Opti-Core® IndustrialNet™ PCF Cable (Breakout)

PANDUIT®

technical information

Opti-Core® IndustrialNet™ Polymer Coated Fiber (PCF) Cables are designed with technicians in mind and are ideal for installation in harsh, industrial environments. Large diameter, high strength, highly durable graded-index PCF cables are suitable for applications that demand high mechanical integrity and reliability, and are easy to prepare and terminate using hand-held tools. Training takes minutes so it's suitable for electricians lacking experience with fiber optic networks. All Opti-Core® IndustrialNet™ Polymer Coated Fiber Cables are factory tested to deliver verified optical performance and reliability for improved network integrity. Provides 1 Gb/s network performance up to 275 meters using OM1 fiber, and up to 550 meters using OM2 fiber per IEEE 802.3z 1 GbE standard. This riser rated cable is also compliant with Low Smoke Zero Halogen requirements, and provides easy installation in utility control rooms, factory automation environments and manufacturing floors. Opti-Core® IndustrialNet™ Polymer Coated Fiber Cables are tested in accordance with Telcordia GR-409-CORE and/or ICEA S-83-596-2010. Available in two and four-fiber breakout cables, or two-fiber interconnect cables, (duplex zipcords). UV-resistance and water-blocking capability makes this cable suitable for use outdoors as well as indoors.

application

Allows installers to install high speed fiber optic permanent links quickly and with minimal training in harsh, industrial environments. Can be used external to the control panel or zone enclosure, and does not require closed pathway or conduit system.

construction

Cable type:	Indoor/outdoor breakout water blocked per: ANSI/TIA-455-828, FOTP-82
Cable jacket ratings:	OFNR and LSZH
Fiber types:	Multimode: OM1 62.5/200/230µm OM2 50/200/230µm
Fiber count:	2 or 4
Jacket color:	Black
Sub-unit jacket colors (in order):	Blue Orange Green Brown

optical properties

Fiber attenuation:	Multimode: OM1 <= 5.0 dB/km @ 850nm OM1 <= 3.0 dB/km @ 1300nm OM2 <= 5.0 dB/km @ 850nm OM2 <= 3.0 dB/km @ 1300nm

physical properties

Cable outside diameter (OD):	8.0mm
Bend radius, minimum (installation):	120 mm
Cable tensile strength (installation):	2358N
Cable weight – 2 fiber cable:	65.0 kg/km
Cable weight – 4 fiber cable:	67.0 kg/km
Sub-unit jacket:	2.2mm
Bend radius, minimum (installed):	80mm
Cable tensile strength (installed):	1179N

environmental properties

Operating temperature:	-20°C to 105°C
Storage and shipping temperature:	-20°C to 80°C
ROHS 2002/95/EC	Compliant

standards

Telcordia GR-409-CORE ICEAS-83-596-2010:	Generic requirements for indoor fiber optic cable
IEC-60332-3:	Test on electric and optical fibre cables under fire conditions – part 3
IEC 60754-1, 2:	Test on gases evolved during combustion of materials from cables – part 1
IEC 61034-2	Measurement of smoke density of cables burning under defined conditions – part 2
ROHS 2002/95/EC	Directive of the European parliament and council on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment

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part number

Example: Fiber, Opti-Core® IndustrialNet™ PCF (polymer coated fiber), indoor/outdoor breakout cable, OFNR/LSZH rated, 50/200/230, 04 fibers

Character	1	2	3	4	5	6	7	8	9	10	11	12
Example	F	I	2	D	2	0	4	–	0	5	0	M

1 – Fiber Product
F = Fiber

2 – Product Type
I = Opti-Core® IndustrialNet™ PCF Cable

3 – Cable Construction
I = Interconnect cable (duplex zipcord)
2 = Indoor/outdoor breakout cable

4 – Flame/Smoke Rating
D = OFNR (Riser)/Low Smoke Zero Halogen (LSZH)

5 – Fiber Size
1 = 62.5/200/230 graded-index polymer coated fiber
2 = 50/200/230 graded-index polymer coated fiber

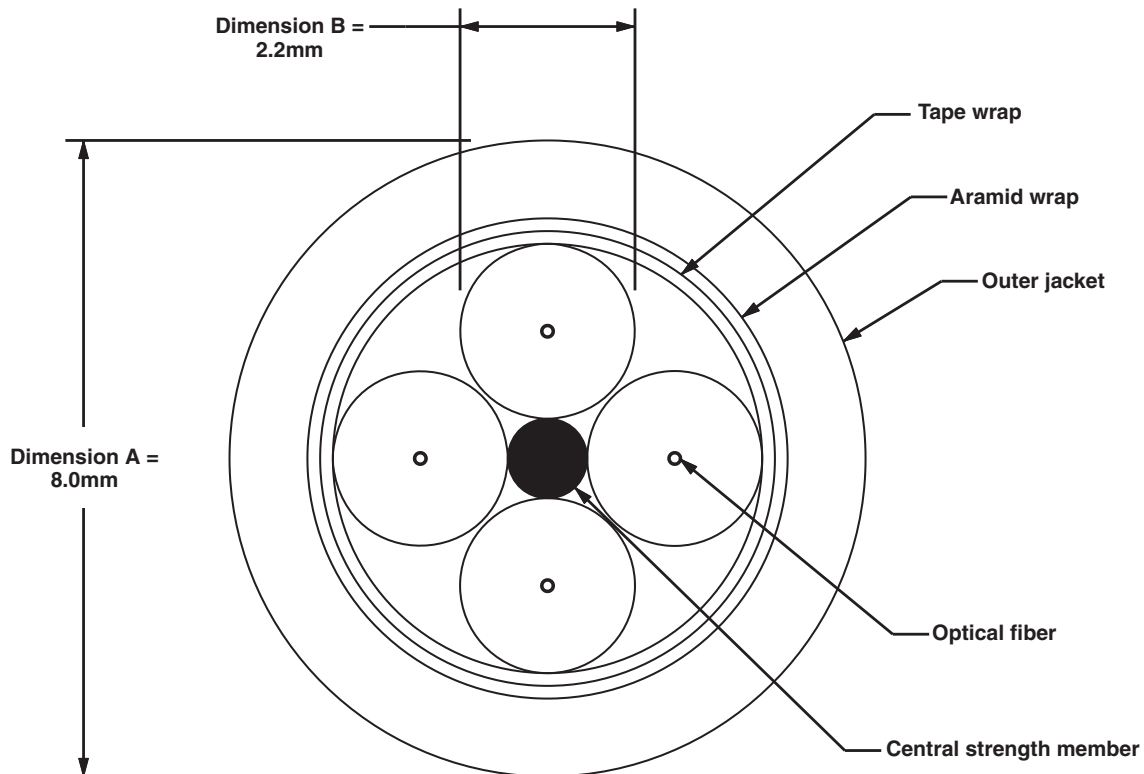**6 and 7 – Fiber Count**
02 = 2 fibers
04 = 4 fibers

8 – Length
Blank = Length made-to-order
Dash (–) = Fixed Length Reel

9, 10, 11 and 12 – Reel Length
050M – 50 meter reel

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Dimension B = 2.2mm

Dimension A = 8.0mm

Tape wrap

Aramid wrap

Outer jacket

Optical fiber

Central strength member

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

For more information

Visit us at www.panduit.com

Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300

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