C	63	inch	8.82	4.41	.670 –1.625
		mm	224	112	17 – 41
SP563C	63	inch	8.82	4.41	.670 –1.625
		mm	224	112	17 – 41

# INLET & RECEPTACLE DIMENSIONS

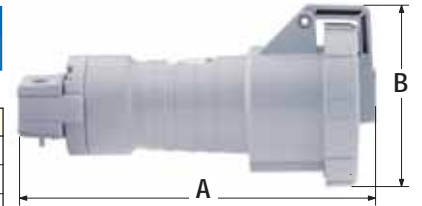
## Industrial Grade International-Rated Pin & Sleeve Devices



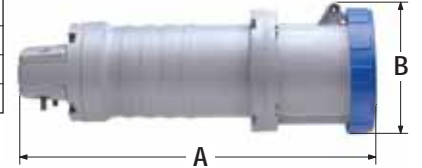
2 YEAR LIMITED  
WARRANTY

### Connector Dimensions

CATALOG NO.	AMPS	UNIT	A	B	CORD GRIP RANGE (DIA.)
432C3WL	32	inch	6.97	4.02	.437 – 1.187
		mm	177	102	11 – 30
3125CW	125	inch	12.80	4.80	.950 – 1.875
		mm	325	122	28 – 48
4125CW	125	inch	12.80	4.80	.950 – 1.875
		mm	325	122	28 – 48
5125CW	125	inch	12.80	4.80	.950 – 1.875
		mm	325	122	28 – 48



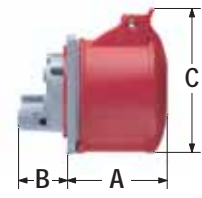
32A CONNECTOR



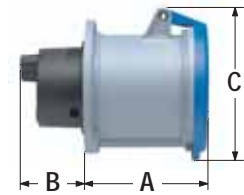
125A CONNECTOR

### Receptacle Dimensions

CATALOG NO.	AMPS	UNIT	A	B	C
SP316R	16	inch	2.20	1.14	2.87
		mm	56	29	73
SP416R	16	inch	2.28	1.18	3.43
		mm	58	30	87
SP516R	16	inch	2.36	1.22	3.50
		mm	60	31	89
SP332R	32	inch	2.76	1.34	3.66
		mm	70	34	93
SP432R	32	inch	2.76	1.34	3.66
		mm	70	34	93
SP532R	32	inch	2.76	1.34	3.90
		mm	71	34	99
SP363R	63	inch	3.43	1.89	4.41
		mm	87	48	112
SP463R	63	inch	3.43	1.89	4.41
		mm	87	48	112
SP563R	63	inch	3.43	1.89	4.41
		mm	87	48	112



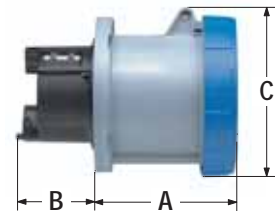
16A, 32A RECEPTACLE



63A RECEPTACLE

### Receptacle Dimensions

CATALOG NO.	AMPS	UNIT	A	B	C
3125R	125	inch	3.94	2.28	4.80
		mm	100	58	122
4125R	125	inch	3.94	2.28	4.80
		mm	100	58	122
5125R	125	inch	3.94	2.28	4.80
		mm	100	58	122



125A RECEPTACLE

### Inlet Dimensions for International-Rated Watertight devices

CATALOG NO.	AMPS	UNIT	A	B
3125B6W	125	inch	3.50	2.21
		mm	89	56
4125B6W	125	inch	3.50	2.21
		mm	89	56
5125B6W	125	inch	3.50	2.21
		mm	89	56



125A INLET

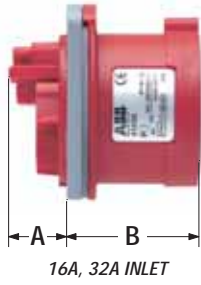
International-Rated Pin & Sleeve Devices



# INLET & RECEPTACLE DIMENSIONS

## Industrial Grade International-Rated Pin & Sleeve Devices

2 YEAR LIMITED  
WARRANTY



16A, 32A INLET



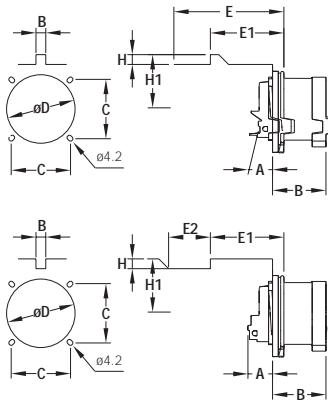
63A INLET

### Inlet Dimensions

CATALOG NO.	AMPS	UNIT	A	B
SP316B	16	inch	.85	1.83
		mm	21.5	46.5
SP416B	16	inch	.83	1.85
		mm	21	47
SP516B	16	inch	.83	1.83
		mm	21	46.5
SP332B	32	inch	.95	2.19
		mm	24.5	55.5
SP432B	32	inch	.95	2.19
		mm	24.5	55.5
SP532B	32	inch	.98	2.19
		mm	25	55.5
SP363B	63	inch	1.97	3.0
		mm	50	78
SP463B	63	inch	1.97	3.0
		mm	50	78
SP563B	63	inch	1.97	3.0
		mm	50	78

