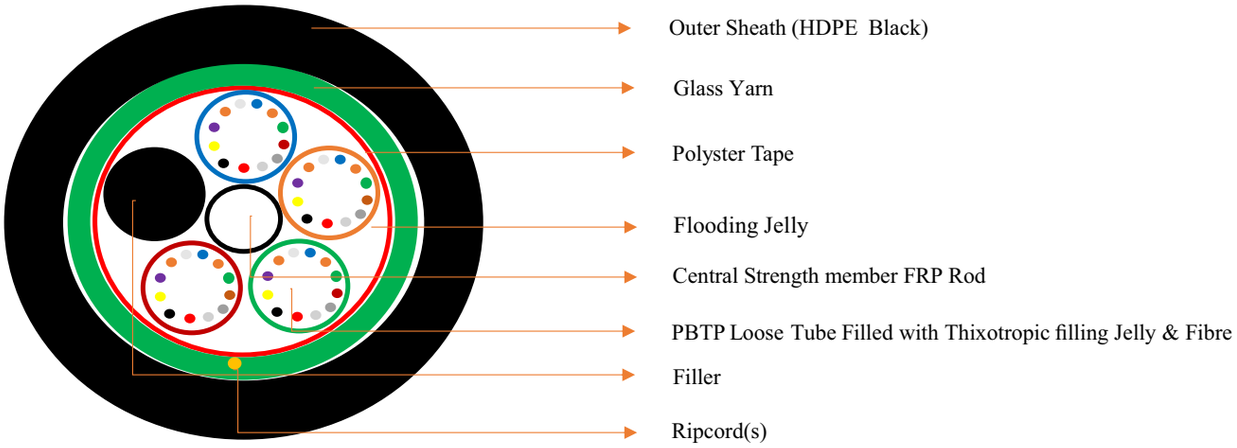
Technical Data Sheet

Cable Description	**48F MT Single Sheathed OF Cable**
Document No.	**OFC/48F/MT SS/OF CABLE/2023/109**
Type of Fibre	**Single Mode, G.652D**

Cable Cross Sectional Diagram [Drawing not to scale]



Cable Construction Details

Central Strength Member	Fibre Reinforced Plastics (FRP Rod)
No.of Fibres per Tube	12 Fibres / Tube
Fibre Colour	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink & Natural
No. of Loose Tubes	4 Nos, PBTP Loose Tube Filled with Thixotropic Filling Jelly
Loose Tubes Colour	Blue, Orange, Green & Brown
Filler /Dummy	01 No., Black HDPE
Moisture Barrier	Thixotropic Flooding Jelly
Core Sequence	Blue, Orange, Green, Brown & Filler-1
Peripheral Strength Member	Glass Yarn
Rip Cords	One Nos. Below Inner Sheath
Outer sheath	Black HDPE Sheath
Marking Details	Cable No, SLM, Laser & Telephone Symbol, S.M, G.652D, 48F, FibRSol Cables, Year at every 1 meter interval or as per customer requirements.

Cable Optical Characteristics

Mode Field Diameter @ 1310 nm		9.2 ± 0.4µm
Cladding Diameter		125 ± 0.7µm
Cladding non-circularity		≤ 0.8 %
Cabled Attenuation at 1310nm		≤ 0.36 dB/Km
Cabled Attenuation at 1550nm		≤ 0.22 dB/Km
Chromatic Dispersion	1285-1330nm	≤ 3.5 ps/nm.km
	1270-1340nm	≤ 5.3 ps/nm.km
	1550 nm	≤ 18 ps/nm.km
Polarization Mode Dispersion at 1310 &		0.2 ps/√.km (Cabled Fibre)
Zero Dispersion Slope		≤ 0.092ps / (nm² .Km)
Zero Dispersion wavelength		1300 - 1324 nm
Cable Cut-off Wavelength		≤ 1260 nm

Cable Mechanical Characteristics

Operating Temperature	-20°C to +70°C
Tensile Strength (Short Term)	1500 Newton
Crush Test	1500 Newton /100x100 mm
Cable Bend Test	20 x D, D = Cable Diameter

Tests shall be carried out as per IEC Standards. Change in attenuations shall be ≤ 0.05 dB/km.

Cable Physical Characteristics

Cable Outer Diameter ± 0.50 mm	9.8 mm	Cable length per Drum	2.0 km ± 10%
Cable Weight ± 10%	80 kg/km	Non Std Length (5% of Order Quantity)	less than 1800 mtr