

# Water-Blocked/Sunlight Resistant Indoor/Outdoor Tight Buffer Fiber Optic Cables – Riser Rated OFNR



## Product Description

Superior Essex water-blocked (dry technology), sunlight resistant indoor/outdoor tight buffer riser rated cable line offers the system designer the ultimate in premises fiber optic cable utility. These cables can be installed in open spaces, trays, conduits, inner-ducts, trenches, steam tunnels and building riser locations. These cables incorporate the latest in dry-water blocking technology. This system of water blocking eliminates the need to clean off the traditional gel-based water-blocking compounds found in loose-tube cables. In addition, breakout kits and or other special termination equipment associated with loose tube OSP cables are not required. The outer jacket is comprised of a rugged UL listed sunlight resistant polymer that allows for the cable to be exposed to long-term direct sunlight without the concern of material degradation. All fiber types are available, including 50/125  $\mu\text{m}$ , 62.5/125  $\mu\text{m}$  and Single-mode.

## Physical Description

- **Single-unit Design (2 – 12 Fibers):** the design consists of flexible tight buffer material extruded over the fiber to a diameter of 900  $\mu\text{m}$ . Multiple 900  $\mu\text{m}$ , color coded fibers are combined with aramid and water-blocking elements to obtain proper strength and water-blocking characteristics. The core construction is then covered with flame, chemical and sunlight resistance black outer jacket.
- **Multiple-unit Design (18 – 144 fibers):** the design consists of multi-fiber dry water-blocked sub-units. For 18 through 36 fiber designs, six-fiber sub-units are grouped together to form the cable core. For 48 through 144 fiber constructions, 12 fiber sub-units are used. For all multiunit constructions, the core is comprised of the water-blocked sub-units cabled together with additional strength members and dry water-blocking elements. The core construction is then covered with flame, chemical and sunlight resistance black outer jacket.

## Features

- Tested and Qualified to GR-409 and GR-2961
- Exceeds TIA/EIA 568-B.3 optical performance
- Dry-block design meets Telcordia GR-20 water block requirements
- 900  $\mu\text{m}$  tight-buffered fibers
- Black, UL listed Sunlight Resistant and outer jacket
- UL/NEC Listed OFNR/FT4
- All – dielectric

## Benefits

- Assurance that cable investment is maintained over the life of the system
- Future-proof fiber performance for current and future multi-gigabit applications
- Cable integrity maintained even if damage occurs to protective layers
- Direct connectorization without additional hardware
- Confidence that cable will last even with long-term exposure to direct sunlight
- Eliminates the need to purchase separate cables for OSP and indoor/riser applications
- No additional grounding materials need to be purchased
- Saves time in cable preparation

## Applications

- Intra/Inter-building Backbones
- Trench/Conduit/Duct/Tray pathways
- Dry or wet locations

Environmental Specifications	Plenum	Riser
Operation	-40°C to + 75°C	-40°C to + 75°C
Storage/Shipping	-40°C to + 75°C	-40°C to + 75°C
Installation	-20°C to + 65°C	-20°C to + 65°C
Crush	10N/mm	10N/mm
Impact	6 N-m	6 N-m

