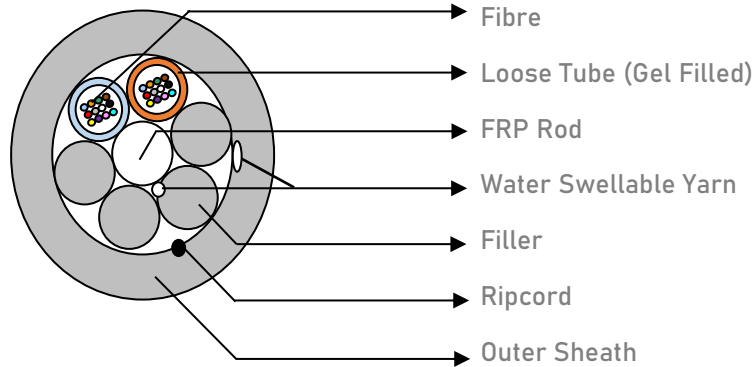


Technical Specifications

12/24/36/48/72F Micro Optical Fibre Cable



Product

Details

Optical Fibre containing elements laid up around central strength member

Gel Filled Water blocked loose tubes

Water blocked core interstices

HDPE sheath as external protection

Cable Construction

Parameter	Structure/Layout/Material
Fibre Count	12/24/36/48/72F
Number of fibres per tube	12
Number of loose tubes - PBT	1/2/3/4/6
Number of Fillers - HDPE Black	5/4/3/2/0
Central Strength Member	FRP Rod
Moisture Barrier	Water Swellable Yarn - (FRP+Core)
Outer Sheath	HDPE - Black
Ripcords	1 - Polyester
Cable Diameter	5.0 ± 0.3 mm
Cable Weight	20 ± 5 kg/km

Colour Coding

Fibre Colour EIA/TIA - 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
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Tube Colour EIA/TIA - 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
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Cable & Fibre Characteristics

Tensile Strength	500 N		IEC-60794-1-21-E1
Crush Resistance	1000 N		IEC-60794-1-21-E3
Impact Strength	1 Nm		IEC-60794-1-21-E4
Torsion	± 360 °		IEC-60794-1-21-E7
Minimum Bend Radius	20 x D		IEC-60794-1-21-E11
Kink	10 x D		IEC-60794-1-21-E10
Environmental Performance	Installation	- 5 °C to + 50 °C	IEC-60794-1-22-F1
	Operation	- 20 °C to + 60 °C	
	Storage	- 20 °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		
	1625 nm	≤ 22 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 %			
Primary Coating Diameter (Uncoloured)	242 ± 5 μm			

Cable Marking

HFCL Ltd 12/24/36/48/72F LT SM G.657A1 MICROCABLE *Year of manufacture Length Code Meter Marking Or As per customer requirement.*

Cable Length

2/4 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