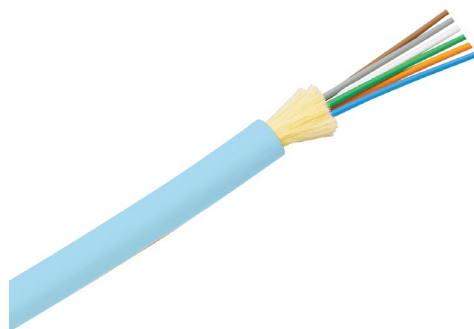


technical information

Opti-Core® Fiber Optic Distribution 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 cable is used within buildings to provide high-density connectivity and ease of installation. Applications include intra building backbones, routing between telecommunications rooms and connectorized cables in riser and plenum environments. Opti-Core® Fiber Optic Distribution Cable features the highest quality singlemode, OM3, OM4 and OM5 laser optimized fiber. Distribution cable in 6, 12, and 24-fiber counts in a "single jacket" designs feature 900µm tight-buffered fibers surrounded by aramid yarn strength members. Larger distribution cable (48 fibers and greater) features a "sub-unit" design that simplifies fiber identification, provides easy access and routing of the fibers and increases cable durability with a dielectric central strength member.



application

For indoor use in intra-building and horizontal installations.

standards

UL-1666
NFPA 262
ROHS Compliant

ANSI/ICEA S-83-596
CSA 22.2
Telcordia GR-409

construction

Inner sheath	PVC	
Outer sheath	PVC	
Mechanical Properties	Riser	Plenum
Tensile strength (< 12 fibers)	Installation: 300 lb. (1335N) Long term: 100 lb. (440 N)	Installation: 100 lb. (440 N) Long term: 30 lb. (132 N)
Tensile strength (>24 fibers)	Installation: 600 lb. (2670 N) Long term: 180 lb. (800 N)	Installation: 300 lb. (1335 N) Long term: 100 lb. (440 N)
Compressive strength (crush)	57lbs/inch for up to 24 fibers and 125lbs/inch for higher fiber counts	
Impact	3 at 4.4 Nm	
Torsion	10 Cycles	
Temperature range	Storage: -40°F to 158°F (-40°C to 70°C) Operation: -4°F to 158°F (-20°C to 70°C) Installation: 4°F to 158°F (-20°C to 70°C)	40°F to 158°F (40°C to 70°C) -4°F to 158°F (-20°C to 70°C) 32°F to 140°F (-0°C to 60°C)

Opti-Core® Fiber Optic Distribution Cable - Americas

physical properties – riser

Fiber Count	Cable Diameter Inches	Installation Bend Radius Inches	Long Term Bend Radius Inches	Cable Weight Lb/kft
6	0.24	4.7	2.3	21
12	0.28	5.5	2.8	30
24	0.32	6.4	3.2	43
48	0.63	12.6	6.3	135
72	0.79	16.0	8.0	204
96	0.92	18.4	9.2	282
144	0.95	19.0	9.5	333

physical properties – plenum

Fiber Count	Cable Diameter Inches	Installation Bend Radius Inches	Long Term Bend Radius Inches	Cable Weight Lb/kft
6	0.18	3.6	1.8	15
12	0.23	4.6	2.3	22
24	0.30	6.0	3.0	42
48	0.66	13.2	6.6	166
72	0.79	15.7	7.9	257
96	0.91	18.2	9.1	356
144	0.89	13.4	9.0	318

optical properties: maximum attenuation (cabled)

Singlemode (ITU-T G.652.D)	0.70 dB/km @ 1310 nm, 0.70 dB/km @ 1550 nm
OM3 Multimode	3.0 dB/km @ 850 nm, 1.5 dB/km @ 1300 nm
OM4 Multimode	3.0 dB/km @ 850 nm, 1.5 dB/km @ 1300 nm
OM5 Multimode	3.0 dB/km @ 850 nm, 1.5 dB/km @ 1300 nm

Opti-Core® Fiber Optic Distribution Cable - Americas

fiber color code

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

Sheath color is yellow for singlemode, aqua for OM3 & OM4, lime green for OM5.

ordering information

*Example: FODPW12Y - Fiber Distribution Cable, Plenum Rated, OM5, 12 Fibers

Character	1	2	3	4	5	6	7	8
Example*	F	O	D	P	W	1	2	Y

1 & 2 – Fiber Product

FS = Fiber Cable, Americas,
Singlemode

FO = Fiber Cable, Americas,
Multimode

3 – Cable Construction

D = Distribution

4 – Flame Rating

R = Riser

P = Plenum

5 – Fiber Type

9 = Singlemode (ITU G.652.D)

X = Multimode OM3 (up to 48 fibers)

Z = Multimode OM4 (up to 48 fibers)

W = Multimode OM5 (up to 24 fibers,
plenum only)

6 & 7 – Fiber Count

06 = 6-fiber

12 = 12-fiber

24 = 24-fiber

48 = 48-fiber

72 = 72-fiber

96 = 96-fiber

1A = 144-fiber

8 – RoHS

Y = Yes