Opti-Core[™] Fibre Optic Indoor-Outdoor Armoured Cable 48 to 144-Fibres, EuroClass Cca and B2ca for EMEA



specifications

The fibre cable shall contain 48 to 144 fibres and have an armoured loose tube construction. It shall be suitable for indoor applications, complying with IEC standards for low smoke/zero halogen and EuroClass (Cca or B2ca) for fire protection. The cable shall also be water-blocked for use in outdoor environments. It shall have options for singlemode (OS2) or multimode fibres (OM4) to support 10 Gb/s network transmission and beyond.



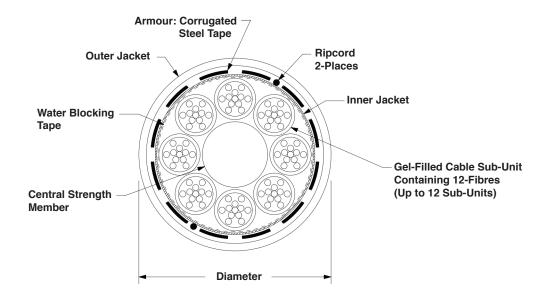
standards and flame rating

ISO 11801 (Generic Cabling)	EN 50575 (Reaction to fire)
EN 50173 (Generic Cabling)	EN 50399 (EuroClass Cca-s1a-d1-a1 and B2ca-s1a-d1-a1)
IEC 60794-1 and 2 (Optical Fibre Cables)	IEC 60332-1-2 and IEC 60332-3-24 (Flame retardant)
RoHS Compliant	IEC 61034 and IEC 60754 (Low Smoke Zero Halogen)

cable construction

Standard loose tube:	Each tube contains twelve 250µm coated fibres
Water blocking: Each tube is water-blocked with gel; the core is wrapped with swellable tape	
Strength members:	Central strength member (FRP rod)
Armour	0.155mm corrugated steel tape
Inner and outer sheaths/jackets:	Inner sheath and 1.5mm outer sheath are both Black and comply with EN 50290-2-27 (halogen free, flame retardant); two ripcords

cross section (representative, not to scale)



Opti-Core[™] Fibre Optic Indoor-Outdoor Armoured Cable 48 to 144-Fibres, EuroClass Cca and B2ca for EMEA

key features and benefits

Gel-filled tube and water-blocking tape	Blocks water from entering the cable and damaging the optical fibres
EuroClass CPR Cca and B2ca	High flame-retardant performance
Steel tape armour	Makes the cable rodent proof
Highest quality OM4 laser optimized fibre	Supports 10 Gb/s applications and beyond, while maintaining compatibility with existing 50μm multimode systems

applications

- This cable can be used for outdoor data communications connections including CATV, telecom trunk and access lines.
- The intended installation environment is in tunnels and subways, where flame retardance is required.
- The cable is armoured for direct burial and conditions with risk of severe rodent attacks.

physical and mechanical properties

<u> </u>						
Fibre Count	48	72	96	144		
Cable Outside Diameter, mm	14.5	14.5 14.5		19		
Number of Sub-Unit Tubes/Filler Tubes	4/2	4/2 6/0 8/0		12/0		
Bend Radius (Installation/Short Term), mm	145	145	145 145			
Bend Radius (Operation/Long Term), mm	290	290	290	380		
Approximate Cable Weight, kg/km	260	266	235	404		
Tensile strength (Installation/Short Term), N	1800 (fibre strain ≤ 0.5%)					
Tensile strength (Operation/Long Term), N	1200 (fibre strain ≤ 0.25%)					
Compressive strength (Crush), N/100 mm	3000					
Impact, J	20					
Torsion	5 cycles ± 1 turn					
Kink	Cable does not form a kink when loop is drawn to a diameter 12 times the cable diameter					
Temperature range	Storage: -40°C to +60°C Installation: -30°C to +60°C Operation: -40°C to +60°C					

optical properties: maximum attenuation (cabled)

OS2 Singlemode (ITU-T G.657.A1)	0.5 dB/km @1310 nm, 0.5 dB/km @1550 nm
OM4 Multimode	3.0 dB/km @850 nm, 1.0 dB/km @1300 nm

Opti-Core[™] Fibre Optic Indoor-Outdoor Armoured Cable 48 to 144-Fibres, EuroClass Cca and B2ca for EMEA

fibre colour code

1		2	3	4	5	6	7	8	9	10	11	12
Re	ed	Green	Blue	Yellow	White	Grey	Brown	Violet	Turquoise	Black	Orange	Pink

ordering information

EuroClass	Fibre	Part Number	Description
Cca	OS2	FAMC948-24	OS2 48-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMC972-24	OS2 72-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMC996-24	OS2 96-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMC91A-24	OS2 144-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMCZ48-24	OM4 48-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
	OM4	FAMCZ72-24	OM4 72-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMCZ96-24	OM4 96-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMCZ1A-24	OM4 144-fibre indoor-outdoor armoured stranded, EuroClass Cca-s1a-d1-a1, 250µm fibres.
		FAMC948-14	OS2 48-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
	OS2	FAMC972-14	OS2 72-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
	052	FAMC996-14	OS2 96-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
B2ca		FAMC91A-14	OS2 144-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
	OM4	FAMCZ48-14	OM4 48-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
		FAMCZ72-14	OM4 72-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
		FAMCZ96-14	OM4 96-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.
		FAMCZ1A-14	OM4 144-fibre indoor-outdoor armoured stranded, EuroClass B2ca-s1a-d1-a1, 250µm fibres.

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. FBDS40--WW-UKE 6/2021