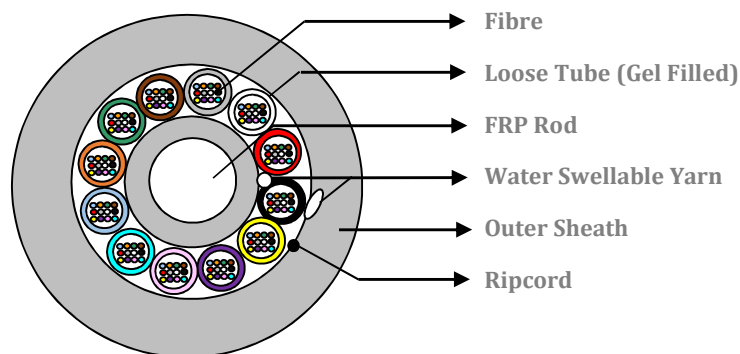




HFCL Limited
(FORMERLY - HIMACHAL FUTURISTIC COMMUNICATIONS LIMITED) - GOA

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Technical Specifications
12/24/48/72/96/144/288F Multitube Micro OFC
A-DQ2Y- MT - 250 um



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			
Fiber Count	12/24/48/72	96F	144	288
Number of fibers per tube	12		12	12
Number of loose tubes - PBT	1/2/4/6	8	12	Layer I : 9 Layer II : 15
Number of Fillers - HDPE - Black	5/4/2/0	0		
Central Strength Member - FRP Rod	1.5 ± 0.1 mm	2.4 ± 0.1 mm	2.5 mm PE upcoated	2.0 mm PE upcoated
Moisture Barrier - (FRP + Core)	Water Swellable yarn			
Outer Sheath	HDPE - Black			
Number of Ripcords	1 - Polyester			
Cable Diameter	5.3 ± 0.3 mm	6.3 ± 0.3 mm	8.0 ± 0.3 mm	9.5 ± 0.3 mm
Cable Weight	25 ± 5 kg/km	40 ± 5 kg/km	50 ± 5 kg/km	80 ± 5 kg/km

Colour Coding

Fibre Colour DIN VDE 0888	Rd	Gr	Bl	Yl	Wh	Sl	Br	Vi	Aq	Bk	Or	Pk
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Tube Colour DIN VDE 0888	Rd	Gr	Bl	Yl	Wh	Sl	Br	Vi	Aq	Bk	Or	Pk
	Rd	Gr	Bl									

#Stripe mark tubes from 13-15.

Cable & Fibre Characteristics

Tensile Strength (max.) (Short Term)	12/24/48/72F : 500 N 96/144/288F : 1000 N		IEC-60794-1-21-E1
Crush Resistance	300 N		IEC-60794-1-21-E3
Impact Strength	2 J		IEC-60794-1-21-E4
Torsion	± 180 °		IEC-60794-1-21-E7
Minimum Bend Radius	Under Traction : 20 x D Above Traction : 15 x D		IEC-60794-1-21-E11
Environmental Performance	Installation	-5 °C to + 50 °C	IEC-60794-1-22-F5
	Operation	-20 °C to + 60 °C	
	Storage	-20 °C to + 70 °C	

Fiber Type	G.652D	
Attenuation	1310 nm	≤ 0.36 dB/km
	1550 nm	≤ 0.22 dB/km
Chromatic Dispersion	1285-1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18 ps/nm.km
PMD	≤ 0.2 ps/√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	≤ 0.6 μm	
Cladding Diameter	125 ± 1.0 μm	
Cladding Non Circularity	≤ 1.0 %	
Primary Coating Diameter (Coloured)	250± 10 μm	

Fiber Type	G.657A1			
Attenuation	1310 nm	≤ 0.36 dB/km		
	1550 nm	≤ 0.22 dB/km		
Chromatic Dispersion	1285-1330 nm	≤ 3.5 ps/nm.km		
	1550 nm	≤ 18 ps/nm.km		
PMD (Max. Individual)	≤ 0.1 ps/√km			
PMD (Link design value)	≤ 0.04 ps / km			
Cable cut off wavelength λ _{cc}	≤ 1260 nm			
MFD	1310 nm	9.2 ± 0.4 μm		
	1550 nm	10.4 ± 0.5 μm		
Bending Induced Attenuation	1 Turn	φ 20	1550 nm	≤ 0.50 dB
			1625 nm	≤ 1.5 dB
	10 Turn	φ 30	1550 nm	≤ 0.05 dB
			1625 nm	≤ 0.30 dB
	100 Turn	φ 50	1310,1550,1625 nm	≤ 0.01 dB
Core-Cladding Concentricity Error	≤ 0.6 μm			
Cladding Diameter	125 ± 1.0 μm			
Cladding Non Circularity	≤ 1.0 %			
Primary Coating Diameter (Coloured)	245 ± 10 μm			

Cable Marking

HFCL Ltd, 12/24/48/72/96/144/288F SM G.652D/G.657A2 MICRO Year of manufacture, Length Code, Meter Marking

Cable Length

2.0 km $\pm$ 10 %

Packaging

Wooden drums or reels

Cable end sealed

Drum marking: Drum number, User name, HFCL Limited, Fiber 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.