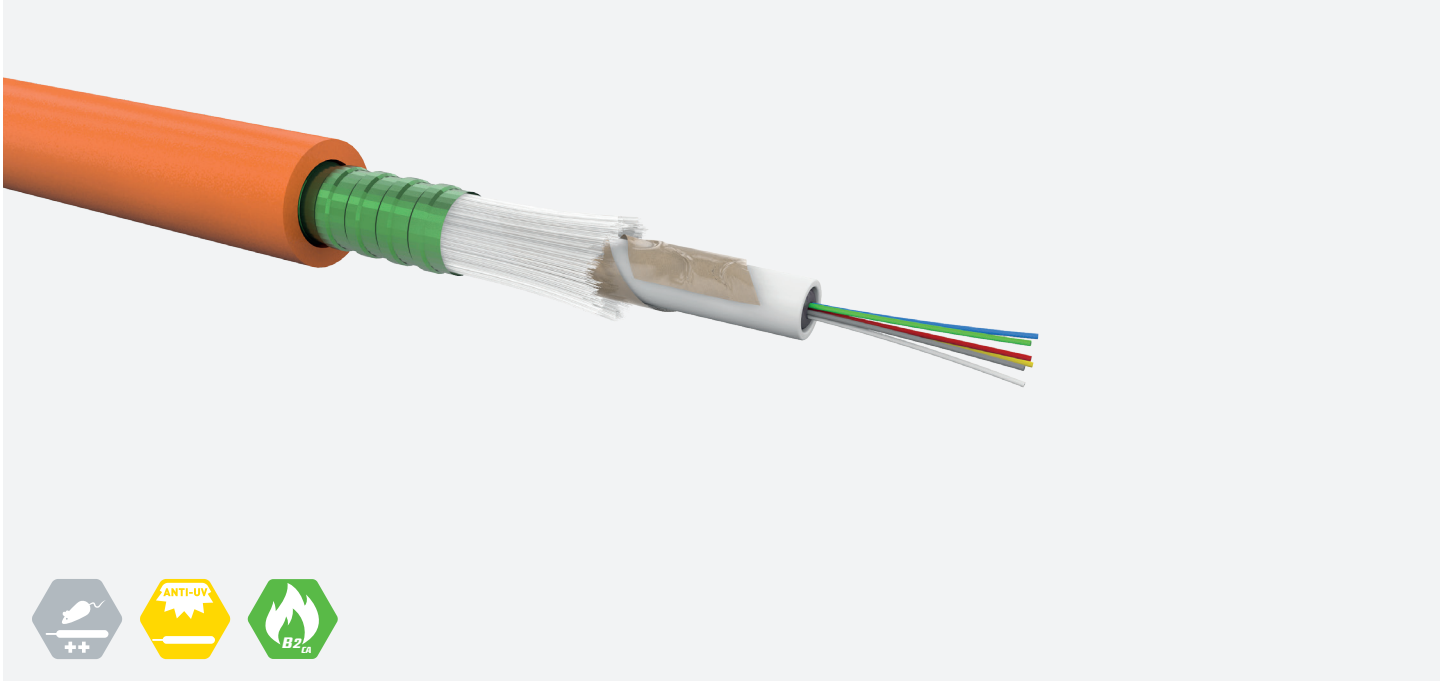




INDOOR/OUTDOOR CENTRAL LOOSE TUBE FIRE RESISTANT CABLE (180 min) GGM FxxBxCFIRST



FIBRE COLOUR CODE

ACCORDING IEC 60304

1 Red	13 Red*
2 Green	14 Green*
3 Blue	15 Blue*
4 Yellow	16 Yellow*
5 White	17 White*
6 Grey	18 Grey*
7 Brown	19 Brown*
8 Purple	20 Purple*
9 Aqua	21 Aqua*
10 Black	22 Natural*
11 Orange	23 Orange*
12 Pink	24 Pink*

