## Opti-Core<sup>™</sup> Fiber Optic Indoor/Outdoor All Dielectric Cable with Tight Buffered Fibers - Asia Pacific



#### technical information

Panduit<sup>™</sup> Opti-Core<sup>™</sup> Indoor/Outdoor All-Dielectric Cable with tight buffered fibers 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 provides high density, and easy installation in transitional aerial and duct applications and entrance facilities. Opti-Core<sup>™</sup> Fiber Optic Indoor/Outdoor All-dielectric Cables with 900µm tight buffered fibers provide for easy field connectorization, and are surrounded by water-blocking 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, water swellable elements, and increases cable durability with a dielectric central strength member. Opti-Core<sup>™</sup> Fiber Optic Indoor/Outdoor Riser (OFNR) Rated All-Dielectric Cable with tight buffered fibers is tested in accordance with Telcordia GR-20, Issue 2, GR-409 and with relevant EIA/TIA-455 series FOTPs for fiber optic cable. Opti-Core<sup>™</sup> Fiber Optic Indoor/Outdoor Low Smoke Zero Halogen (LSZH) Rated All-Dielectric Cable with tight buffered fibers meets the IEC 60794-1 standard. All standard RoHS compliant multimode and singlemode cable is available in 2, 4, 6, 8, 12, and 24-fiber counts as a "non-subunitized" design and in 48 and 72-fiber counts as a "sub-unitized" design.



#### application

Can be used for indoor and outdoor applications including LAN backbones, backbones in data centers, and routing between telecommunications rooms. The cable is suited for installation in ducts and on trays. Cable features a UV stabilized water and moisture resistant outer jacket and water-blocking aramid yarns. Cables with 48 or more fibers have water swellable elements.

#### standards

Telcordia GR-409-CORE IEC 60332-1 IEC60332-3-24

#### construction

Central strength member (48 and 72 fiber cables)	Fiberglass Reinforced Plastic (FRP) with up-coating
Tight buffer	4 to 72-fibers: 0.9 +/- 0.05mm
Water blocking	4 to 24-fibers: Water-blocking aramid yarn 48 to 72-fibers: Water-blocking aramid yarn and water swellable elements
Wrapping	48 to 72-fibers: Water blocking tape
Inner sheath	4 to 24-fibers – Non-subunitized: No inner sheath 48 to 72-fibers – Sub-unit sheath: LSZH or PVC
Outer sheath	LSZH or PVC Riser. 1 ripcord under the sheath

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#### mechanical properties

Tensile strength (installation)	E1	4 to 12-fibers: 660N 24 to 72-fibers: 1320N		
Tensile strength (long-term)	E1	4 to 12-fibers: 198N 24 to 72-fibers: 396N		
Compressive strength (crush)	E3	1000N/100mm		
Impact	E4	2.9 Nm, 3 impacts, r = 300mm		
Torsion	E7	+/- 180°, 10 cycles		
Kink	E10	R = 10 x D (Cable diameter)		
Temperature range	F1	Shipping/Storage: -40 °C to +70 °CInstallation:-10 °C to +60 °COperation:-20 °C to +70 °C		
Water penetration	F5B	No water leakage after 24 hours		

### physical properties

Fiber Count	Cable O.D. (mm)	Installation Bend Radius (mm)	Long-Term Bend Radius (mm)	Cable Weight (kg/km)
4	5.3 ± 0.2	106	53	24(LSZH)/23 (Riser)
6	5.3 ± 0.2	106	53	26(LSZH)/25 (Riser)
8	5.8 ± 0.2	116	58	30(LSZH)/29 (Riser)
12	6.6 ± 0.2	132	66	37(LSZH)/36 (Riser)
24	8.8 ± 0.2	176	88	60(LSZH)/60 (Riser)
48	18.3 ± 1.5	366	183	255(LSZH)/245 (Riser)
72	21.9 ± 1.5	438	219	382(LSZH)/370 (Riser)

### fiber color code 4 to 24 fibers

Fiber color code	1 Blue	7 Red	13 Blue with Black tracer	19 Red with Black tracer
	2 Orange	8 Black	14 Orange with Black tracer	20 Light green with black tracer
	3 Green	9 Yellow	15 Green with Black tracer 21 Yellow with Black tracer	
	4 Brown	10 Violet	16 Brown with Black tracer	22 Violet with Black tracer
	5 Grey	11 Pink	17 Grey with Black tracer	23 Pink with Black tracer
	6 White	12 Aqua	18 White with Black tracer	24 Aqua with Black tracer

### fiber color code 48 to 72 fibers

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

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#### ordering information

Example: FLKR512- Fiber, Indoor/Outdoor Tight Buffered All-Dielectric, Riser-Rated, OM2, 12-Fiber



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