### Inlet

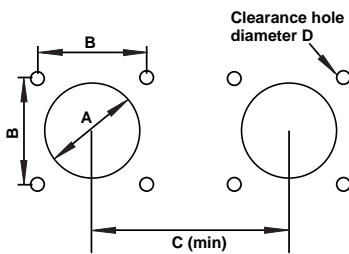
#### Panel Mounting Dimensions



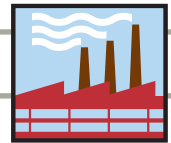
DEVICE SIZE		C	D	E	E1	E2	G	H	H1
SP316B	in	1.73-1.85	1.93	2.95	1.59	0.31	0.35	0.16	1.18
	mm	44-47	49	75	40.5	8	9	4	30
SP416B	in	1.97-2.05	2.32	3.15	1.83	0.31	0.35	0.2	1.34
	mm	50-52	59	80	46.5	8	9	5	34
SP516B	in	1.97-2.05	2.32	3.54	2.07	0.31	0.35	0.27	1.5
	mm	50-52	59	90	52.5	8	9	7	38
SP332B	in	2.36-2.40	2.6	3.54	2.11	0.31	0.35	0.27	1.57
	mm	60-61	66	90	53.5	8	9	7	40
SP432B	in	2.36-2.40	2.6	3.54	2.11	0.31	0.35	0.27	1.57
	mm	60-61	66	90	53.5	8	9	7	40
SP532B	in	2.36-2.40	2.6	4.13	2.34	0.35	0.35	0.31	1.77
	mm	60-61	66	105	59.5	9	9	8	45
SP363B	in	2.40	2.76	4.13	2.32	0.39	0.43	0.35	1.95
	mm	61	70	105	59	10	11	9	49.5
SP463B	in	2.40	2.76	4.13	2.32	0.39	0.43	0.35	1.95
	mm	61	70	105	59	10	11	9	49.5
SP563B	in	2.40	2.76	4.13	2.32	0.39	0.43	0.35	1.95
	mm	61	70	105	59	10	11	9	49.5

### Drilling Plan

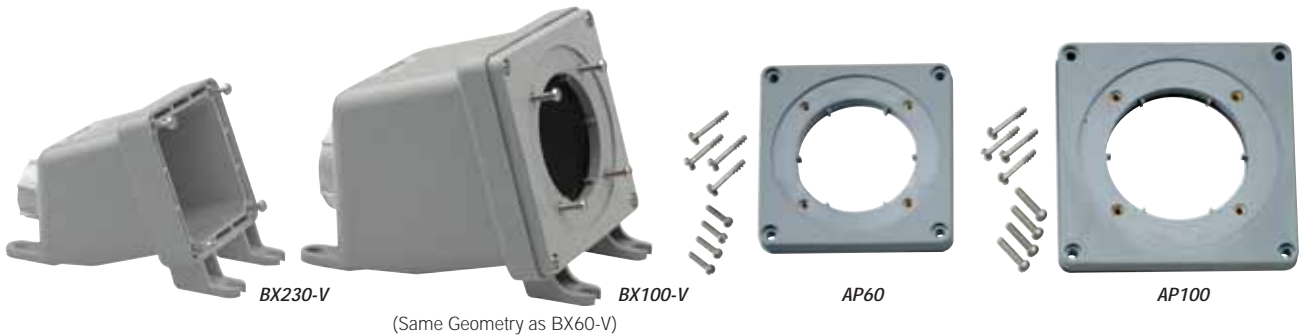
#### Inlets & Receptacles



DEVICE SIZE		A		B		C (min)		D	
		inches	mm	inches	mm	inches	mm	inches	mm
16A; 3-wire:	Receptacle	1.93	49	1.73	44	3.35	85	.185	4.7
	Inlet	1.93	49	1.73	44	3.35	85	.185	4.7
16A; 4-wire:	Receptacle	2.32	59	2.05	52	3.94	100	.185	4.7
	Inlet	2.32	59	2.05	52	3.94	100	.185	4.7
16A; 5-wire:	Receptacle	2.32	59	2.05	52	3.94	100	.185	4.7
	Inlet	2.32	59	2.05	52	3.94	100	.185	4.7
32A; 3-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
32A; 4-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
32A; 5-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
63A	All	2.76	70	2.40	61	6.69	170	.185	4.7
125A	All	3.47	88	2.80	71	7.87	200	.280	7.1



2 YEAR LIMITED WARRANTY



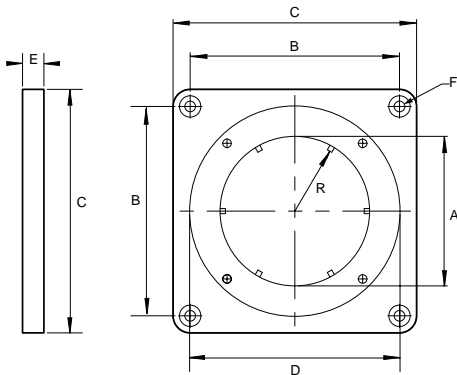
(Same Geometry as BX60-V)

