Opti-Core™ Fiber Optic Indoor/Outdoor Armored Cable with Tight Buffered Fibers

North America and Latin America



SPECIFICATIONS

Opti-Core Indoor/Outdoor Armored Cable with tight buffered fibers shall provide water blocking technology, high density, and easy installation in transitional aerial and duct applications and entrance facilities. The 900µm tight-buffered fibers shall provide easy connectorization. Cables with greater than 24 fibers shall provide easy access and routing of the fibers via a sub-unit design. Opti-Core Fiber Optic Indoor/Outdoor Riser (OFCR) and Plenum (OFCP) Rated Cable with tight buffered fibers shall be tested in accordance with Telcordia GR-20, Issue 2, GR-409 and with relevant EIA/TIA-455 series FOTPs for fiber optic cable. All multimode and singlemode cable shall be available in 6-, 12-, and 24-fiber counts as a non-subunitized design while 48-, 72-, and 96-fiber counts (144 for Riser) shall be available in singlemode as a sub-unitized design.



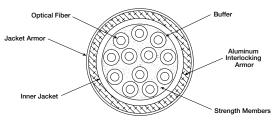
STANDARDS

<u> </u>	
TIA/EIA-568	ANSI/ICEA S-83-596
ANSI/ICEA S-104-696	CSA 22.2
UL-1666	Telcordia GR-409
NFPA 262	Telcordia GR-20
RoHS Compliant	

CONSTRUCTION (ALL-DIELECTRIC)

6 to 24 fibers:

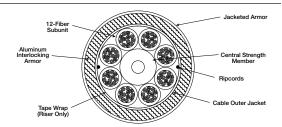
900µm tight buffered fibers, aramid strength members and dry water blocking elements are contained in a flame-retardant inner jacket (black). Aluminum interlocking armor is applied over the inner jacket and covered with a flame rated jacket (black).



(Representative cross-section with 12 fibers)

48 to 144 fibers:

4 to 12 sub-units with 12 fibers per sub-unit. A glass reinforced (GRP) anti-buckling member is centrally located within the cable. Subunits are wrapped in tape (riser only) and held together with an outer jacket (black) that contains ripcords. Aluminum interlocking armor is applied over the outer jacket and covered with a flame rated jacket (black). Each sub-unit has twelve 900µm tight buffered fibers, aramid strength members and dry water blocking elements in a flame-retardant jacket (black).



(Representative cross-section with 96 fibers)

APPLICATIONS

Opti-Core Indoor/Outdoor Armored Cable with tight buffered fibers are an integral part of any end-to-end fiber optic solution, designed to support the data needs of today while meeting the ever-advancing network requirements of tomorrow. This cable provides water blocking technology, high density, and easy installation in transitional aerial and duct applications and entrance facilities. The 900µm tight-buffered fibers offer easy connectorization. The tight-buffered fibers surrounded by aramid yarn strength members combine usability indoors and out. Interlocking aluminum armor can eliminate the need for inner duct or conduit to provide a smaller crush resistant pathway for improved design flexibility and lower installed cost. Cables with greater than 24 fibers feature a sub-unit design that simplifies fiber identification, providing easy access and routing of the fibers. It also increases cable durability with a dielectric central strength member.

Opti-Core™ Fiber Optic Indoor/Outdoor Armored Cable with Tight Buffered Fibers

PHYSICAL AND MECHANICAL PROPERTIES (RISER)

Fiber count:	6	12	24	48	72	96	144			
Cable outside	0.56 in.	0.59 in.	0.65 in.	0.95 in.	1.10 in.	1.29 in.	1.35 in.			
diameter:	(14.2mm)	(14.9mm)	(16.5mm)	(24.1mm)	(27.9mm)	(32.7mm)	(34.3mm)			
Long-term	5.6 in.	5.9 in.	6.5 in.	9.5 in.	11.0 in.	12.9 in.	13.5 in.			
bend radius:	(14.3cm)	(15.0cm)	(16.6cm)	(24.2cm)	(28.0cm)	(32.8cm)	(34.3cm)			
Installation	11.2 in.	11.8 in.	13.0 in.	19.0 in.	22.0 in.	25.8 in.	27.0 in.			
bend radius:	(28.5cm)	(30.0cm)	(33.1cm)	(48.3cm)	(55.9cm)	(65.6cm)	(68.6cm)			
Cable weight:	132 lbs./kft.	146 lbs./kft.	158 lbs./kft.	368 lbs./kft.	472 lbs./kft.	569 lbs./kft.	676 lbs./kft.			
	(196 kg/km)	(217 kg/km)	(235 kg/km)	(547 kg/km)	(703 kg/km)	(847 kg/km)	(1006 kg/km)			
Tensile strength	6- to 12-fibers: 100 lbs.									
(installation):	24-fibers: 300 lbs.									
		48- to 144-fibers (sub-unitized): 600 lbs.								
Tensile strength	6- to 12-fibers: 30 lbs.									
(long-term):	24-fibers: 90 lbs.									
	48- to 144-fibers (sub-unitized): 180 lbs.									
Compressive strength:	440 N/cm									
Impact:	Per FOTP 25									
Torsion:	Per FOTP 85									
Kink:	Per FOTP 104									
Temperature range:	Shipping/Storage: -40°F to 158°F (-40°C to 70°C)									
	Installation: 14°F to 140°F (-10°C to 60°C)									
			Operation: -	40°F to 158°F (-4	0°C to 70°C)					

