

1. Physical Characteristics:

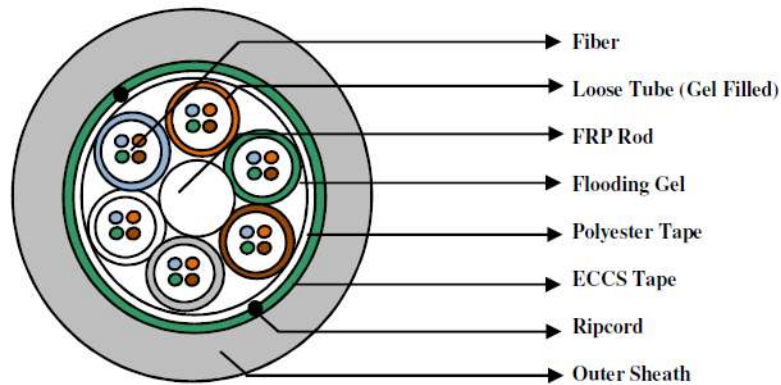


Fig. 1.1

Table 1.1 Construction details



Parameter	Dimension	Type, Colour
Number of fiber per tube	4	Colour: Blue ,Orange, Green, Brown 
Number of loose tubes	6	Colour 
Loose tube ID/OD	1.2/1.9 ± 0.1 mm	PBT
Central Strength member	2.0 ± 0.1 mm	Central FRP rod
Core Wrap	-	Polyester tape
Moisture Barrier	-	Flooding Gel
Rip cord	2	Polyester
Armour	-	ECSS Tape
Outer Sheath	1.5mm (Nominal)	HDPE – Black (Optional – LSZH, FRLS, UV Resistant, Rodent Resistant)
Overall Cable diameter	10.5 ± 0.5 mm	
Cable weight	120 ± 10 kg/km	

Table 1.2 Cable Mechanical Characteristics:

Parameter	Dimension
Tensile Strength	1500 N
Impact Strength	10 Nm
Crush Resistance	1000 N
Torsion	±180 °
Minimum bend radius	20 x D , D=Diameter of cable

Table 1.3 Temperature Performance:

Parameter	Dimension
Installation	- 20 °C to + 70 °C
Operation	- 20 °C to + 70 °C
Storage	- 20 °C to + 70 °C

2. Optical Fiber Characteristics:

Fibre Type	G.652D (OS2)		50 μm (OM3)		50 μm (OM4)	
Attenuation	at 1310 nm	≤ 0.34 dB/km	at 850 nm	≤ 3.0 dB/km	at 850 nm	≤ 3.0 dB/km
	at 1550 nm	≤ 0.23 dB/km	at 1300 nm	≤ 1.0 dB/km	at 1300 nm	≤ 1.0 dB/km
Chromatic Dispersion	1285 - 1330 nm	≤ 3.5 ps/nm.km Minimum	850 nm	≥ 1500 MHz.km	850 nm	≥ 3500 MHz.km
	1550 nm	≤ 18 ps/nm.km	1300 nm	≥ 500 MHz.km	1300 nm	≥ 500 MHz.km
	1625 nm	≤ 22 ps/nm.km				
Zero Dispersion Wavelength		1300 - 1324 nm				
Zero Dispersion Slope		≤ 0.092 ps/nm ² .km				
Polarisation Mode Dispersion		≤ 0.20 ps/√km				
Cable Cut-off Wavelength		≤ 1260 nm				
Mode Field Diameter	at 1310 nm	9.2 ± 0.4 μm	Core Diameter	50 ± 2.5 μm	Core Diameter	50 ± 1 μm
Mode field Concentricity Error		≤ 0.8 μm	Core Cladding Concentricity Error	≤ 1 μm	Core Cladding Concentricity Error	≤ 1 μm
Cladding Diameter		125 ± 1 μm		125 ± 1 μm		125 ± 1 μm
Cladding Non-circularity		≤ 1 %		≤ 1 %		≤ 1 %
Coating Diameter	Uncoloured	245 ± 10 μm	Coloured	250 ± 15 μm	Coloured	250 ± 15 μm

Fibre Type	62.5 μm (OM1)	
Attenuation	at 850 nm	≤ 3.0 dB/km
	at 1300 nm	≤ 1.0 dB/km
Chromatic Dispersion	850 nm	≥ 200 MHz.km
	1300 nm	≥ 600 MHz.km
Core Diameter		62.5 ± 2.5 μm
Core Cladding Concentricity Error		≤ 1 μm
Cladding Diameter		125 ± 1 μm
Cladding Non-circularity		≤ 1 %
Coating Diameter	Coloured	250 ± 15 μm

3. Packaging:

Packing	Wooden drum reel
Default Cable length in drum	2000m ±10%

4. Cable Printing details:

CISNET FO OUTDOOR CABLE <fiber count> <fiber type> <cable type> <cable PN> <month/year> <batch number> XXXXX METER

CIS Cable PN	Fiber Count	Fiber Type	Cable type	Packaging Length
CNOFCSM24FMLTJFSSARM	24	SM G.652D (OS2)	MULTI TUBE DISTRIBUTION ARMoured HDPE	2000m ±10%
CNOFCM324FMLTJFSSARM	24	MM 50/125 (OM3)	MULTI TUBE DISTRIBUTION ARMoured HDPE	2000m ±10%
CNOFCM424FMLTJFSSARM	24	MM 50/125 (OM4)	MULTI TUBE DISTRIBUTION ARMoured HDPE	2000m ±10%