Opti-Core™ Fibre Optic Indoor/Outdoor All-Dielectric Cable with Tight Buffered Fibres - EMEA Class B2ca-s1a-d1-a1 and Cca-s1a-d1-a1 rated
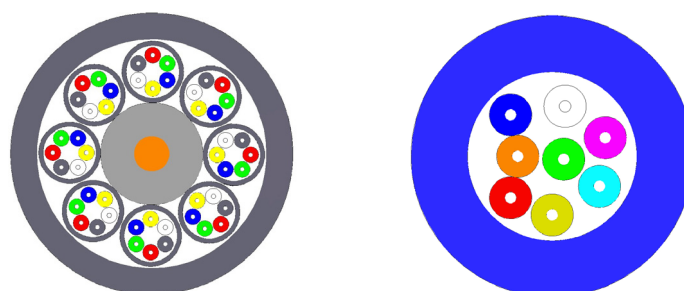
PANDUIT™

CABLE DATA SHEET

technical information

Panduit™ Opti-Core™ Indoor/Outdoor All-Dielectric Cable with tight buffered fibres is an integral part of the Panduit end-to-end fibre optic solution, designed to support today's data needs while meeting tomorrow's ever-advancing network requirements. This cable provides a water and moisture resistant outer jacket, high density, and easy installation in transitional aerial and duct applications and entrance facilities. 900µm +/- 50µm tight buffered fibres permit easy connectorization permit. Opti-Core™ Fibre Optic Indoor/Outdoor All-Dielectric Cables (2 to 24 fibres) with tight buffered fibres have a non-subunitized design that surrounds the using glass yarn strength members, providing improved rodent protection- effective in many cases. Cables with greater than 24 fibres feature a sub-unit design that simplifies sub-unit and fibre identification, surrounds the fibre inside sub-units with aramid yarn, provides easy access and routing of the fibres, and increases cable durability using a dielectric central strength member. Sub-units made of thin LSZH sheath in the same colours as the outer sheath, marked with unit numbers 1 through 6. Unit diameter approximately 3.5mm. Opti-Core™ Fibre Optic Indoor/Outdoor Riser (OFNR) Rated All-Dielectric Cable with tight buffered fibres tested is in accordance with Telcordia GR-20, Issue 2, GR-409 and with relevant EIA/TIA-455 series FOTPs for fibre optic cable. Opti-Core™ Fibre Optic Indoor/Outdoor Low Smoke Zero Halogen (LSZH) Rated All-Dielectric Cable with tight buffered fibres meets the IEC 60794-1 standard. All standard RoHS compliant multimode and singlemode cable is available in 2, 4, 6, 8, 12, and 24 fibre counts as a "non-subunitized" design.

application

Can be used for indoor and outdoor applications including LAN and WAN 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.

standards

EN 187 000	ISO 11801 2nd edition	EuroClass B2ca-s1a-d1-a1
IEC 60794-2	EN 50-173-1	Cca-s1a-d1-a1
IEC 60794-2-20	EN 501-73-1:2002	

construction

Central strength member	2-24 fibres: E-Glass rovings
Tight buffer	2-24 fibres: 900µm +/- 50µm
Water blocking	The core is water blocked using swellable tape and yarn
Wrapping	Swellable tape
Sheath	2-24 fibres: 1.1mm blue Fire Bur, Halogen free, flame resistant thermoplastic sheathing compound acc. EN 502-0-2-27, UV stabilized

fire ratings

IEC 60332-1-2	Single vertical wire test
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke

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mechanical properties

Tensile strength (long-term)	E11	2 to 12-fibres: 750 N 24-fibres: 1200 N
Tensile strength (installation)	E11	2 to 12-fibres: 1500 N 24-fibres: 2400 N
Max. installation load		2 to 12-fibres: 1500 N 24-fibres: 2400 N
Compressive strength (crush)	E3	2-12 fibres: 2000 N 16-24 fibres: 1000 N
Impact	E4	B2ca rated: 15 J Cca rated: 10 J
Torsion	E7	5 cycles ±1 turn
Kink	E10	No kink at 12 x cable diameter
Temperature range	F1	Installation: -20 °C to +60 °C (2 to 24-fibres) Operation: -20 °C to +60 °C (2 to 24-fibres) Storage: -40 °C to +70 °C (2 to 24-fibres)
Water penetration	F5B	No water leakage after 24 hours

physical properties

Fibre Count	Cable O.D. (mm)	Installation Bend Radius (mm)	Long-Term Bend Radius (mm)	Cable Weight (kg/km)
2	7.5	150	75	B2ca=42 Cca=46
4	7.5	150	75	B2ca=43 Cca=48
6	7.5	150	75	B2ca=44 Cca=49
8	8.0	170	80	B2ca=49 Cca=54
12	8.3	180	B2ca=83 Cca=85	B2ca=57 Cca=62
24	9.4	190	B2ca=94 Cca=95	B2ca=81 Cca=87

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fibre colour code 2 to 24 fibres

Fibre colour code	1 Red	7 Brown	13 Yellow w/mark every 70mm	19 Yellow w/mark every 35mm
	2 Green	8 Violet	14 White w/mark every 70mm	20 White w/mark every 35mm
	3 Blue	9 Turquoise	15 Grey w/mark every 70mm	21 Grey w/mark every 35mm
	4 Yellow	10 Black	16 Turquoise w/mark every 70mm	22 Turquoise w/mark every 35mm
	5 White	11 Orange	17 Orange w/mark every 70mm	23 Orange w/mark every 35mm
	6 Grey	12 Pink	18 Pink w/mark every 70 mm	24 Pink w/mark every 35mm

ordering information

Example: FAKC912-24 - Fibre Indoor/Outdoor Tight Buffered Unarmored, Euroclass rated, OS2, 12-fibre ,

Character	1	2	3	4	5	6	7	8	9	10
Example	F	A	K	C	9	1	2	-	2	4

1 and 2 – Fibre Product
FA = Fibre,

3 – Cable Construction
K = Indoor/Outdoor
  Tight Buffered Unarmored

4 – Flame Rating
C - EuroClass Rated

5 – Fibre Type
6 = OM1 62.5/125μm
5 = OM2 50/125μm
9 = OS2 9/125μm
X = OM3 10G 50/125μm
Z = OM4 10G 50/125μm

6 and 7 – Fibre Count
02 = 2-fibre
04 = 4-fibre
06 = 6-fibre
08 = 8-fibre
12 = 12-fibre
24 = 24-fibre

8 = Dash

9 and 10 – EuroClass Code
14-B2ca-s1a-d1-a1
24-Cca-s1a-d1-a1

For more information

Visit us at www.panduit.com

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