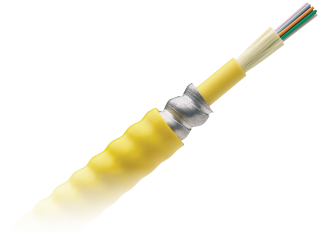


# Panduit® Opti-Core® Fiber Optic Indoor Distribution Interlocking Armored Cable

## technical information

Panduit® Opti-Core® Fiber Optic Indoor Interlocking Armored 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. Opti-Core® Fiber Optic Indoor Interlocking Armored Cable is used within buildings to provide high-density connectivity and ease of installation. Interlocking aluminum armor eliminates the need for inner duct or conduit to provide a smaller crush resistant pathway for improved design flexibility and lower installed cost. Applications include intra-building backbones, building backbones, and horizontal installations for riser (OFCR), plenum (OFCP), and harsh environments. Opti-Core® 10Gig™ Fiber Optic Indoor Interlocking Armored 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. RoHS compliant singlemode and multimode cable is available in fiber counts from 6 to 144 fibers.



## application

Used in intrabuilding backbone, building backbone, and horizontal installations and harsh environments.

## standards

UL-1666 NFPA 262 ROHS Compliant	ANSI/ICEA S-83-596 CSA 22.2 Telcordia GR-409
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## construction

Water blocking	NA
Inner sheath	PVC
Outer sheath	PVC or PVDF

## mechanical properties

Mechanical Properties	Riser	Plenum
Tensile strength(<12 fibers)	Installation: 150 lbs. (667 N) Long term: 450 lbs. (200 N)	Installation: 100 lbs. (440 N) Long term: 30 lbs. (132 N)
Tensile strength (>12 fibers)	Installation: 300 lbs. (1335N) Long term: 90 lbs. (400 N)	Installation: 150 lbs. (667 N) Long term: 40 lbs. (200 N)
Compressive strength (crush)	250lb/inches	
Impact	3 at 8.83 N*m	
Temperature range	Storage: -40°F to +185°F ( -40°C to 85°C ) Operation:- 40°F to +167°F ( -40°C to 75°C) Installation: -4°F to +140°F ( -20°C to +60°C)	-40°F to 185°F ( -40°C to 85°C ) -40°F to 167°F ( -40°C to 75°C ) 32°F to 140°F (-0°C to 60°C)

## physical properties – riser

Fiber Count	Cable OD Inches	Long Term Bend Radius Inches	Installation Bend Radius Inches	Cable Weight Lbs./kft
2	0.52	5.2	10.4	121
4	0.55	5.5	11.0	128
6	0.56	5.6	11.2	132
8	0.58	5.8	11.6	135
12	0.59	5.9	11.8	146
24	0.63	6.3	12.6	161
36	0.97	9.8	19.5	398
48	0.96	9.6	19.2	381
60	1.01	10.1	15.2	345
72	1.12	11.2	22.4	495
96	1.25	12.5	25.0	632
144	1.28	12.8	25.6	703

# Panduit® Opti-Core® Fiber Optic Indoor Distribution Interlocking Armored Cable

## physical properties – plenum

Fiber Count	Cable OD Inches	Installation Bend Radius Inches	Long Term Bend Radius Inches	Cable Weight Lbs./kft
2	0.47	4.5	9.4	84.0
4	0.47	4.5	9.4	87.0
6	0.47	4.7	9.4	87.0
8	0.48	4.8	9.5	91
12	0.51	5.1	10.2	95
24	0.73	7.3	14.6	167
36	0.94	8.0	16.0	380
48	0.94	8.1	16.2	370
60	0.97	14.6	9.7	345
72	1.05	9.4	21.3	502
96	1.18	10.9	21.8	642

## technical properties

	Singlemode	OM1	OM2	OM3	OM4
Cabled Attenuation (maximum)					
850nm		3.0dB/km	3.0dB/km	3.0dB/km	3.0dB/km
1300nm		1.0dB/km	1.0dB/km	1.0dB/km	1.0dB/km
1310nm	.7dB/km				
1550nm	.7dB/km				
Core Diameter	8.2µm *				
Cladding Diameter	125µm ± 0.7µm	62.5µm ± 2.5µm	50µm ± 2.5µm	50µm ± 2.5µm	50µm ± 2.5µm
Coating Diameter	245µm ± 10µm	245µm ± 10µm	245µm ± 5µm	245µm ± 5µm	245µm ± 5µm
Overfilled Bandwidth- 850nm (MHz-km)	—	≥200	≥500	≥1500	≥3500
Overfilled Bandwidth- 1300nm (HMz-km)	—	≥500	≥500	≥500	≥500
Effective Modal Bandwidth- 850nm (MHz-km)	—	≥220	≥950	≥2000	≥4700
Compliance	ITU-T G.652 (A,B,C, D), ITU-T G.657.A1 IEC 60793-2-50, ISO 11801 OS2, TIA-492-CAAB, Telcordia GR-20	TIA-492AAAA IEC 60793-2-10	TIA-492AAAB, TIA-492AAAC, TIA-492AAD, IEC 60793-2-10	TIA-492AAAB, TIA-492AAAC, TIA-492AAD, IEC 60793-2-10	TIA-492AAAB, TIA-492AAAC, TIA-492AAD, IEC 60793-2-10

## fiber color code

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

## ordering information

\*Example: FOPRZ12Y- Fiber, Armored Distribution, Riser Rated, OM4, 12-Fiber

<b>Character</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Example*</b>	<b>F</b>	<b>O</b>	<b>P</b>	<b>R</b>	<b>Z</b>	<b>1</b>	<b>2</b>	<b>Y</b>
<b>1 &amp; 2 – Fiber Product</b>	FS = Fiber – OM1, OM2, OS1 FO = Fiber – OM3, OM4		<b>4 – Flame Rating</b>	R = Riser P = Plenum		<b>6 &amp; 7 – Fiber Count</b>	36 = 36-Fiber 48 = 48-Fiber 60 = 60-Fiber 72 = 72-Fiber 96 = 96-Fiber 1A = 144-Fiber	
<b>3 – Cable Construction</b>	P = Indoor Interlocking Armored		<b>5 – Fiber Type</b>	9 = Singlemode (OS2 ITU G.652.D) 6 = Multimode (OM1) 5 = Multimode (OM2)		X = Multimode (OM3) Z = Multimode (OM4)		<b>8 – RoHS</b>
								Y = Yes

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