Opti-Core[™] Fiber Optic Indoor-Outdoor Cable with Tight Buffered Fibers — Asia Pacific



specifications

This family of cables shall contain 4 to 72 optical fibers. The fibers shall be tight-buffered for easy termination with field-installable connectors. The cables shall be flame rated for use indoors, complying with UL standards for riser and IEC standards for Low Smoke/Zero Halogen (LSZH). The cables shall have UV resistant and water blocking properties for use in outdoor environments. The cables shall have options for singlemode (OS2) or multimode fibers (OM3 and OM4) to support 10 Gb/s network transmission and beyond.



standards and flame rating

Telcordia GR-409-CORE (Indoor Fiber Optic Cable)
ISO 11801 (Generic Cabling for Customer Premises)
UL 1666 (Riser)
IEC 60332 (Flame Retardant)
IEC 61034 and IEC 60754-2 (Low Smoke and Zero Halogen)

cable construction (all-dielectric)

4 to 24 fibers

RoHS Compliant

900µm tight buffered fibers are protected by water blocking strength members in a flame-retardant outer jacket.



(representative cross-section with 24 fibers)

48 and 72 fibers

4 or 6 sub-units with 12 fibers per sub-unit. Cable has a dielectric central strength member and 2 ripcords. Subunits are surrounded by tape (Riser only) and outer jacket. Each sub-unit contains twelve 900µm tight buffered fibers, water blocking strength members and a flame-retardant sheath.



(representative cross-section with 48 fibers)

Outer jacket

Outer sheath is Black. Material is flame-retardant, UV stabilized and resistant to water and moisture.

key features and benefits

900um tight buffered fibers	Easy to handle, strip and connectorize in the field						
Flame retardant riser or LSZH jacket	Provides life safety benefits; meets industry standards for smoke and flame and is well suited for indoor installations						
Water swellable elements	Prevent the migration of water throughout the cable (longitudinally water blocked)						
Sub-unit design with central strength member	Simplifies fiber identification, provides easy access and routing of fibers, increases cable durability						
Highest quality OM3 and OM4 laser optimized fiber	Supports 10 Gb/s applications while maintaining compatibility with existing 50μm multimode systems						

applications

- · Can be used indoors and outdoors; a good choice for entrance facilities
- Typical applications include LAN backbones, backbones in data centers, and routing between telecommunications rooms
- This cable is suited for installation in ducts and on trays

Opti-Core[™] Fiber Optic Indoor-Outdoor Cable with Tight Buffered Fibers – Asia Pacific

physical and mechanical properties

Fiber Count	4	6	8	12	24	48	72		
Nominal Outside Diameter (mm)	5.3	5.3	5.8	6.6	8.8	18.3	21.9		
Bend Radius	Installation/Short Term/With Load: 20X Cable Outside Diameter								
	Operation/Long Term/No Load: 10X Cable Outside Diameter								
Weight (kg/km)	25	32	41	53	60	253	381		
Tensile Strength (Installation/Short Term) (N)	660	660	660	660	1320	1320	1320		
Tensile Strength (Installation/Long Term) (N)	200	200	200	200	400	400	400		
Compressive Strength (Crush) (N/100mm)	1000	1000	1000	1000	1000	1000	1000		
Temperature Range	Storage: -40°C to +70°C								
	Installation: 0°C to +50°C								
Operation: -20°C to +70°C									
Water penetration	3 meter sample, no leakage after 24 hours								

optical properties: maximum attenuation

OS2 Singlemode (ITU-T G.652.D)	0.7 dB/km @1310 nm, 0.7 dB/km @1550 nm					
OM3 & OM4 Multimode	3.5 dB/km @850 nm, 1.5 dB/km @1300 nm					

fiber color sequence

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

Fibers 13 through 24 repeat this color sequence and have a Black dash. Fiber 20 is light green with a black tracer.

ordering information

*Example: FLKLZ12 = OM4 12 Fiber Indoor-Outdoor Cable, LSZH, 900μm Tight Buffered Fibers

 Character
 1
 2
 3
 4
 5
 6
 7

 Example*
 F
 L
 K
 L
 Z
 1
 2

1 and 2 – Fiber Product, Region FL = Fiber Cable, Asia Pacific

3 – Cable Construction

K = Indoor-Outdoor Tight Buffered All-Dielectric

4 - Flame Rating

L = LSZH R = Riser 5 - Fiber Type

9 = Singlemode OS2 9/125μm X = Multimode OM3 50/125μm

 $Z = Multimode OM4 50/125\mu m$

6 and 7 - Fiber Count

04 = 4-fiber 06 = 6-fiber

08 = 8-fiber

12 = 12-fiber

24 = 24-fiber

48 = 48-fiber (OS2 only) 72 = 72-fiber (OS2 only)

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

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. Replaces FBDS09 FBDS38--WW-ENG

11/2021

