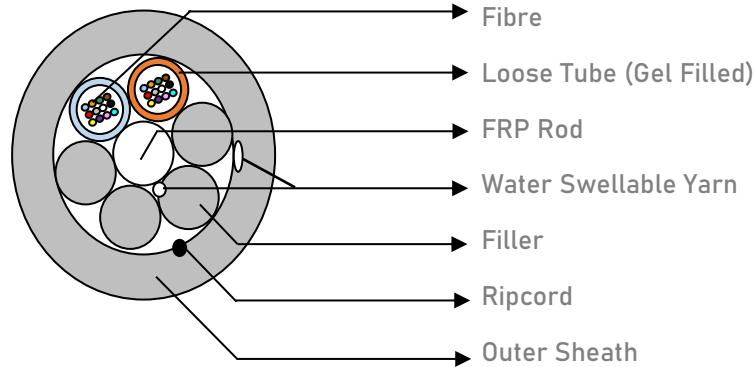


**Technical Specifications**  
**12/24/36/48/72F Micro Optical Fibre Cable**



**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	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	4.5 ± 0.3 mm
Cable Weight	15 ± 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	300 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	1550 nm		≤ 17.5 ps/nm.km	
PMD (Max. Individual)	≤ 0.1 ps/√km			
PMD (Link design value)	≤ 0.06 ps /√km			
Cable cut off wavelength λ <sub>cc</sub>	≤ 1260 nm			
Bending induced attenuation	1 turn	φ 20 mm	1550 nm	≤ 0.20 dB
			1625 nm	≤ 0.50 dB
	10 turns	φ 30 mm	1550 nm	≤ 0.20 dB
			1625 nm	≤ 0.50 dB
MFD	1310 nm		9.1 ± 0.4 μm	
Core-Cladding Concentricity Error	≤ 0.5 μm			
Cladding Diameter	125 ± 0.7 μm			
Cladding Non Circularity	≤ 0.7 %			
Primary Coating Diameter	200 ± 5 μm (Coloured)			

Cable Marking

HFCL Ltd 12/24/36/48/72F LT SM G.657A1 200 um 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