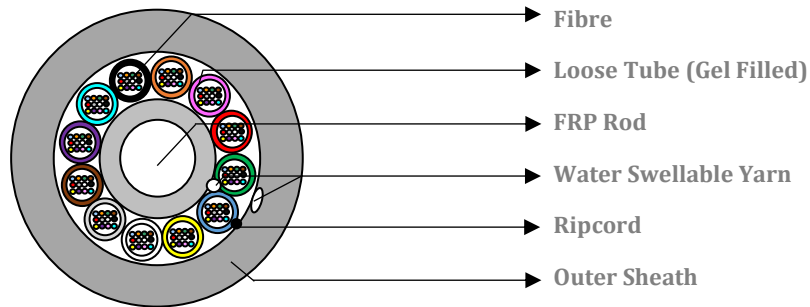


Technical Specifications

144F Multitube Micro OFC



Product

Details

Optical Fibre containing elements laid up around central strength member

Water blocked loose tubes

Water blocked core interstices

Polyethylene sheath as outer protection

Cable Construction

Parameter	Structure/Layout/Material
Fibre Count	144F
Number of fibres per tube	12
Number of loose tubes	12
Central Strength Member	FRP Rod PE Upcoated
Moisture Barrier	Water Swellable yarn – (FRP + Core)
Outer Sheath	PE - Black
Number of Ripcords	1 - Polyester
Cable Diameter	7.9 ± 0.3 mm
Cable Weight	55 ± 10 kg/km

Colour Coding

Fibre Count	1	2	3	4	5	6	7	8	9	10	11	12
Fibre Colour DIN VDE 0888	Rd	Gr	Bl	Yl	Wh	Sl	Br	Vi	Aq	Bk	Or	Pk

Tube Count	1	2	3	4	5	6	7	8	9	10	11	12
Tube Colour DIN VDE 0888	Rd	Gr	Bl	Yl	Wh	Sl	Br	Vi	Aq	Bk	Or	Pk

Cable & Fibre Characteristics

Tensile Strength	Short Term: 1500 N		IEC-60794-1-21-E1
Crush Resistance	1000 N/10 cm		IEC-60794-1-21-E3
Impact Strength	1 N.m		IEC-60794-1-21-E4
Torsion	± 180 °		IEC-60794-1-21-E7
Minimum Bend Radius	20 x D		IEC-60794-1-21-E11
Environmental Performance	Installation	-15 °C to + 50 °C	IEC-60794-1-22-F1
	Operation	-40 °C to + 70 °C	
	Storage	-40 °C to + 70 °C	

Fibre Type	G.657A1			
Attenuation	1310 nm	≤ 0.36 dB/km		
	1550 nm	≤ 0.23 dB/km		
Chromatic Dispersion	1285-1330 nm	≤ 3.5 ps/nm.km		
	1550 nm	≤ 18 ps/nm.km		
PMD (Max. Individual)	≤ 0.15 ps/√km			
PMD (Link design value)	≤ 0.06 ps /√km			
Cable cut off wavelength λ _{cc}	≤ 1260 nm			
MFD	1310 nm	9.1 ± 0.3 μm		
	1550 nm	10.3 ± 0.5 μm		
Bending Induced Attenuation	1 Turn	φ 20	1550 nm	≤ 0.75 dB
			1625 nm	≤ 1.5 dB
	10 Turn	φ 30	1550 nm	≤ 0.25 dB
			1625 nm	≤ 1.0 dB
Core-Cladding Concentricity Error	≤ 0.5 μm			
Cladding Diameter	125 ± 0.7 μm			
Cladding Non Circularity	≤ 0.8 %			
Coating Diameter	242 ± 5 μm			

Fibre Type	G.652D	
Attenuation	1310 nm	≤ 0.36 dB/km
	1550 nm	≤ 0.23 dB/km
Chromatic Dispersion	1285-1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18 ps/nm.km
PMD (Max. Individual)	≤ 0.2 ps/ $\sqrt{\text{km}}$	
PMD (Link design value)	≤ 0.06 ps / $\sqrt{\text{km}}$	
Cable cut off wavelength λ_{cc}	≤ 1260 nm	
MFD	1310 nm	9.2 ± 0.4 μm
	1550 nm	10.4 ± 0.5 μm
Core-Cladding Concentricity Error	≤ 0.5 μm	
Cladding Diameter	125 ± 0.7 μm	
Cladding Non Circularity	≤ 0.8 %	
Primary Coating Diameter (Uncoloured)	242 ± 5 μm	

Cable Marking

As per customer requirement.

Cable Length

4.0/6.0 km ± 5 %

Packaging

Wooden drums or reels

Cable end sealed

Drum marking: Drum number, User name, HFCL Limited, Fibre count, Cable Length, Date of manufacture, Net weight, Gross weight

Cable Performance Standards

IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH.