**Valox® Back Boxes for Watertight Inlets & Receptacles**

APPLICATION	CATALOG NO.
20 & 30 Amp No Adapter Plate Required	BX230-V
60 Amp Adapter Plate Included	BX60-V
100 Amp Adapter Plate Included	BX100-V

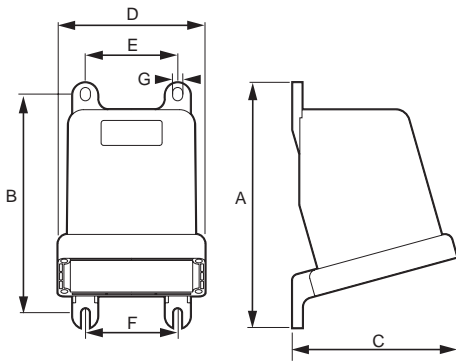
**Replacement Valox® Adapter Plates for Leviton & Hubbell Back Boxes**

APPLICATION	CATALOG NO.
60 Amp Watertight Inlets & Receptacles	AP60
100 Amp Watertight Inlets & Receptacles	AP100



**Dimensions for Valox® Adapter Plates**

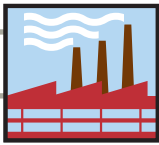
UNIT	A	B	C	D	E	F	R
<b>60 Amp</b>							
inch	2.78	3.86	4.50	3.88	.40	.20	1.28
mm	70	98	114	98.5	10	5	32.5
<b>100 Amp</b>							
inch	3.23	4.88	5.50	4.60	.40	.22	1.50
mm	82	124	140	117	10	5.5	38



**Dimensions for Valox® Back Boxes**

UNIT	A	B	C	D	E	F	G
<b>20 Amp &amp; 30 Amp – 1" Hub</b>							
inch	6.69	5.91	4.53	3.90	2.35	2.35	0.25
mm	170.0	150.0	115.0	99.0	60.0	60.0	6.5
<b>60 Amp – 1 1/2" Hub</b>							
inch	7.68	6.92	5.20	4.65	2.99	2.99	0.31
mm	195.0	176.0	132.0	118.0	76.0	76.0	8.0
<b>100 Amp – 2" Hub</b>							
inch	8.23	7.39	6.30	5.71	3.99	3.33	0.33
mm	209.0	188.0	160.0	145.0	101.0	84.5	8.5

Valox® is a registered trademark of GE.



# PIN & SLEEVE ACCESSORIES

## Industrial Grade Pin & Sleeve Devices

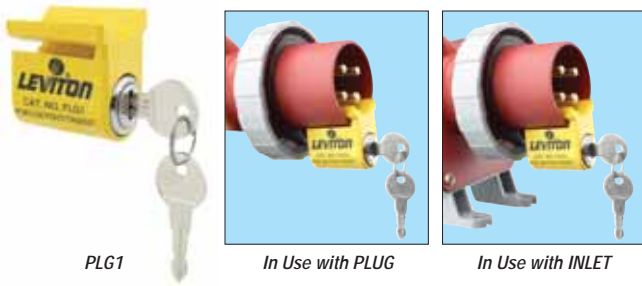


PC420

PC60

PC100

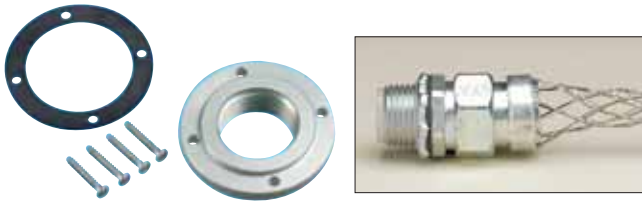
PROTECTIVE CLOSURE CAPS



PLG1

In Use with PLUG

In Use with INLET



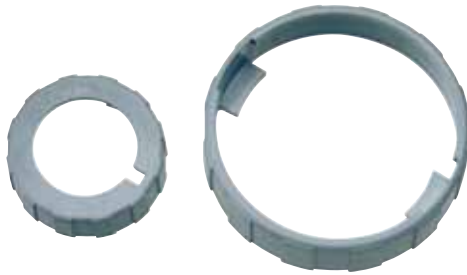
SAD125

L7902 STRAIGHT MALE  
LIQUID-TIGHT GRIP  
For use with flexible metal conduit.



