

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

North America
and Latin America

PANDUIT®
SPECIFICATION SHEET

specifications

Opti-Core Gel-Free Indoor/Outdoor Cable shall be 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 shall provide 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 shall be 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 shall feature 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 shall be 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

Opti-Core Gel-Free Indoor/Outdoor Cable 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: 89.92 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
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environmental properties

Temperature range:	Shipping and 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)
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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	Installation Bend Radius Inches	Long Term Bend Radius Inches	Cable Weight Lbs./kft
4	0.28	2.8	5.6	36
6	0.29	2.91	5.6	40.98
12	0.29	2.91	5.6	40.98
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	—	3.5dB/km	3.5dB/km	3.5dB/km
1300nm	—	1.5dB/km	1.5dB/km	1.5dB/km
1310nm	0.40dB/km	—	—	—
1550nm	0.30dB/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

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

Character	1	2	3	4	5	6	7	8
Example	F	O	C	R	Z	0	6	Y

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

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