Opti-Core™ Fibre Optic Indoor/Outdoor Steel Armour Cable (up to 24 Fibres) – EMEA

PANDUIT™

technical information

Opti-Core™ Fibre Optic Indoor-Outdoor Steel Armoured Cable has a low smoke zero halogen (LSZH) jacket and provides water-blocking, high density, and easy installation in duct applications and entrance facilities. Corrugated steel tape armour eliminates the need for inner duct or conduit to provide a smaller crush resistant pathway, improved design flexibility, and lower installed cost. Up to 24 250μm coated fibres are contained in a central loose tube that is gel-filled for superior water blocking. EuroClass CPR options include Eca and B2ca. Standard singlemode and multimode options are available, with OM3 and OM4 versions containing the highest quality laser optimized fibre to support 10Gb/s applications while maintaining compatibility with existing 50μm multimode systems.
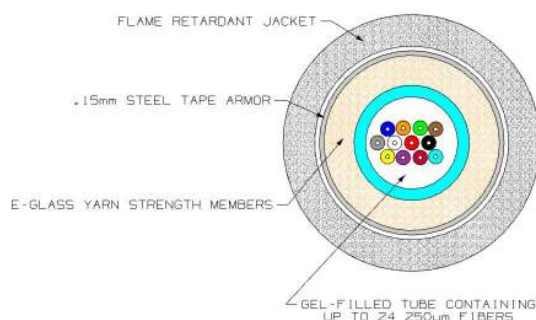

application

Can be used indoors or outdoors for LAN and WAN backbones, telecom access lines and fibre to building drop connections. The cable is rodent proof and well suited for installation in ducts and on trays. The Eca version is excellent for direct burial with proper sand back filling. The B2ca version has very high flame retardance and is ideal for indoor installations that may include short outdoor runs.

standards

ISO 11801-1	EN 50575
IEC 60794-1	EN 50173-1

construction

Strength member	E-glass yarns
Loose tube	2.8mm gel-filled loose tube with up to 24 fibres
Armouring	0.15mm corrugated steel tape
Jacket / Sheath	1.5mm, Black, UV stabilized, EN 50290-2-27

fire ratings

Part Number Format	FAGC***-40	FAGC***-14
EuroClass CPR Rating	Eca	B2ca-s1a-d1-a1
IEC 60754-1 (halogen acid gas content/ halogen free)	✓	✓
IEC 60754-2 (acidity/ corrosivity)	✓	✓
IEC 61034 (smoke density/ low smoke)	✓	✓
IEC 60332-1-2 (single wire flame retardance)	✓	✓
IEC 60332-3-24 (fire retardance)	–	✓

Opti-Core™ Fibre Optic Indoor/Outdoor Steel Armour Cable (up to 24 Fibres) – EMEA

mechanical properties

Tensile strength (operation/ long term)	1000 N (fibre strain ≤ 0.2%)
Tensile strength (installation/ short-term)	3000 N (fibre strain ≤ 0.6%)
Compressive strength (crush)	2200 N/ 100 mm
Impact	30 Nm
Torsion	5 cycles ±1 turn
Kink	The cables do not form a kink when a loop is drawn together to a diameter of 100mm
Temperature range	Installation: -40°C to +70°C Operation: -40°C to +70°C Storage: -40°C to +70°C

physical properties

Fibre Count	Cable O.D.	Installation Bend Radius	Long Term Bend Radius	Cable Weight
4 – 24	8.5mm	170mm	85mm	Eca: 75 kg/km B2ca: 100 kg/km

optical properties: maximum attenuation

OS2 Singlemode (ITU-T G.657.A1)	0.5 dB/km @ 1310 nm, 0.5 dB/km @ 1550 nm
OM3 Multimode	3 dB/km @ 850 nm, 1 dB/km @ 1300 nm
OM4 Multimode	3 dB/km @ 850 nm, 1 dB/km @ 1300 nm

fibre colour code 2-24 fibres

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

ordering information

*Example: FAGC912-40, Indoor-Outdoor Central Tube Armored, OS2, 12 Fibres, LSZH Eca

Character	1	2	3	4	5	6	7	8	9	10
Example*	F	A	G	C	9	1	2	-	4	0

1 and 2 – Fibre Product
FA = Fibre

3 – Cable Construction
G = Indoor/Outdoor Central Tube Armoured (up to 24 fibres)

4 – Flame Rating
C = EuroClass rated

5 – Fibre Type
9 = OS2 9/125µm
X = OM3 10 GbE 50/125µm
Z = OM4 10 GbE 50/125µm

6 and 7 – Fibre Count
4 = 4-fibre
6 = 6-fibre
8 = 8-fibre
12 = 12-fibre
24 = 24-fibre

8 – Dash

9 and 10 – EuroClass Code
14 = B2ca-s1a-d1-a1 (only OS2 and OM4)
40 = Eca

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

PANDUIT™