CA520

CA100



RA420

RA100



Mount-Kit

### Protective Closure Caps for Plugs and Inlets

APPLICATION NORTH AMERICAN	APPLICATION INTERNATIONAL	WATERTIGHT CATALOG NO.
20 Amp, 3-Wire	16 Amp, 3-Wire	PC320
20 Amp, 4-Wire	16 Amp, 4-Wire	PC420
20 Amp, 5-Wire	16 Amp, 5-Wire	PC520
30 Amp, 3-, 4-Wire	32 Amp, 3-, 4-Wire	PC3430
30 Amp, 5-Wire	32 Amp, 5-Wire	PC530
All 60 Amp	All 63 Amp	PC60
All 100 Amp	All 125 Amp	PC100

### Lockout / Tagout for Pin and Sleeve Devices

APPLICATION	CATALOG NUMBER WATERTIGHT & SPLASHPROOF
Can be used for any IEC 309-1 and 309-2 pin and sleeve plugs or inlets	PLG1

### Liquid-Tight Adapters

APPLICATION	NPT SIZE	ADAPTER CATALOG NO.	STRAIGHT MALE FITTING CATALOG NO.
20 Amp, 3-, 4-Wire	1/2" NPT	SAA12	L7902
20 Amp, 5 Wire	1/2" NPT	SAB12	L7902
30 Amp, 3-, 4-Wire	3/4" NPT	SAB34	L7903
30 Amp, 5 Wire	3/4" NPT	SAC34	L7903
30 Amp, 5 Wire	1" NPT	SAC100	L7904
60 Amp, All	1 1/4" NPT	SAC125	L7905
100 Amp, All	1 1/4" NPT	SAD125	L7905

### Replacement Watertight Closure Cover Kit for Connectors and Receptacles

APPLICATION	CATALOG NUMBER
20 Amp, 3-Wire	CA320
20 Amp, 4-Wire	CA420
20 Amp, 5-Wire	CA520
30 Amp, 3-, 4-Wire	CA343
30 Amp, 5-Wire	CA530
All 60 Amp	CA060
All 100 Amp	CA100

### Replacement Watertight Locking Ring for Plugs and Inlets

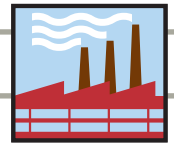
APPLICATION	CATALOG NUMBER
20 Amp, 3-wire	RA320
20 Amp, 4-wire	RA420
20 Amp, 5-wire	RA520
30 Amp, 3-, 4-wire	RA343
30 Amp, 5-wire	RA530
All 60 Amp	RA060
All 100 Amp	RA100

### Replacement Grommets for Plugs and Connectors

APPLICATION	CATALOG NUMBER
20A 3,4-Wire	GROMT-020
20A 5-Wire 30A 3,4-Wire	GROMT-023
30A 5-Wire	GROMT-030
All 60A	GROMT-060
All 100A	GROMT-100

### Replacement Mounting Feet

APPLICATION	CATALOG NUMBER
For all Disconnects and Mechanical Interlocks. Includes 4 feet and 4 mounting screws	MOUNT-KIT



# Industrial Grade Pin & Sleeve Devices

## Making the Right Connection is as Easy as Matching Colors and Telling Time!

Leviton's pin and sleeve devices are easy to use. Matching amperage and voltage requirements is literally as easy as matching colors and telling time.

The amperage rating is related to the size of the device; devices of the same amperage are the same size.

The voltage rating is related to the location of the ground sleeve on the female device and the number of conductors. This location is based on a clock face with the key-way at the 6 o'clock position.

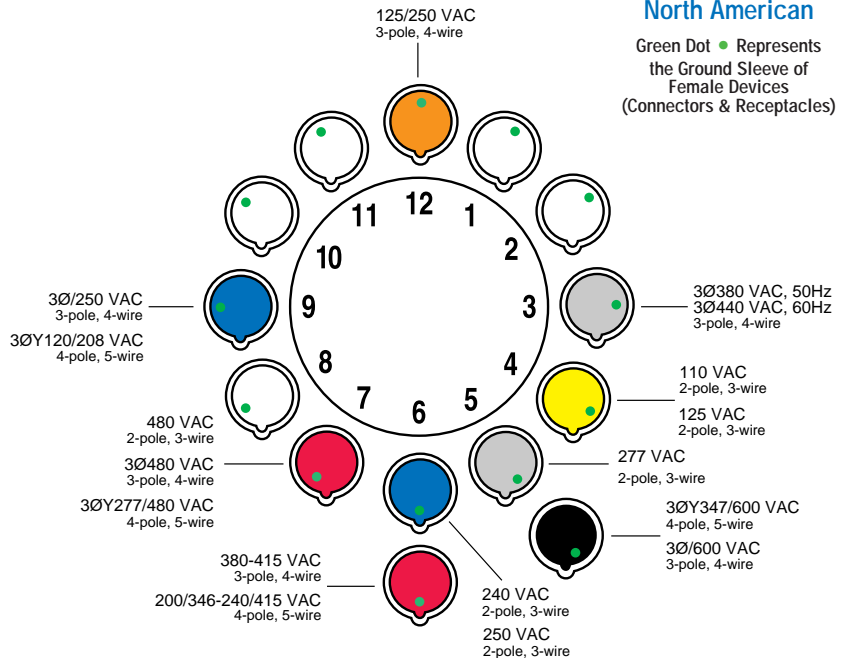
The ground sleeve is positioned at a specific hour location, depending on the device's voltage rating.

The clock position for plugs and inlets is a mirror image of the position for matching connectors and receptacles.

For quick visual identification, voltage ratings are also color-coded and the housings of interconnecting units are always the same color. All 125VAC devices are yellow; 250VAC are blue, etc. Matching up interconnecting devices is as easy as matching colors.

