

# Opti-Core™ Fibre Optic Indoor-Outdoor Cable with Tight Buffered Fibres – Cca for EMEA

## specifications

This family of cables shall contain 2 to 24 optical fibres. The fibres shall be tight-buffered for easy termination with field-installable connectors. The cables shall be flame rated for use indoors, complying with IEC standards for low smoke / zero halogen and EuroClass Cca for fire protection. The outer sheath shall have UV resistant and water blocking properties for limited use in outdoor environments. The cables shall have options for singlemode (OS2) or multimode fibres (OM3, OM4 and OM5) to support 10 Gb/s network transmission and beyond.



## standards and flame rating

- ISO 11801 (Generic Cabling)
- EN 50173 (Generic Cabling)
- EN 50575 (Reaction to fire, EuroClass)
- BS EN 50575 (Reaction to fire, UKCA)
- EN 50399 (EuroClass Cca)
- IEC 60332-1-2 and 60332-3-24 (Flame Retardant)
- IEC 61034 (Low Smoke)
- IEC 60754-2 (Zero Halogen)
- RoHS Compliant

## cable construction (all-dielectric)

- 900µm tight buffered fibres are surrounded by water swellable threads and glass yarn strength members in a flame-retardant outer sheath.
- Outer sheath (jacket) is black. Material is LSZH, flame-retardant, UV stabilized and water-blocked. One ripcord.

## key features and benefits

<b>900µm tight buffered fibres</b>	Easy to handle, strip and connectorize in the field
<b>Flame retardant LSZH sheath</b>	Provides life safety benefits; meets European industry standards for smoke and flame and is well suited for indoor installations
<b>Water swellable elements</b>	Prevent the migration of water throughout the cable
<b>Highest quality OM3, OM4 and OM5 laser optimized fibre</b>	Supports 10 Gb/s applications while maintaining compatibility with existing 50µm multimode systems

## applications

- Can be used for indoor and limited outdoor applications. A good choice for entrance facilities.
- Typical applications include LAN backbones, backbones in data centers, and routing between telecommunications rooms.
- Suited for installation in indoor-outdoor ducts and on trays.

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## physical and mechanical properties

<b>Fiber count:</b>	2	12	24
<b>Nominal Outside Diameter (mm) :</b>	6.0	8.3	9.5
<b>Minimum Bend Radius:</b>	Installation / Short Term / With Load: 20X Cable Outside Diameter		
	Operation / Long Term / No Load: 10X Cable Outside Diameter		
<b>Approximate Weight (kg/km):</b>	42	73	98
<b>Tensile strength, Installation (N) (fibre strain ≤ 0.6%):</b>	1500	1500	2400
<b>Tensile strength, Operation (N) (fibre strain ≤ 0.2%):</b>	500	500	800
<b>Compressive strength / Crush (N/100mm):</b>	1000	1000	1000
<b>Temperature:</b>	Storage: -30°C to +60°C Installation: -20°C to +60°C Operation: -20°C to +60°C		

Tested according to IEC 60794-1-21/22 methods

## optical properties: maximum attenuation (cabled)

<b>OS2 Singlemode (ITU-T G.657.A1):</b>	0.4 dB/km @1310 nm, 0.4 dB/km @1550 nm
<b>OM3, OM4 &amp; OM5 Multimode:</b>	3.5 dB/km @850 nm, 1.5 dB/km @1300 nm

## 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

Fibres 13 to 24 use same sequence as 1 to 12 and have a mark every 70mm. Fiber 22 is white with a mark every 35mm.

## ordering information

\*Example: FAKC912-24, OS2 12 Fibre Indoor-Outdoor Cable, Euroclass Cca, 900µm Buffered Fibres

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

### 1 and 2 – Fibre Product, Region

FA = Fibre Cable, CPR for EMEA

### 3 – Cable Construction

K = Indoor-Outdoor with Tight Buffered Fibres

### 4 – Flame Rating

C = Euroclass Rated

### 5 – Fibre Type

9 = Singlemode OS2

X = Multimode OM3

Z = Multimode OM4

W = Multimode OM5

### 6 and 7 – Fibre Count

02 = 2-fibre (only OS2)

12 = 12-fibre

24 = 24-fibre

### 8 – Dash

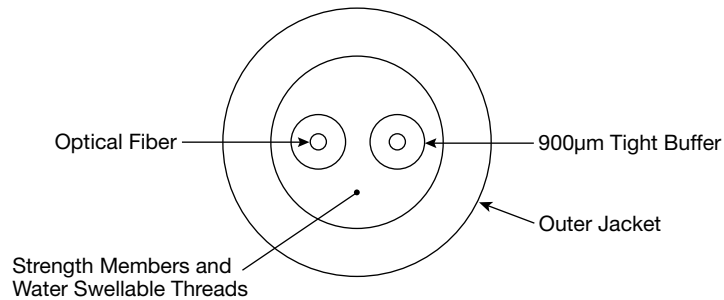
### 9 and 10 – Euroclass Code

24 = Cca-s1a-d1-a1

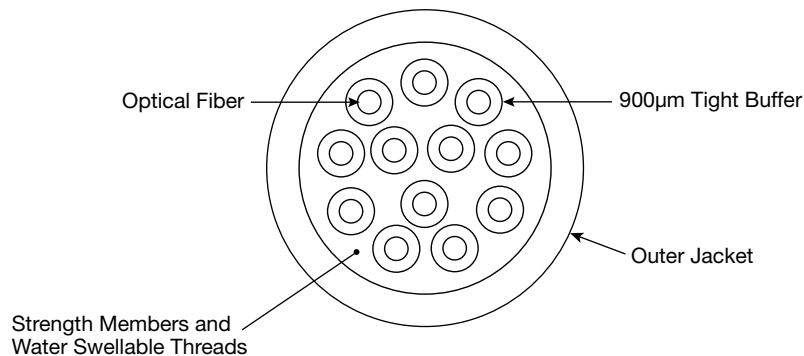
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representative cross sections (not to scale)

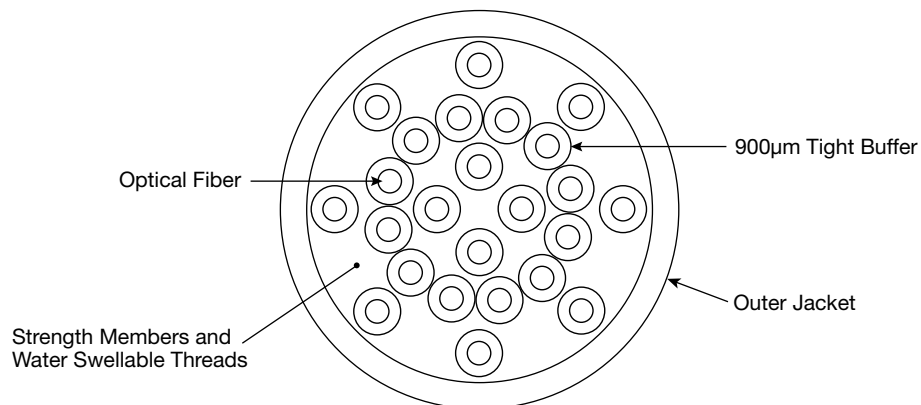
2 FIBER



12 FIBER



24 FIBER



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