

technical information

Opti-Core Fibre Optic Indoor/Outdoor Cable shall be an integral part of any end-to-end fibre optic solution, designed to support the data needs of today while meeting the ever-advancing network requirements of tomorrow. This low smoke zero halogen (LSZH) rated cable provides water-blocking, high density, and easy installation in duct applications and entrance facilities. Opti-Core Fibre Optic Indoor/Outdoor Cable shall meet the IEC 60794-1 standards. Opti-Core™ 10 GbE Fibre Optic Indoor/Outdoor Cable shall feature the highest quality OM3 and OM4 laser optimised fibre to support 10 Gb/s applications while maintaining compatibility with existing 50µm multimode systems. Standard multimode and singlemode indoor/outdoor cables shall be available in fibre counts up to 24 fibres as a central tube design and up to 72-fibres as a stranded tube design.



applications

Opti-Core Fibre Optic Indoor/Outdoor Cable is for use indoors or outdoors. It is suited for installation in ducts and on trays. It may be used for direct burial with proper sand back-filling. The glass yarns provide a degree of rodent protection.

cable construction

Central tube cable (up to 24 Fibres):	Central tube contains up to 24 250µm coated fibres and is water-blocked with gel. Cable is all-dielectric and includes water-blocking strength members and ripcord.
Stranded tube cable (>24 Fibres):	Each sub-unit tube contains 12 250µm coated fibres and is water-blocked with gel. Cable is all-dielectric and has central strength member and ripcords; also filler tubes for certain fiber counts. Sub-units are surrounded by water-blocking tape, flame-retardant tape and strength members.
Outer sheath:	Outer sheath is black, low smoke, halogen free and UV stabilised.

physical and mechanical properties

	4	6	8	12	24	48	72	96	144
Fibre count:	4	6	8	12	24	48	72	96	144
Cable Diameter (mm):	7.3	7.3	7.3	7.3	7.3	11.5	11.5	13	15.5
Installation Bend Radius (mm):	146	146	146	146	146	230	230	260	310
Long Term Bend Radius (mm):	73	73	73	73	73	115	115	130	155
Cable Weight (kg/km):	51.7	51.7	51.7	51.7	51.7	105	130	165	205
Tensile strength (Long Term):	up to 24-fibre: 1000 N >24-fibre: 3500 N (fibre strain <0.25%)								
Tensile strength (Installation):	up to 24-fibre: 3000 N >24-fibre: 5000 N (fibre strain <0.5%)								
Compressive strength (crush):	up to 24-fibre: 3,500 N/10cm >24-fibre: 3000 N/100mm								
Impact:	20 J								
Torsion:	5 cycles ±1 turn								
Kink:	No kink when looped to a diameter of 200mm (central tube) or 12X the cable diameter (stranded tube)								
Temperature range*:	Installation: -15°C to +40°C Operation: -30°C to +60°C (up to 24-fibre) Operation: -40°C to +70°C (>24-fibre) Storage: -40°C to +60°C								

standards and flame rating

ISO 11801	EuroClass Eca
EN 60794-2-20	
IEC 60794-2-20	
EN 50173	
Flame ratings:	IEC 60332-1-2 IEC 60794-2 IEC 61034

Opti-Core™ Fibre Optic Indoor/Outdoor Cable – EMEA

fibre colour code

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

ordering information

Example: FACC912-40, Fibre, Indoor/Outdoor Central Tube, EuroClass, OS2, 12-fibre-Eca

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

1 and 2 – Fibre Product

FA = Fibre Cable, EuroClass

3 – Cable Construction

N = Indoor/Outdoor Stranded Tube
(greater than 24 fibre)
C = Indoor/Outdoor Central Tube
(up to 24 Fibre))

4 – Flame Rating

C = EuroClass rated

5 – Fiber Type

9 = OS2 9/125µm
X = OM3 10 GbE 50/125µm
Z = OM4 10 GbE 50/125µm

6 and 7 – Fibre Count

04 = 4-fibre
06 = 6-fibre
08 = 8-fibre
12 = 12-fibre
24 = 24-fibre
48 = 48-fibre (OS2 Only)
72 = 72-fibre (OM4 and OS2 only)**
96 = 96-fibre (OS2 Only)
1A = 144-fibre (OS2 Only)

8 – Dash

N = Blunt end

9 and 10 - EuroClass Code™

40 - Eca

EL-KAYAN
TECHNOLOGY

Dimensions are in inches. [Dimensions in brackets are metric].

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