## North American

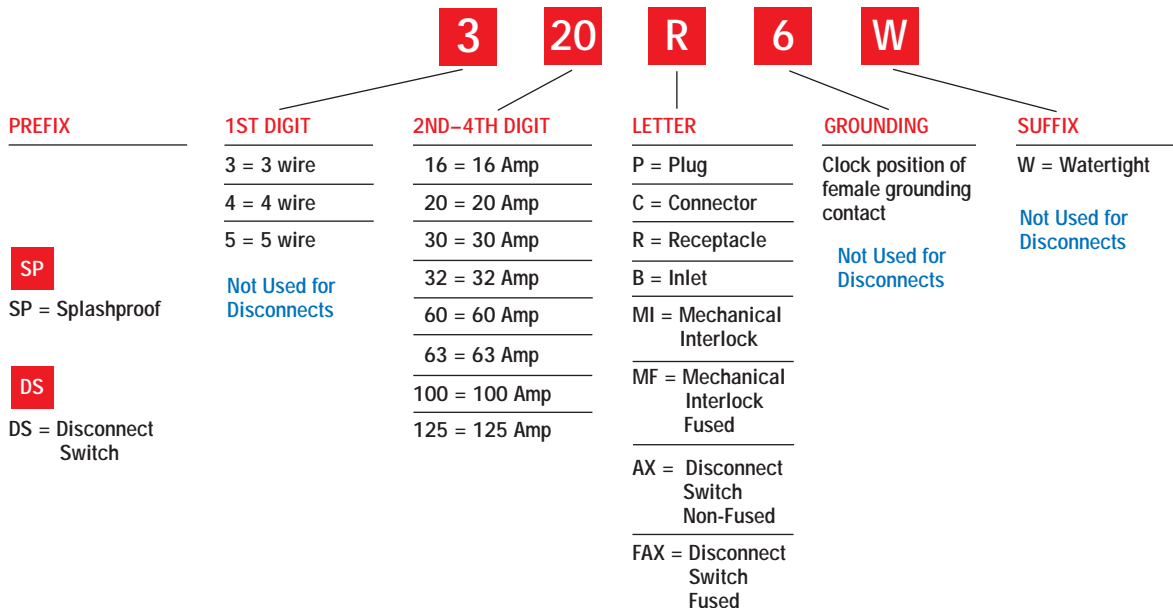
Green Dot • Represents the Ground Sleeve of Female Devices (Connectors & Receptacles)

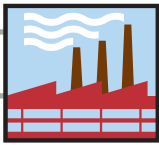


Rated Voltage	Color
110V-130V	Yellow
125V-250V	Orange
200V-250V	Blue
277V, 380V, 440V	Grey
346V-480V	Red
500V and above	Black

## Catalog Numbering System

Leviton's catalog numbering system is easy to use. Each letter or number provides a description of the product. Simply follow the six-part code below, made up of letters and numbers. Each catalog number contains the number of conductors, amperage rating, device type, clock position of the ground sleeve, and environmental rating. For example, the catalog number below refers to a 3-wire, 20 amp receptacle with a grounding sleeve located at the 6 o'clock position and an environmental classification of watertight.





## SAFETY DISCONNECT SWITCH FEATURES

### Industrial Grade Watertight Safety Disconnect Switches

UL 98 & UL 508 Listed, CUL per CSA Specification, C22.2 No. 14 Certified

2 YEAR LIMITED  
WARRANTY

Liquid-tight conduit fitting can be installed for top or bottom feed

One fitting supplied:

- 30 Amp – 3/4"
- 60 Amp – 1 1/4"
- 100 Amp – 1 1/2"

Stainless steel screws are captive and will not fall out when cover is opened

Impact UV and chemical-resistant Valox enclosure rated to UL and IEC watertight standards

- Type 3R, 4X & 12K
- IP67

Fused Models Accept  
"Class J" Time-Delay Fuses

Pre-wired grounding plates (top and bottom of enclosure) connect to metal conduit grounding system

Brass threaded inserts will not strip, provide higher torque, and form tighter seal between back box and cover

Rugged hinge mechanism pivots 180° for easy access during installation and maintenance

Red "pistol grip" handle provides visual confirmation of switch's status

Integrated lockout handle meets OSHA safety regulations

Watertight Safety Disconnect Switches Include —  
30 Amp Fused, 60 & 100 Amp (Fused & Non-Fused)

Meets 2002 NEC® Requirements  
430.102 (A) and 430.102 (B)

Circuit identification pad for means of identifying specific equipment loads

DS60-FAX



Handle with padlock installed

Generous wiring space for top to bottom wiring

Disconnect switch with integrated fuse holder offers proven performance in a compact package

- Fused cartridges accept "Class J" fuses (not included)
- 1 Factory installed Auxiliary Contact (Normally Open – 10 Amp)
- Additional Auxiliary Contact Available (Normally Closed – 10 Amp)
- Easily accessible neutral and ground terminal blocks

DS60-FAX



#### STANDARDS & CERTIFICATIONS

##### Safety Disconnect Switches

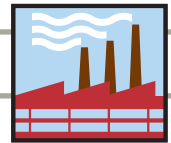
UL 98 Fused (Including 100A Non-Fused - DS)	UL 508 Non-Fused	CSA C22.2 No. 14	NOM	CE	IEC 947-3
E63969		✓	✓	*	✓

