



HFCL Limited

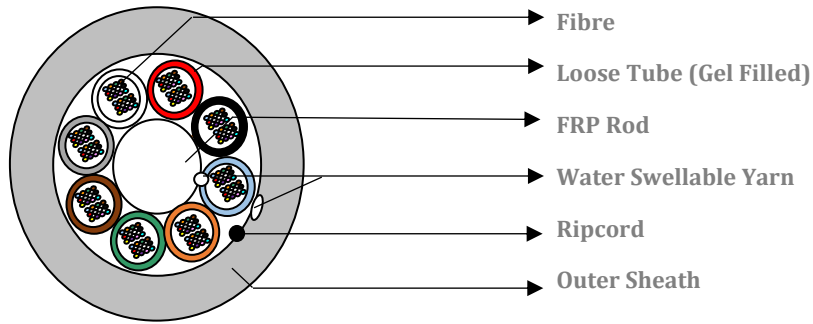
(FORMERLY - HIMACHAL FUTURISTIC COMMUNICATIONS LIMITED) - GOA

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Technical Specifications 192F Multitube Micro OFC



192F Cable Shown



Product

Details

Optical Fibre containing elements laid up around central strength member

Water blocked loose tubes

Water blocked core interstices

PE sheath as outer protection

Cable Construction

Parameter	Structure/Layout/Material
Fibre Count	192F
Number of fibres per tube	24
Number of loose tubes - PBT	8
Central Strength Member	FRP Rod
Moisture Barrier	(FRP+Core) - Water Swellable Yarn
Outer Sheath	PE - Black
Ripcords	1 - Polyester
Cable Diameter	6.1 ± 0.3 mm
Cable Weight	40 ± 5 kg/km

Colour Coding

Fibre Colour EIA/TIA - 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vl	Pk	Aq
	Bl*	Or*	Gr*	Br*	Sl*	Wh*	Rd*	Nt*	Yl*	Vl*	Pk*	Aq*

*Ring marking on fibres from 13-24 at every 50 mm distance. Natural ring marked fibre instead black fibre

Loose Tube Colour	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk
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Cable & Fibre Characteristics

Tensile Strength	1500 N	IEC-60794-1-21-E1	
Crush Resistance	1000 N	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	
Water Penetration Test	1 m water head, 3 m sample, 24 hours	IEC-60794-1-22-F5	
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	
	1625 nm		≤ 0.25 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 _{cc}	≤ 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	≤ 0.8 %			
Primary Coating Diameter	200 ± 5 μm			

Cable Marking

HFCL Ltd 192F LT SM G.657A1 200 μ m MICRO Year of manufacture Length Code Meter Marking Or As per customer requirement.

Cable Length

8 km \pm 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.