

## 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

<b>Central tube cable (up to 24 Fibres):</b>	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.
<b>Stranded tube cable (&gt;24 Fibres):</b>	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.
<b>Outer sheath:</b>	Outer sheath is black, low smoke, halogen free and UV stabilised.

## physical and mechanical properties

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

<b>ISO 11801</b>	EuroClass Eca
<b>EN 60794-2-20</b>	
<b>IEC 60794-2-20</b>	
<b>EN 50173</b>	
<b>Flame ratings:</b>	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

<b>Character</b>	1	2	3	4	5	6	7	8	9	10
<b>Example</b>	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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