\*Not available on DS30-AX



To learn more about Leviton's outstanding offering of devices visit our Website at: [www.leviton.com](http://www.leviton.com)





Industrial Grade Watertight Safety Disconnect Switches



Engineered to UL & IEC Watertight Standards



DS30-AX  
(Non-Fused)



DS60-FAX  
(Fused)



DS100-AX  
(Non-Fused)

2 YEAR LIMITED WARRANTY

Ordering Information

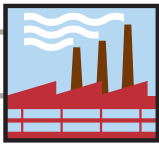
AMPS	MAX VOLTAGE	CATALOG NO.	
		NON-FUSED	FUSED
30	600V AC	DS30-AX	DS30-FAX
60	600V AC	DS60-AX	DS60-FAX
100	600V AC	DS100-AX	

ELECTRICAL				MECHANICAL		ENVIRONMENTAL		
Ground Path Integrity	Device	Current Applied	Duration	Mold Stress Relief	70°C for 7 hours	Flammability	V2 or better per UL 94 or CSA 22.2 No 0.6; V-0 for watertight enclosure	
	30 A	60 A	2 min	Knockout Test	Remains in place with 20 lb push		Rain (3R) per UL 50	Water spray @ 5 psi from all sides for 1 hr
	60 A	120 A	4 min	Crush	100 lb			Hosedown (4X) per UL 50
100 A	200 A	6 min	Impact	1.2 lb steel ball dropped from 5 ft	Dust (12K) per UL 50	Cement Dust Circulated @ 1000 ft/minute for 5 minutes		
Current Interrupting	Certified for current interrupting at full-rated current and voltage			Cold Impact			Same as above, after conditioning to -35°C	Gasket Aging
Endurance	6000 operations at rated current and voltage (Power factor 0.75 – 0.80)			Strength of Insulating Base and Support	110% of specified tightening torque on terminal screws	UV Resistance	Exposed plastic materials are UV stabilized	
Dielectric	1000 V plus twice rated voltage for 1 minute			Pullout	18 lb pull on internal wires		Operating Temperature	-40°C to +60°C (-40°F to +140°F)

VOLTS	MAX. HP RATINGS PER UL508 NON-FUSED SAFETY DISCONNECT SWITCHES			VOLTS	MAX. HP RATINGS PER UL508 FUSED SAFETY DISCONNECT SWITCHES	
	DS30-AX	DS60-AX	DS100-AX		DS30-FAX	DS60-FAX
120V AC	1	2	5	120V AC	2	NR
208V AC	5	20	25	208V AC	7.5	15
240V AC	2.5	10	15	240V AC	3	NR
480V AC	5	20	25	480V AC	15	NR
600V AC	NA	20	20	600V AC	20	NR
3Ø Y 120/208V AC	5	20	25	3Ø Y 120/208V AC	7.5	15
3Ø 240V AC	5	20	30	3Ø 240V AC	7.5	15
3Ø 480V AC	15	40	50	3Ø 480V AC	15	30
3Ø 600V AC	15	40	50	3Ø 600V AC	20	50

NR = Not Rated

Watertight Safety Disconnect Switches



# TECHNICAL INFORMATION

## Industrial Grade Watertight Safety Disconnect Switches UL 98 & UL 508 Listed, CUL per CSA Specification, C22.2 No. 14 Certified



Engineered to IP67  
Watertight Standards

2 YEAR LIMITED  
WARRANTY



Watertight Safety Disconnect Switches

- Heavy Duty Safety Disconnects
- Enclosures are TYPE 3R, 4X & 12K, IP67
- Listed to UL 508 for Non-Fused and UL 98 for Fused
- Certified to CSA Standard C22.2 number 14
- Classified to IEC Standard 947-3
- CE marking per low-voltage directives 73/23/EEC, 93/68/EEC

### Material Specifications

#### 30 Amp Switch, Non-Fused

PART	MATERIAL
Housing Cover	Valox 357
Housing Base	Valox 357
Housing Gasket	Solid Chloroprene
Handle	Valox 357
Screw handle	Stainless Steel
Conduit Grounding Plate	Zinc-Coated Steel
Conduit Hub	Die-Cast Zinc
Switch	Nylon
Switch Terminal Contacts	Brass
Switch Contacts	Cadmium-Free Silver Alloy
Internal Screws	Zinc-Coated Steel
Housing Screws	Stainless Steel
Mounting Feet	Valox 357
Ground Terminal	Plated Brass/Steel
Ground Terminal Block	Nylon
Neutral Terminal	Plated Brass/Steel
Neutral Terminal Block	Nylon

