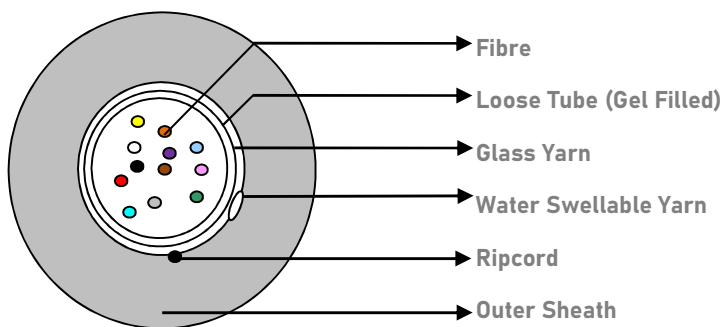


Technical Specifications

12F UT Unarmoured Optical Fibre Cable

AI-DQ(ZN)BH - UT



Product

Details

Optical Fiber containing elements laid up around central strength member
Gel Filled Water blocked loose tubes & Water blocked core interstices
Glass yarn provided as peripheral strength member
LSZH sheath as external protection

Cable Construction

Parameter	Structure/Layout/Material
Fiber Count	12F
Number of fibres per tube	12
Number of loose tubes - PBT	1
Moisture Barrier	Water Swellable Yarn
Peripheral strength member	Glass Yarn
Outer Sheath - LSZH - Black	1.5 mm (Nominal)
Ripcords - Polyester	1
Cable Diameter	7.0 ± 0.5 mm
Cable Weight	65.0 ± 10 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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Loose tube Colour EIA/TIA - 598	Nt
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Cable & Fibre Characteristics

Tensile Strength	1500 N	IEC-60794-1-21-E1
Crush Resistance	2000 N	IEC-60794-1-21-E3
Impact Strength	10 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
Water Penetration Test	1 m water head, 3m sample, 24 hours	IEC-60794-1-22-F5
Environmental Performance	Installation	-20 ° C to + 70°C
	Operation	-30 ° C to + 70°C
	Storage	-30 ° C to + 70°C

Single Mode Fibre	G.652D	
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	≤ 18.0 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	≤ 0.5 μm	
Cladding Diameter	125 ± 0.7 μm	
Cladding Non Circularity	≤ 0.7 %	
Primary Coating Diameter (Uncoloured)	242 ± 5 μm	

Cable Marking

HFCL Ltd 12F SM G.652D DUCT OFC *Year of manufacture Length Meter Marking Or 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, 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