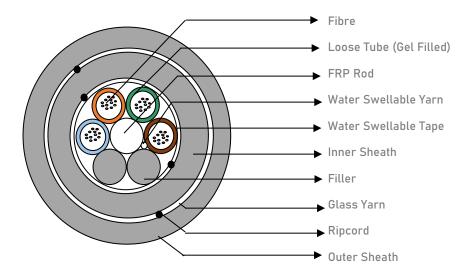


HFCL Limited

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Technical Specifications

24/48/96F Multitube Unarmoured OFC - Anti Termite & Anti Rodent



Product Details

Optical Fibre containing elements laid up around central strength member
Water blocked loose tubes
Water blocked core interstices
LSZH sheath as Inner protection
Glass Yarn Rodent protection and strength member
HDPE Sheath as outer Protection

Cable Construction

Parameter	Structure/Layout/Material			
Fibre Count	24F	48F	96F	
Number of fibres per tube	12			
Number of loose tubes - PBT	2	8		
Central Strength Member	FRP Rod			
Number Of Fillers – PE - Black	4 2		-	
Moisture Barrier	Water Swellable Yarn			
Core Wrapping	Water Swellable Tape			
Inner Sheath	LSZH – Black			
Peripheral Strength Member	Glass Yarn			
Outer Sheath	HDPE – Black – Anti Termite & Anti Rodent			
Number of Ripcords	4 – Polyester			
Cable Diameter	12.0 ± 0.5 mm	12.0 ± 0.5 mm	13.2 ± 0.5 mm	
Cable Weight	125 ± 10 kg/km	125 ± 10 kg/km	160 ± 15 kg/km	
Fibre Type	G.652D/OM1	G.652D	G.652D	

Colour Coding

Fibre Count	1	2	3	4	5	6	7	8	9	10	11	12
Fibre Colour EIA/TIA – 598	Bl	0r	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
Tube Count	1	2	3	4	5	6	7	8	9	10	11	12

Cable & Fibre Characteristics

Tanaila Ctuanuth Installation	24/48F	96F	JEC /070/ 1 21 F1	
Tensile Strength - Installation	3000 N	3500 N	IEC-60794-1-21-E1	
Crush Resistance	4000 N,	IEC-60794-1-21-E3		
Impact Strength		IEC-60794-1-21-E4		
Torsion		IEC-60794-1-21-E7		
Minimum Bend Radius	20 x D		IEC-60794-1-21-E11	
Water Penetration Test	1 m water head, 3 m sample, 24 hours		IEC-60794-1-22-F5	
	Installation	-20 °C to + 70 °C		
Environmental Performance	Operation	-30 °C to + 70 °C	IEC-60794-1-22-F1	
	Storage	-30 °C to + 70 °C		

Fibre Type	G.652D		
Attamustica	1310 nm	≤ 0.36 dB/km	
Attenuation	1550 nm	≤ 0.23 dB/km	
Charactic Dispersion	1285-1330 nm	≤ 3.5 ps/nm.km	
Chromatic Dispersion	1550 nm	≤ 18 ps/nm.km	
PMD (Max. Individual)	≤ 0.2 ps/√km		
PMD (Link design value)	≤ 0.06 ps/√km		
Cable cut off wavelength λcc	≤ 1260 nm		
MED	1310 nm	9.2 ± 0.4 μm	
MFD	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 %		
Coating Diameter	242 ± 5 μm		

Fibre Type	OM1		
Attanuation	850 nm	≤ 3.5 dB/km	
Attenuation	1300 nm	≤ 1.5 dB/km	
Dan dwidth	850 nm	≥ 200 MHz.km	
Bandwidth	1300 nm	≥ 500 MHz.km	
Core Diameter	62.5 ± 2.5 μm		
Core-Cladding Concentricity Error	≤ 1.5 μm		
Cladding Diameter	125 ± 1.0 μm		
Cladding Non Circularity	≤ 1.0 %		
Coating Diameter	242 ± 7 μm		

Cable Marking

As per customer requirement

Cable Length

4.0 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, Telcordia GR-20, ITU-T, RoHS, REACH.