#### 60 & 100 Amp Switch, Non-Fused

PART	MATERIAL
Housing Cover	Valox 357
Housing Base	Valox 357
Housing Gasket	Solid Chloroprene
Handle	Valox 357
Screw handle	Stainless Steel
Conduit Grounding Plate	Zinc-Coated Steel
Conduit Hub	Die-Cast Zinc
Switch	Reinforced Nylon
Switch Terminal Contacts	Brass
Switch Contacts	Cadmium-Free Silver Alloy
Internal Screws	Zinc-Coated Steel
Housing Screws	Stainless Steel
Hinge Screws	Stainless Steel
Mounting Feet	Valox 357
Ground Terminal	Plated Brass/Steel
Ground Terminal Block	Nylon
Neutral Terminal	Plated Brass/Steel
Neutral Terminal Block	Nylon

#### 30 & 60 Amp Switch, Fused

PART	MATERIAL
Housing Cover	Valox 357
Housing Base	Valox 357
Housing Gasket	Solid Chloroprene
Handle	Valox 357
Screw handle	Stainless Steel
Conduit Grounding Plate	Zinc-Coated Steel
Conduit Hub	Die-Cast Zinc
Switch	Reinforced Nylon
Switch Terminal Contacts	Brass
Internal Screws	Zinc-Coated Steel
Housing Screws	Stainless Steel
Hinge Screws	Stainless Steel
Fuse Holder	Reinforced Nylon
Mounting Feet	Valox 357
Ground Terminal	Plated Brass/Steel
Ground Terminal Block	Nylon
Neutral Terminal	Plated Brass/Steel
Neutral Terminal Block	Nylon

Valox® is a registered trademark of GE.

#### STANDARDS & CERTIFICATIONS

##### Safety Disconnect Switches

UL 98 Fused	UL 508 Non-Fused	CSA C22.2 No.14	NOM	CE	IEC 947-3
✓	✓	✓	✓	*	✓

\*Not available on DS30-AX

#### IP Ratings & UL Standards

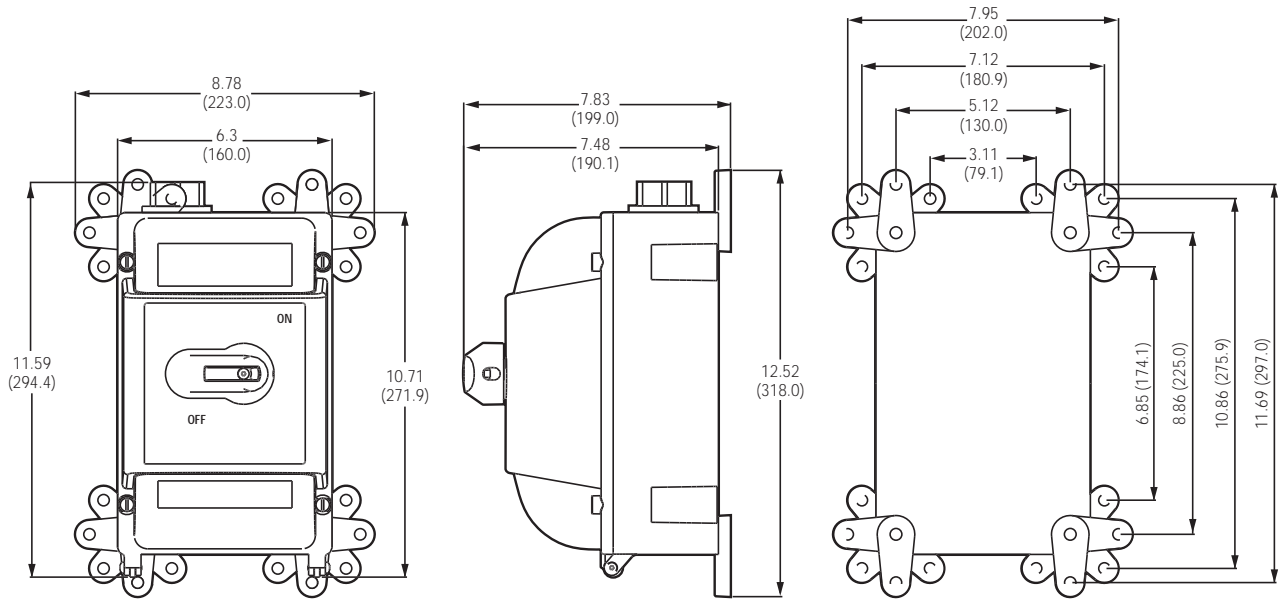
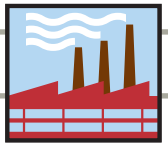
CATALOG NO.	IP RATING	UL STANDARD
DS30-AX	IP67	UL508
DS60-AX	IP67	UL508
DS100-AX	IP67	UL98
DS30-FAX	IP67	UL98
DS60-FAX	IP67	UL98

