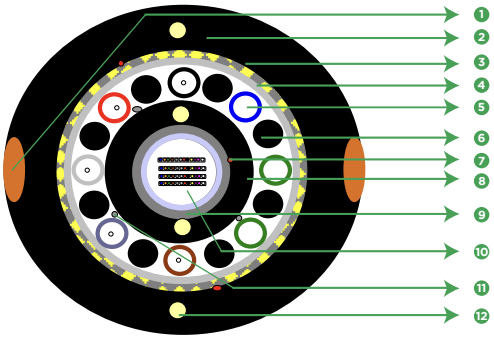
Product Specification

AERIAL -LITE

Intrusion Proof Fibre Optic Cable-100 m Span, 56F SM (G.652D)



1 ORANGE STRIPE MARKING 2 HDPE BLACK OUTER SHEATH (LAYER VII) 3 ARAMID YARN LAYER (LAYER VI)
4 WATER SWELLABLE TAPE (LAYER V) 5 LOOSE TUBE WITH FibreS & JELLY (LAYER IV) 6 SENSORY LAYER FILLERS
7 RIPCORD(S) 8 HDPE BLACK INNER SHEATH (LAYER III) 9 WATER SWELLABLE TAPE (LAYER II)
10 LOOSE TUBE WITH RIBBON & JELLY (LAYER I) 11 WATER SWELLABLE YARNS 12 EMBEDDED STRENGTH MEMBER (FRP)

** Typical Construction Diagram - Not to Scale*

Product Details

Fibre in Inner Core
Single Mode Optical Fibre- 48 Nos. Sterlite Fibre ITU.T - G.652.D
Maximum Cabled Fibre Attenuation dB/Km- 1310nm : 0.36 & 1550nm : 0.22 & 1625nm : 0.25
PMD Fibre- ≤ 0.2 ps/ fflkm

Central Ribbon Loose Tube
Filling Jelly- Thixotropic jelly to prevent water ingress in loose tube
Fibres per Ribbon- 12 Nos.
Ribbon/Tube- 4 Nos.
Loose Tube- 1 Nos. Thermoplastic Material (PBTP)

Inner Core
Water blocking elements- Water Swellable Tape to prevent water penetration across inner core
Rip Cord- 1 Nos. Polyester Based Twisted Yarns, Applied Below Inner Sheath
Embedded strength member- 0.7 mm x 2 No Fibre Reinforced Plastic to provide tensile strength & antibuckling properties to cable
Inner Sheathing- UV Proof High Density Black Polyethylene, 1.3 mm Minimum Thickness

Product Details

Fibre in Outer Layer
Single Mode Optical Fibre Sensory- 8 Nos. Sterlite Fibre ITU.T - G.652.D
Maximum Cabled Fibre Attenuation dB/Km- 1310nm : 0.36 & 1550nm : 0.22 & 1625nm : 0.25
PMD Fibre- ≤ 0.2 ps/ √km

Outer Core
Filling Jelly- Thixotropic jelly to prevent water ingress in loose tube
Sensory Fibre/Tube- 1 No.
Sensory Layer Tube- 8 Nos Thermosplastic Material (PBT) LT ID/OD : 1.4/2.0 + 0.1 mm
Sensory Layer Filler- 8 Nos. Polyethylene Black
Water blocking elements- Water Swellable Yarns applied over the inner core to prevent water penetration
Core Wrapping- Binder and Water Blocking Tape

Cable
Peripheral Strength Member- Aramid yarns with helical wound & full coverage over cable core to meet tensile strength
Rip Cords- 2 Nos. Polyester Based Twisted Yarns Applied Below Outer Sheath
Embedded strength member- 1.0 mm x 2No Fibre Reinforced Plastic to provide tensile strength & antibuckling properties to cable
Stripe Marking- Two Orange Stripe marking on outer sheath (180° apart)
Outer Sheathing- UV Proof Heigh Density Black Polyethylene 1.8 mm Minimum Thickness

Printing Details

RIBBON PRINTING FOR G652D : 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, 4 RIBBON 4.
Printing : STERLITE PHONE SYMBOL LASER SYMBOL TYPE C G652D 48F+8F YEAR OF MANUFACTURE NFS OFC METER MARKING CABLE ID (WHITE - HOT FOIL EMB.)

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.

Colour Details

Fibre Colour in Ribbon	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
Fibre Colour in Sensory LT	Natural											
Ribbon LT Colour	White											
Sensory LT Colour	Blue	Orange	Green	Brown	Slate	White	Red	Black				
Filler Colour	Black											
Inner/Outer Sheath Colour	Black											

Specifications

Mechanical & Environmental Characteristics	
Cable Characteristics	**Cable Performance**
Tensile Strength	6 x W x 9.81 Newton
Impact Strength	25 Nm, 0.5 M, Minimum Bend Radius 20 D
Torsion	180°x10 cycles, Crush Resistance, 4000 N for 10 min
Minimum Bend Radius	20 D
Crush Resistance	4000 N for 10 min
Repeated Bend	90° back & forth 10 cycles
Water Penetration	1m head, 3m samples, 24 hrs
Temperature Performance	
Installation	-15° C to +60° C
Operation	-30° C to +70° C
Storage	-30° C to +70° C
Drip Test	30 cm , 70° C, 24Hrs.

Note: All tests shall be carried out as per IEC Standard. Change in attenuation shall be < 0.05 dB at 1550 / 1625 nm.

Physical Parameters

Cable Diameter (mm) Nominal	Cable wt. (Kg/km)	Cable Length
19.0 + 0.5	260 ± 8%	2/4 Km ± 10 %

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For additional information please contact your sales representative.
You can also visit our website at www.stl.tech