**Water-Blocked/Sunlight Resistant Indoor/Outdoor Tight Buffer Fiber Optic Cables – Riser Rated OFNR**

Part Numbers and Physical Characteristics								
Part #	Fiber Count	Nom. Diameter inches (mm)	Nom. Weight lbs/kft (kg/km)	Max Tensile Loading		Min Bend Radius		Vertical Rise
				Install lbs (N)	Long Term lbs (N)	Install inches (mm)	Long Term inches (mm)	ft (m)
<b>Reduced Water Peak Single-mode Fiber</b>								
W30023101	2	0.20 (5.0)	14 (21)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	98 (31)
W30043101	4	0.20 (5.0)	15 (22)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	108 (33)
W30063101	6	0.20 (5.0)	16 (24)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	121 (37)
W30083101	8	0.24 (6.0)	20 (30)	150 (660)	45 (200)	3.5 (90)	2.4 (60)	154 (47)
W30123101	12	0.26 (6.5)	24 (36)	150 (660)	45 (200)	3.9 (100)	2.8 (70)	180 (55)
W30183101	18	0.54 (13.7)	94 (140)	300 (1320)	90 (396)	8.7 (220)	5.4 (137)	702 (214)
W30243101	24	0.52 (13.3)	87 (130)	300 (1320)	90 (396)	8.4 (213)	5.2 (133)	856 (261)
W30363101	36	0.63 (15.9)	128 (190)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W30483101	48	0.63 (15.9)	121 (180)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W30723101	72	0.76 (19.3)	185 (275)	600 (2700)	90 (396)	12.2 (309)	7.6 (193)	1096 (334)
W30963101	96	0.89 (22.5)	269 (400)	600 (2700)	90 (396)	14.2 (360)	8.9 (225)	1096 (334)
W31443101	144	0.98 (25.0)	276 (410)	600 (2700)	90 (396)	15.7 (400)	9.8 (250)	1096 (334)
<b>TeraGain® 62.5/125 µm (220/600 Mhz-km) MMF</b>								
W30026G01	2	0.20 (5.0)	14 (21)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	98 (31)
W30046G01	4	0.20 (5.0)	15 (22)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	108 (33)
W30066G01	6	0.20 (5.0)	16 (24)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	121 (37)
W30086G01	8	0.24 (6.0)	20 (30)	150 (660)	45 (200)	3.5 (90)	2.4 (60)	154 (47)
W30126G01	12	0.26 (6.5)	24 (36)	150 (660)	45 (200)	3.9 (100)	2.8 (70)	180 (55)
W30186G01	18	0.54 (13.7)	94 (140)	300 (1320)	90 (396)	8.7 (220)	5.4 (137)	702 (214)
W30246G01	24	0.52 (13.3)	87 (130)	300 (1320)	90 (396)	8.4 (213)	5.2 (133)	856 (261)
W30366G01	36	0.63 (15.9)	128 (190)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W30486G01	48	0.63 (15.9)	121 (180)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W30726G01	72	0.76 (19.3)	185 (275)	600 (2700)	90 (396)	12.2 (309)	7.6 (193)	1096 (334)
W30966G01	96	0.89 (22.5)	269 (400)	600 (2700)	90 (396)	14.2 (360)	8.9 (225)	1096 (334)
W31446G01	144	0.98 (25.0)	276 (410)	600 (2700)	90 (396)	15.7 (400)	9.8 (250)	1096 (334)
W3002AG01	2	0.20 (5.0)	14 (21)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	98 (31)
W3004AG01	4	0.20 (5.0)	15 (22)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	108 (33)
W3006AG01	6	0.20 (5.0)	16 (24)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	121 (37)
W3008AG01	8	0.24 (6.0)	20 (30)	150 (660)	45 (200)	3.5 (90)	2.4 (60)	154 (47)
W3012AG01	12	0.26 (6.5)	24 (36)	150 (660)	45 (200)	3.9 (100)	2.8 (70)	180 (55)
W3018AG01	18	0.54 (13.7)	94 (140)	300 (1320)	90 (396)	8.7 (220)	5.4 (137)	702 (214)
W3024AG01	24	0.52 (13.3)	87 (130)	300 (1320)	90 (396)	8.4 (213)	5.2 (133)	856 (261)
W3036AG01	36	0.63 (15.9)	128 (190)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W3048AG01	48	0.63 (15.9)	121 (180)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W3072AG01	72	0.76 (19.3)	185 (275)	600 (2700)	90 (396)	12.2 (309)	7.6 (193)	1096 (334)
W3096AG01	96	0.89 (22.5)	269 (400)	600 (2700)	90 (396)	14.2 (360)	8.9 (225)	1096 (334)
W3144AG01	144	0.98 (25.0)	276 (410)	600 (2700)	90 (396)	15.7 (400)	9.8 (250)	1096 (334)
W3002BG01	2	0.20 (5.0)	14 (21)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	98 (31)
W3004BG01	4	0.20 (5.0)	15 (22)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	108 (33)
W3006BG01	6	0.20 (5.0)	16 (24)	150 (660)	45 (200)	3.1 (80)	2.0 (50)	121 (37)
W3008BG01	8	0.24 (6.0)	20 (30)	150 (660)	45 (200)	3.5 (90)	2.4 (60)	154 (47)
W3012BG01	12	0.26 (6.5)	24 (36)	150 (660)	45 (200)	3.9 (100)	2.8 (70)	180 (55)
W3018BG01	18	0.54 (13.7)	94 (140)	300 (1320)	90 (396)	8.7 (220)	5.4 (137)	702 (214)
W3024BG01	24	0.52 (13.3)	87 (130)	300 (1320)	90 (396)	8.4 (213)	5.2 (133)	856 (261)
W3036BG01	36	0.63 (15.9)	128 (190)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W3048BG01	48	0.63 (15.9)	121 (180)	300 (1320)	90 (396)	10.0 (254)	6.3 (159)	1096 (334)
W3072BG01	72	0.76 (19.3)	185 (275)	600 (2700)	90 (396)	12.2 (309)	7.6 (193)	1096 (334)
W3096BG01	96	0.89 (22.5)	269 (400)	600 (2700)	90 (396)	14.2 (360)	8.9 (225)	1096 (334)
W3144BG01	144	0.98 (25.0)	276 (410)	600 (2700)	90 (396)	15.7 (400)	9.8 (250)	1096 (334)

\* To select a part number for a fiber type not listed, please see our fiber selection pages starting on page 230

**Standards Compliance**

UL Listed Sunlight Resistant, Listed as OFNR (UL 1666), Designed and tested in accordance with Telcordia GR-409-CORE, GR-20-CORE, GR-2961-CORE, ISO/IEC 11801, ANSI/TIA/EIA 568-B.3, RoHS Compliant.