#### SWITCHING MECHANISM TYPE

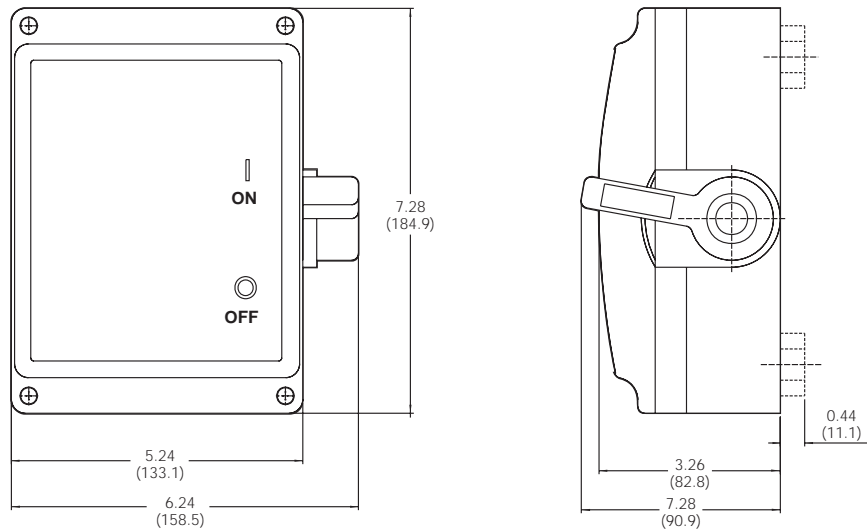
NON-FUSED	SWITCHING	FUSED	SWITCHING
DS30-AX	Rotary	DS30-FAX	Knife
DS60-AX	Rotary	DS60-FAX	Knife
DS100-AX	Knife	—	—

# SAFETY DISCONNECT SWITCH DIMENSIONS

## Industrial Grade Watertight Safety Disconnect Switches



30 AMP FUSED & 60 AMP NON-FUSED



30 AMP NON-FUSED

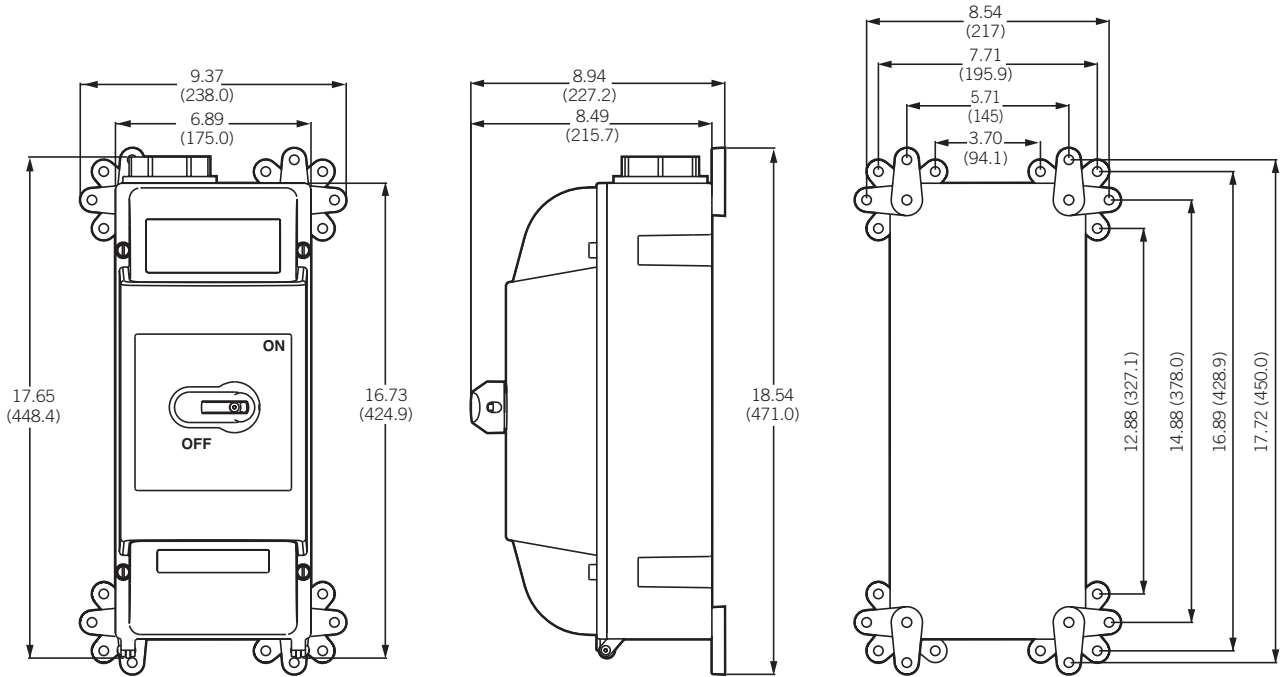
Watertight Safety Disconnect Switches



# SAFETY DISCONNECT SWITCH DIMENSIONS

## Industrial Grade Watertight Safety Disconnect Switches

2 YEAR LIMITED  
WARRANTY



60 AMP FUSED & 100 AMP NON-FUSED

### Auxiliary Contacts for Safety Disconnect Switches

- Leviton Disconnect Switches automatically ship with one factory installed auxiliary contact, normally open.
- A second auxiliary contact may be added. Select from the table below.



DEVICE	CATALOG NO.	DESCRIPTION
For ALL <b>non-fused</b> and <b>fused</b> disconnect switches	AUXNO	Normally open contact, 10 Amp, early break type
	AUXNC-NF	Normally closed contact, 10 Amp, early break type
For ALL <b>fused</b> disconnect switches	AUXNC-F	Normally closed contact, 10 Amp, early break type