TECHNICAL SPECIFICATION OF SINGLE LOOSE TUBE AND NON-METALIC ARMORED SINGLE LSZH SHEATHED FIBER OPTIC CABLE (IEC 60794-3-12)

1.Cable Type: A-DQ (BN) H **mxn….1.000N CT**

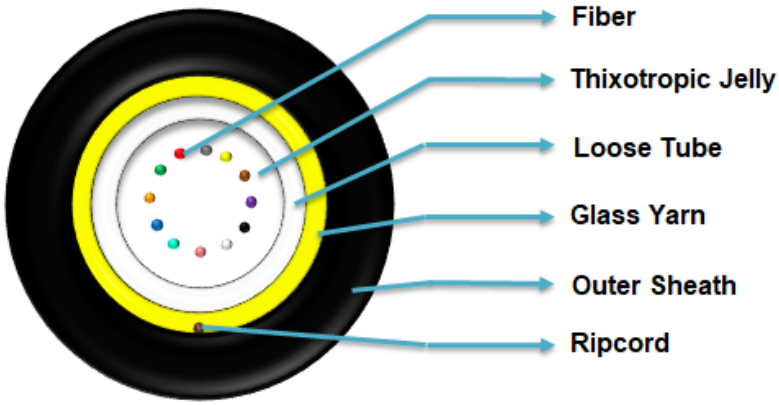
Fiber type	SM 9/125 (G.657)
Attenuation at 1310 nm	Max 0,360 dB/km
Attenuation at 1550 nm	Max 0,250 dB/km

		4 Core SM G.657
Tube Diameter	mm±0,07	2,50
Tube inner diameter	mm±0,07	1,70
Number of tube	Pieces	1
Number of fiber per tube	Fiber/tube	4
Tensile Strength (Installation)	N	1.000
Nominal Outer Diameter of cable	Nom.mm ± 0,5	5,5
Nominal Cable Weight	Kg/km	40
Nominal Gross Weight	Kg/drum	120
Nominal Cable Length on Drum	Meter/drum ± %5	2.000

Loose Buffer Tube	PBT (polybutylene terephthalate)	
Filling Compound in Loose Tube	Thixotropic Jelly Compound	
Auxiliary Strength Member	Glass Yarn	
Corrugated Steel Tape Thickness	NA	
Co-Polymer Thickness	NA	
Outer Sheath Material	LSZH (IEC 60332-1-2)	
Outer Sheath Color	Black	
Outer Sheath Thickness	Nom.1,00 ± 0,1 mm	
Ripcord	1 pieces under the sheath	
Cable drum	2.000 ± %5 mt	
Tensile Strength for Short Term	1.000N	IEC 60794-1-E1
Tensile Strength for Long Term	600N	IEC 60794-1-E1
Bending Radius	20xD	IEC 60794-1-2-E11
Repeated Bending Radius	5xD,10 cycle,50 N	IEC 60794-1-2-E6
Torsion Test	±180º,1 meter,10 Cycle	IEC 60794-1-2-E7
King Test	Min 20xD	IEC 60794-1-2-E10
Impact Test	1 meter 5 N	IEC 60794-1-2-E4
Crush Test	1.000N/100mm	IEC 60794-1-2-E3
Temperature Cycling	-20ºC/+70ºC	
Operation Temperature	-10ºC/+60ºC - Installation	
	-10ºC/+70ºC - Operation	

2.Cable Construction

2.1.Cable Construction



Note: Drawing is not scaled.

2.2.Color Code of Fibers

No of Fiber	1	2	3	4
Color	Blue	Orange	Green	Brown

3.Length marking on the cable

The outer sheath will be marked in one meter intervals as follows;

TURKUAZ KABLO 2023 4 SM ITU-T G.657 LSZH SHEATH <METRAJ BASKISI>

4.Color of Sheath

Outer sheath is LSZH material that is including UV protection in accordance with IEC 60332-1-2 international standards.

5.Packing

Shipment will be done with non-returnable wooden drums with protection.

6.Cable Life Time

Designed cable has a minimum 25 years' service life time, if the cable is correctly installed.

9- Specification for Single Mode Optical Fibre (G.657):

Optical Specifications

Attenuation:	@1310 nm:	Max.0,35 dB/km
	@1550 nm:	Max. 0,21 dB/km
	@1625 nm:	Max. 0,22 dB/km
	@ 1383±3 nm	Max. 0,33 dB/km

Bending induced attenuation:

Mandrel radius	Number of Turns	Wavelength	Attenuation
7,5 mm	1	1550	Max0,50
7,5 mm	1	1625	Max 1,0
10 mm	1	1550	Max 0,10
10 mm	1	1625	Max 0,20
15 mm	10	1550	Max 0,03
15 mm	10	1620	Max 0,1

Cable Cut-off Wavelength	≤ 1260
Chromatic Dispersion at 1550 nm	≤ 18 (ps nm/km)
Zero Dispersion Wavelengths	1300-1324 nm
Zero Dispersion slope	≤ 0,092 ps/(nm² .km)
Polarization Mode Dispersion Coefficient:	≤ 0,2 ps/ rkm
Fiber PMD link design value	≤ 0,08 ps/ rkm

Geometrical Specifications

Mode Field Diameter at 1310 nm:	8,6µm ± 0,4
Cladding Diameter:	125µm ±0,7µm
Core/Cladding Concentricity Error:	≤ 0,5 µm
Cladding Non-Circularity:	≤ 0,7%
Coating Diameter colored	250±15µm
Coating/Cladding Non-Circularity Error	≤ 12%
Fiber proof test level	≥ 100 kpsi (1,0 % strain)