

SPECIFICATIONS

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-fibers as a stranded tube design.



STANDARDS AND FLAME RATING

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

PHYSICAL AND MECHANICAL PROPERTIES

Fiber count:	4	6	8	12	24	48	72	96	144
Cable outside diameter, mm:	7.3	5.6	6.6	5.6	5.7	11.5	11.5	13	15.5
Installation Bend Radius, mm:	146	112	132	112	114	230	230	260	310
Long Term Bend Radius, mm:	73	56	66	56	57	115	115	130	155
Cable Weight, kg/km:	51.7	41	57.3	40	42.5	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): (Long Term):	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/100nm								
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 +70°C (up to 24-fibre) Operation: -40°C to +70°C (>24-fibre) Storage: -40°C to +60°C								

Opti-Core™ Fibre Optic Indoor/Outdoor 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 waterblocking strength members and ripcord.
Stranded tube cable (>24 Fibres):	Each sub-unit tube contains 12 250um 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.

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.

FIBER COLOR SEQUENCE

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

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

PART NUMBER CONFIGURATOR

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 - Fibre Product	F = Fibre Cable	7 - Fibre Count	04 = 4-fibre
2 - Fibre Product	A = EuroClass		06 = 6-fibre
3 - Cable Construction	N = Indoor/Outdoor Stranded Tube (greater than 24 fibre)		08 = 8-fibre
	C = Indoor/Outdoor Central Tube (up to 24 Fibre)		12 = 12-fibre
4 - Flame Rating	C = EuroClass rated		24 = 24-fibre
5 - Fibre Type	9 = OS2 9/125µm	8 - Dash	48 = 48-fibre (OS2 Only)
	X = OM3 10 GbE 50/125µm		72 = 72-fibre (OM4 and OS2 only)**
	Z = OM4 10 GbE 50/125µm	9 - EuroClass Code	96 = 96-fibre (OS2 Only)
6 - Fibre Count		10 - EuroClass Code	1A = 144-fibre (OS2 Only)
	04 = 4-fibre		- = Blunt end
	06 = 6-fibre		4 = Euroclass Eca
	08 = 8-fibre		0 = None
	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)		

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