* with black rings

FEATURES

- ▶ Central loose tube 250 µm optical fibre, with a thin layer of gel
- ▶ Up to 48 fibres (with 2 bundles of 24F)
- ▶ Multimode 50/125 OM3, 50/125 OM4 or singlemode 9/125 OS2
- ▶ Easy slitting
- ▶ MMF fibres compliant to ITU-T G651.1
- ▶ SMF fibers compliant to ITU-T G652B/G652D
- ▶ OM3 & OM4 fibres integrate bend optimized fiber technology
- ▶ Indoor/outdoor rated cable with corrugated steel tape & water-swallowable glass yarns protection against rodents
- ▶ Fire barrier with 2 layers of mica tape
- ▶ Low smoke, Halogen Free Flame Retardant (HFFR) & UV resistant
- ▶ Circuit integrity: 180 min (IEC 60331-25)
- ▶ Circuit integrity with shock: 120 min (EN 50200)
- ▶ EN 13501-6 Fire rating: B2ca-s1a, d1, a1
- ▶ Fire behaviour according to EN 50575, EN 50399, EN 60332-3, EN 61034-2, EN 60754-2
- ▶ Compliant to IEC 60794-1 cable performance requirements
- ▶ IEC 60304 colour coded
- ▶ Outer jacket color: orange
- ▶ Standard put up: 2000 m

CABLE PERFORMANCES

		6 FIBRES	12 FIBRES	24 FIBRES	48 FIBRES
Temperature	Operating	-40 °C to +70 °C			
	Storage	-40 °C to +70 °C			
	Installation	-30 °C to +60 °C			
Max. pulling force during installation (N)		1200			
Crush resistance (N/dm)		2000			
Min. static bending radius (mm)		10x O.D.			
Dynamic min bending radius (mm)		20x O.D.			
Nominal weight (kg/km)		115	115	140	140
Nominal diameter (mm)		8.9	8.9	9.9	9.9
Jacket thickness (mm)		1.8			
Tube diameter (mm)		2.8	2.8	3.8	3.8

OPTICAL PERFORMANCES

	OM3 50/125	OM4 50/125	OS2/G652D 9/125
Bandwith @850nm (MHz.km)	≥ 2000*	≥ 4700*	NA
Bandwith @1300nm (MHz.km)	≥ 500	≥ 500	NA
Typ. attenuation @850nm (dB/km)	≤ 2.4	≤ 2.3	NA
Typ. attenuation @1300nm (dB/km)	≤ 0.6	≤ 0.6	NA
Typ. attenuation @1310nm (dB/km)	NA	NA	≤ 0.34
Typ. attenuation @1550nm (dB/km)	NA	NA	≤ 0.20
Numerical aperture (µm)	0.2 ± 0.015	0.2 ± 0.015	NA
Core non-circularity	≤ 5 %	≤ 5 %	NA
Mode field diameter (1310/1550nm - µm)	NA	NA	9.2 ± 0.4 / 10.3 ± 0.5
Cladding diameter (µm)	125 ± 1.0	125 ± 1.0	125 ± 0.5
Cladding non-circularity	≤ 0.7 %	≤ 0.7 %	≤ 0.5 %
Coating diameter (µm)	242 ± 5	242 ± 5	245 ± 5
Core/cladding concentricity error (µm)	≤ 1 µm	≤ 1 µm	≤ 0.4 µm
Cut-off wavelength (nm)	NA	NA	≤ 1260
Zero dispersion wavelength (nm)	1320 - 1365	1295 - 1340	1300 - 1324
GIR @850nm	1.482	1.482	NA
GIR @1300nm	1.477	1.477	NA
GIR @1310nm	NA	NA	1.466
GIR @1550nm	NA	NA	1.467
PMD individual fiber (ps/√km)	NA	NA	≤ 0.08
Chromatic dispersion: 1285-1330nm (ps/nm.km)	NA	NA	≤ 3.5
Chromatic dispersion: 1550nm (ps/nm.km)	NA	NA	≤ 17.0

* EMBC calculation method

PART NUMBERS

	6 FIBRES	12 FIBRES	24 FIBRES	48 FIBRES
OM3	GGM F6B3CFIRST	GGM F12B3CFIRST	GGM F24B3CFIRST	GGM F48B3CFIRST
OM4	GGM F6B4CFIRST	GGM F12B4CFIRST	GGM F24B4CFIRST	GGM F48B4CFIRST
OS2	GGM F6B9CFIRST	GGM F12B9CFIRST	GGM F24B9CFIRST	GGM F48B9CFIRST