

Opti-Core® Gel-Free Indoor/Outdoor All-Dielectric Cable

specifications

Opti-Core® Gel-Free Indoor/Outdoor Cable is an integral part of the Panduit end-to-end fiber optic solution, designed to support today's data needs while meeting tomorrow's ever-advancing network requirements. This riser rated or plenum rated cable provides UV resistance, water-blocking, high density and easy installation in transitional aerial and duct applications, and entrance facilities. Opti-Core® Gel-Free Indoor/Outdoor Cable is tested in accordance with Telcordia GR-20, Issue 2, GR-409 and with relevant EIA/TIA-455 series FOTPs for fiber optic cables. Opti-Core® 10Gig Gel-Free Indoor/Outdoor Cable features the highest quality OM3 and OM4 laser optimized fiber to support 10 Gb/s applications while maintaining compatibility with existing 50µm multimode systems. Standard RoHS multimode and singlemode indoor/outdoor cables are available in 4, 6, and 12-fiber counts in a "central loose tube" design and in 24, 36, 48, 72, 96, and 144-fiber counts in a "stranded loose tube" design.



applications

Allows installation using loose tube cable methods within buildings and outdoor environments for transitional aerial, duct applications and entrance facilities.

construction

Up to 12 fibers: 250µm coated fibers in a central loose tube that is dry water-blocked, water-blocking strength members, outer strength member, ripcord, black outer jacket

>12 fibers: Twelve 250µm coated fibers per dry water-blocked loose tube, central strength member, filler tube(s), outer strength member, ripcord, black outer jacket

Outer sheath: PVC or PVDF

physical properties

Tensile strength (up to 12 fibers): Installation: 300 lbs. (1335 N)
Long Term: 90 lbs. (400 N)

Tensile strength (>12 fibers): Installation: 600 lbs. (2700 N)
Long Term: 200 lbs. (890 N)

Compressive strength (crush): Up to 12 fibers: 57 lbs./inch
>12 Fibers: 125 lbs./inch

Impact: 3 at 4.4 N*m

Torsion: 10 Cycles

Kink: IEC 60794-1-2 Method G7

standards

Meets or exceeds: TIA/EIA- 568
ANSI/ICEA S-83-596
Telcordia GR-409
CSA 22.2 No. 230
Telcordia GR-20
ANSI/ICEA S-104-696
RoHS Compliant
UL-1666
NFPA 262

environmental properties

Temperature range: Shipping and Storage:
-40°F to +185°F (-40°C to +85°C)
Installation:
-4°F to +140°F (-20°C to +60°C)
Operation:
-40°F to +167°F (-40°C to +75°C)

Opti-Core® Gel-Free Indoor/Outdoor All-Dielectric Cable

physical properties–riser

Fiber Count	Cable Diameter Inches	Long Term Bend Radius Inches	Installation Bend Radius Inches	Cable Weight Lbs./kft
4	0.31	3.0	6.0	40
6	0.31	3.0	6.0	40
12	0.31	3.0	6.0	40
24	0.40	4.0	8.0	63
36	0.40	4.0	8.0	63
48	0.40	4.0	8.0	63
72	0.43	4.3	8.6	69
96	0.50	5.1	10.1	96
144	0.64	6.5	12.9	158

physical properties–plenum

Fiber Count	Cable Diameter Inches	Long Term Bend Radius Inches	Installation Bend Radius Inches	Cable Weight Lbs./kft
4	0.28	2.8	5.6	36
6	0.28	2.8	5.6	36
12	0.28	2.8	5.6	36
24	0.37	3.7	7.4	55
36	0.37	3.7	7.4	55
48	0.37	3.7	7.4	55
72	0.44	4.0	8.0	67
96	0.48	4.8	9.6	97
144	0.64	6.4	12.8	138

technical properties

	Singlemode	OM1	OM3	OM4
Cabled Attenuation (maximum)				
850nm	—	3.5 dB/km	3.5 dB/km	3.5 dB/km
1300nm	—	1.5 dB/km	1.5 dB/km	1.5 dB/km
1310nm	0.40 dB/km	—	—	—
1550nm	0.30 dB/km	—	—	—
Overfilled Bandwidth-850nm (MHz-km)	—	≥200	≥1500	≥3500
Overfilled Bandwidth-1300nm (HMz-km)	—	≥500	≥500	≥500
Effective Modal Bandwidth-850nm (MHz-km)	—	≥220	≥2000	≥4700
Compliance	ITU-T G.652 (A,B,C,D), IEC 60793-2-50, ISO 11801 OS2, TIA-492-CAAB, Telcordia GR-20	TIA-492AAAA, IEC 60793-2-10	TIA-492AAAB, TIA-492AAAC, TIA-492AAAD, IEC 60793-2-10	TIA-492AAAB, TIA-492AAAC, TIA-492AAAD, IEC 60793-2-10

Opti-Core® Gel-Free Indoor/Outdoor All-Dielectric Cable

technical properties

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

ordering information

CHARACTER	1	2	3	4	5	6	7	8
EXAMPLE*	F	O	C	R	Z	0	6	Y

*Example: FOCRZ06Y– Fiber Cable, Indoor/Outdoor, Central Tube Riser rated, OM4, 6-fiber

1 and 2 Fiber Product, Region

FS = Fiber Cable, OM1 & OS2, Americas
FO = Fiber Cable, OM3 & OM4, Americas

3- Cable Construction

C = Indoor/Outdoor Central Tube (up to 12 fiber)
N = Indoor/Outdoor Stranded Tube (24 fiber and greater)

4- Flame Rating

R = Riser
P = Plenum

5- Fiber Type

9 = Singlemode (OS2 ITU G.652.D)
6 = Multimode (OM1 with 6, 12, or 24 fibers only)
X = Multimode (OM3)
Z = Multimode (OM4)

6 and 7 Fiber Count

04 = 4-fiber
06 = 6-fiber
12 = 12-fiber
24 = 24-fiber
36 = 36-fiber
48 = 48-fiber
72 = 72-fiber
96 = 96-fiber
1A = 144-fiber

8- RoHs Compliant

Y = Yes

Please contact Panduit customer service for information on additional part number options.

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

PANDUIT®

For more information
Visit us at www.panduit.com
Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300

©2021 Panduit Corp.
ALL RIGHTS RESERVED.
FBCB30--WW-ENG
1/2021