

CENTRAL LOOSE TUBE FIBER OPTIC CABLE



FEATURES

- Central loose tube 250 µm optical fiber
- Multimode 62.5/125 OM1, 50/125 OM2, 50/125 OM3, 50/125 OM4 or singlemode 9/125 OS2
- Multimode fibers also compliant to ITU-T G651.1
- Singlemode fiber compliant with both ITU-T G652B & ITU-T G652D
- OM3 & OM4 modes integrates bend optimized fiber technology
- 4, 6, 8, 12 & 24 fibers
- Indoor / Outdoor
- Glass yarns protection against rodents
- Water blocking E-glass yarns protection
- Halogen free outer sheath (IEC 60754-2 & IEC 61034-2), UV stable
- Fire behaviour: EN 13501-6: Euroclass Eca, EN 50575, EN 50399, EN 60332-1-2
- IEC 60794-1 compliant with mechanical and environmental performances
- Color: orange

MECHANICAL & ENVIRONMENTAL PROPERTIES

Test		Test method
Tensile strength	1100 N	IEC 60794-1-2 / E1A
Crush resistance	2000N /dm	IEC 60794-1-2 / E3
Impact resistance	3 impacts (w/25N.m)	IEC 60794-1-2 / E4
Min. bending radius	15 x O.D.	IEC 60794-1-2 / E11A
Min. bending radius (load)	20 x O.D.	IEC 60794-1-2 / E11B
Moisture resistance	Pass	IEC 60794-1-2 / F5
Installation Temp.	-15°C to +50°C	IEC 60794-1-2 / F1
Operation Temp.	-20°C to +70°C	IEC 60794-1-2 / F1
Storage Temp.	-20°C to +70°C	IEC 60794-1-2 / F1

Physical properties	4 to 12 fibers	24 fibers
Weight	36 kg/km	49 kg/km
Overall diameter	5.4 ±0.54 mm	6.4 ±0.54 mm
Sheath thickness	1 ±0.2 mm	1.3 ±0.3 mm
Central tube O.D.	2.5 mm	3 mm
Standard put up	2100 m (Plywood drum)	2100 m (Plywood drum)

COLOR CODE: according IEC 60304

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

13 Red/Black	19 Brown/Black
14 Green/Black	20 Violet/Black
15 Blue/Black	21 Aqua/Black
16 Yellow/Black	22 Transparent/Black
17 White/Black	23 Orange/Black
18 Grey/Black	24 Pink/Black

OPTICAL PERFORMANCES

Optical Properties	OM1 62,5/125	OM2 50/125	OM3 50/125	OM4 50/125*	OS2/G652D 9/125
Bandwith @850nm (MHz.km)	≥220	≥500	≥2000**	≥4700**	NA
Bandwith @1300nm (MHz.km)	≥600	≥500	≥500	≥500	NA
Typ. Attenuation @850nm (dB/km)	2.6 / 3.0	2.4 / 3.5	2.0 / 3.0	2.0 / 3.0	NA
Typ. Attenuation @1300nm (dB/km)	0.5 / 1.0	0.7 / 1.5	0.5 / 1.0	0.5 / 1.0	NA
Typ. Attenuation @1310nm (dB/km)	NA	NA	NA	NA	0.31 / 0.36
Typ. Attenuation @1550nm (dB/km)	NA	NA	NA	NA	0.20 / 0.24
Numerical aperture (μm)	0.275 ±0.0015	0.200 ±0.0015	0.200 ±0.0015	0.200 ±0.0015	NA
Core Non-Circularity	≤ 5%	≤ 5%	≤ 5%	≤ 5%	NA
Mode Field Diameter (1310/1550nm - μm)	NA	NA	NA	NA	9.2 ± 0.4 / 10.4 ± 0.5
Cladding diameter (μm)	125 ± 1.0	125 ± 1.0	125 ± 1.0	125 ± 1.0	125 ± 0.7
Cladding Non-circularity	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%
Coating diameter (μm)	245 ± 10	245 ± 10	245 ± 10	245 ± 10	235.0 - 245.0
Coating Non-circularity	≤ 5%	≤ 5%	≤ 5%	≤ 5%	NA
Core/cladding concentricity error (μm)	≤ 1.0μm	≤ 1.5μm	≤ 1.5μm	≤ 1.5μm	≤ 0.5μm
Cut-off wavelength (nm)	NA	NA	NA	NA	< 1260
Zero dispersion wavelength (nm)	1320 - 1365	1295 - 1340	1295 - 1340	1295 - 1340	1302 - 1322
GIR @850nm	1.496	1.483	1.483	1.483	NA
GIR @1300nm	1.491	1.479	1.479	1.479	NA
GIR @1310nm	NA	NA	NA	NA	1.467
GIR @1550nm	NA	NA	NA	NA	1.468
PMD individual fiber (ps/√km)	NA	NA	NA	NA	0.1
Chromatic dispersion : 1235-1330nm (ps/nm.km)	NA	NA	NA	NA	≤ 3.5
Chromatic dispersion : 1550nm (ps/nm.km)	NA	NA	NA	NA	≤ 18.0

* On demand / ** EMBc calculation method

PART NUMBERS

	4 FIBERS	6 FIBERS	8 FIBERS	12 FIBERS	24 FIBERS
OM1	GGM F04B62LST	GGM F06B62LST	GGM F08B62LST	GGM F012B62LST	GGM F024B62LST
OM2	GGM F04B50LST	GGM F06B50LST	GGM F08B50LST	GGM F012B50LST	GGM F024B50LST
OM3	GGM F04BOM3LST	GGM F06BOM3LST	GGM F08BOM3LST	GGM F012BOM3LST	GGM F024BOM3LST
OM4	GGM F04BOM4LST	GGM F06BOM4LST	GGM F08BOM4LST	GGM F012BOM4LST	GGM F024BOM4LST
OS2	GGM F04B9LST	GGM F06B9LST	GGM F08B9LST	GGM F012B9LST	GGM F024B9LST