PHYSICAL AND MECHANICAL PROPERTIES (PLENUM)

Fiber count:	6	12	24	48	72	96				
Cable outside	0.44 in.	0.46 in.	0.54 in.	0.94 in.	1.08 in.	1.19 in.				
diameter:	(11.3mm)	(11.8mm)	(13.7mm)	(23.8mm)	(27.43mm)	(30.2mm)				
Long-term	4.4 in.	4.7 in.	5.4 in.	8.1 in.	9.4 in.	10.9 in.				
bend radius:	(11.2cm)	(11.8cm)	(13.7cm)	(20.6cm)	(23.9cm)	(27.7cm)				
Installation	6.7 in.	6.9 in.	8.1 in.	16.2 in.	18.8 in.	21.8 in.				
bend radius:	(16.9cm)	(17.7cm)	(20.6cm)	(41.2cm)	(47.8cm)	(55.4cm)				
Cable weight:	73 lbs./kft.	84 lbs./kft.	112 lbs./kft.	243 lbs./kft.	383 lbs./kft.	511 lbs./kft.				
	(109 kg/km)	(125 kg/km)	(166 kg/km)	(363 kg/km)	(570 kg/km)	(760 kg/km)				
Tensile strength	6- to 12-fibers: 150 lbs.									
installation):	24-fibers: 300 lbs.									
	48-fibers (sub-unitized): 400 lbs.									
	72- to 96-fibers (sub-unitized): 600 lbs.									
Tensile strength	6- to 12-fibers: 45 lbs.									
long-term):	24-fibers: 90 lbs.									
	48-fibers (sub-unitized): 120 lbs.									
	72- to 96-fibers (sub-unitized): 180 lbs.									
Compressive strength:	440 N/cm									
mpact:	Per FOTP 25									
Torsion:	Per FOTP 85									
Kink:	Per FOTP 104									
Temperature range:	Shipping/Storage: -40°F to 158°F (-40°C to 70°C)									
	Installation: 32°F to 140°F (0°C to 60°C)									
		(Operation: -40°F to	158°F (-40°C to 70°C	C)					

Opti-Core™ Fiber Optic Indoor/Outdoor Armored Cable with Tight Buffered Fibers

OPTICAL PROPERTIES

Max. attenuation:	Singlemode:	0.7dB/km @ 1310nm	Multimode OM1,	3.0dB/km @ 850nm	
		0.7dB/km @ 1550nm	OM3, & OM4:	1.0dB/km @ 1300nm	

FIBER COLOR SEQUENCE

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua

Fibers 13 to 24 repeat this sequence and have a black tracer. Fiber 20 is black with a white tracer.

ORDERING INFORMATION LIST

Part Number	Description
FSLP606	62.5µm OM1 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900µm Buffered Fibers
FSLP612	62.5µm OM1 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900µm Buffered Fibers
FSLR606	62.5µm OM1 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900µm Buffered Fibers
FSLR612	62.5µm OM1 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900µm Buffered Fibers
FOLPX06	50μm OM3 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLPX12	50μm OM3 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLPX24	50μm OM3 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLRX06	50μm OM3 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FOLRX12	50μm OM3 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FOLRX24	50μm OM3 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FOLPZ06	50μm OM4 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLPZ12	50μm OM4 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLPZ24	50μm OM4 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FOLRZ06	50μm OM4 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FOLRZ12	50μm OM4 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FOLRZ24	50μm OM4 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLP906	9μm OS2 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLP912	9μm OS2 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLP924	9μm OS2 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLP948	9μm OS2 48 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLP972	9μm OS2 72 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLP996	9μm OS2 96 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Plenum (OFCP), 900μm Buffered Fibers
FSLR906	9μm OS2 6 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR912	9μm OS2 12 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR924	9μm OS2 24 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR948	9μm OS2 48 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR972	9μm OS2 72 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR996	9μm OS2 96 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900μm Buffered Fibers
FSLR91A	9µm OS2 144 Fiber Indoor-Outdoor Armored Tight Buffer Cable, Riser (OFCR), 900µm Buffered Fibers

WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT US/CANADA Phone: 800.777.3300 PANDUIT EUROPE LTD. London, UK Phone: 44.20.8601.7200 PANDUIT SINGAPORE PTE. LTD. Republic of Singapore Phone: 65.6305.7575 PANDUIT JAPAN Tokyo, Japan Phone: 81.3.6863.6000 PANDUIT LATIN AMERICA Guadalajara, Mexico Phone: 52.33.3777.6000 PANDUIT AUSTRALIA PTY. LTD. Victoria, Australia Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

