

**Product Name** : 96F SM G.652 D Multiloose Tube PE/PA Duct Lite Optical Fibre Cable

Product Code : DT0096FS308TGPN01

**Revision** : 1.0 **Date** : 14-Nov-2019

#### **Product Details**

Sterlite Tech<sup>TM</sup> 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-swellable tape to prevent water ingress in the interstices of cable core.

# **Construction Diagram**



<sup>\*</sup> 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	96
Fibre Type	Sterlite Fibre ITU-T G.652 D
Maximum Cabled Attenuation (dB/km)	1310nm: 0.35 & 1550nm: 0.23
Individual PMD (ps/sqrt.km)	= 0.2</td
Link Design PMD (ps/sqrt.km)	= 0.1</td
Fibres per Tube	12
Fibre Color Sequence	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua
Tube Size (mm)	2
Central Strength Member	FRP (Fibre Reinforced Plastic)
No of Tubes in Layer 1	8
Tube Color Sequence	Blue, Orange, Green, Brown, Slate, White, Red, Black
Inner Sheath Material	UV Proof Black HDPE
Nominal Sheath Thickness (mm)	1.4
No of Ripcords Below Inner Sheath	2
Outer Sheath Material	UV Proof Orange Nylon 1010
Nominal Sheath Thickness (mm)	0.6
Nominal Cable Dimensions (mm)	11.8+/- 0.5
Nominal Cable Weight (kg/km)	117+/- 10%



Mechanical & Environmental Characteristics			
Cable Characterisitics	<b>Testing Standard</b>	Cable Performance	
Tensile Strength (N)	IEC-60794-1-21-E1	3500	
Crush Resistance (N/100 mm)	IEC-60794-1-21-E3	2000	
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 head, 3m samples, 24 hrs	
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hr	
*Temperature Performance	IEC-60794-1-22-F1	Max. change in attenuation shall be =0.15 dB/km</td	
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) : 8 +/- 5% Order Tolerance : +/- 5%

Short Lengths : Max 5%, Customer Approval

**Printing Details** 

Printing : STERLITE SM 96F G652 D PE/PA DUCT LASER SYMBOL TELEPHONE SYMBOL YEAR

OF MANUFACTURE LENGTH CODE METER MARKING

**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	14-Nov-2019	Initial Issue

**Prepared By:** Brijesh Y