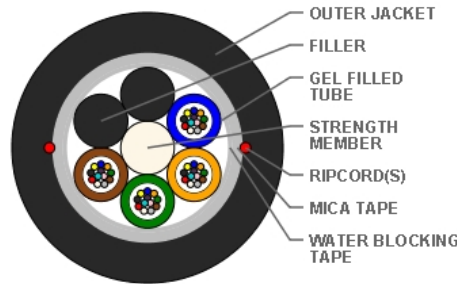


Product Name : 48F SM (G.657A1) Duct Lite Multitube Single Sheath [LSZH] OFC
Product Code : DT0048FS104TGL106
Revision : 1.0 **Date** : 25-May-2021

Product Details

STL DUCT-LITE® Multitube Single Jacket Fibre Optic Cables are suitable for duct applications. This cable is a stranded loose tube cable with optical fibres placed inside robust buffer tubes stranded around a fibre reinforced plastic (FRP) central strength member. In addition to optical fibres, the buffer tubes contain water blocking gel and the cable core is surrounded with water-swellaable tape to prevent water ingress in the interstices of cable core.

Construction Diagram



* Typical Construction Diagram - Not to Scale

Features & Benefits

- Multitube design with ripcords for easy and quick mid span access
- Easily removable rugged thermoplastic jacket
- Water-blocking technology for gel free core helps in quicker end preparation
- Flexible, light weight, easy to handle & install
- Tensile and crush resistant
- UV protected

Specifications

Physical Characteristics	
Fibre Count	48
Fibre Type	Sterlite ITU-T G.657 A1
Maximum Cabled Attenuation (dB/km)	1310nm : 0.35 & 1550nm : 0.23
PMD LDV (ps/sqrt.km)	<= 0.1
Fibres per Tube	12
Fibre Color Sequence	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua
Central Strength Member	FRP (Fibre Reinforced Plastic)
No of Tubes in Layer 1	4
Tube Color Sequence	Blue, Orange, Green, Brown, Filler, Filler
No of Fillers	2
Filler Color	Black
Outer Sheath Material	UV Proof Black LSZH
No of Ripcords Below Outer Sheath	2
Nominal Cable Dimensions (mm)	10±0.5
Nominal Cable Weight (kg/km)	115±10%

Remarks : CPR Rating - Dca

Mechanical & Environmental Characteristics

Cable Characteristics	Testing Standard	Cable Performance
Tensile Strength (N)	IEC-60794-1-21-E1	1500
Crush Resistance (N/100 mm)	IEC-60794-1-21-E3	1500
Impact Strength(Nm)	IEC-60794-1-21-E4	5
Torsion	IEC-60794-1-21-E7	±180°
Min. Bend Radius (During Installation)	IEC-60794-1-21-E11	20 D
Min. Bend Radius (After Installation)	IEC-60794-1-21-E11	15 D
Water Penetration Test	IEC-60794-1-22-F5	1m waterhead, 3m samples, 24 h
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 h
Temperature Performance	IEC-60794-1-22-F1	Max. change in attenuation shall be ≤ 0.15 dB/km
Installation		-10°C to +70°C
Operation		-40°C to +70°C
Storage		-40°C to +70°C

Note : All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be ≤ 0.05 dB/km for Single Mode fibre and ≤ 0.3 dB/km for Multimode fibre.

Cable Performance Standards

Cable complies to the following standards IEC 60793, IEC 60794, Telecordia GR-20, ITU-T, RoHS, REACH.

Packing and Lengths

Drum Type	: Wooden Drums
Length Multiple (km)	: $4 \pm 5\%$
Order Tolerance	: $\pm 5\%$
Short Lengths	: Max 5%, Customer Approval

Printing Details

Printing	: STL SM 48F G657A1 DUCT LASER SYMBOL TELEPHONE SYMBOL YEAR OF MANUFACTURE LENGTH CODE METER MARKING
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Note : The accuracy of marking shall be $+0.5\%$. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supersedes the earlier markings.

Revision History

Revision No.	Date	Description
1.0	24-May-2021	Initial Issue

Prepared By : Zaid