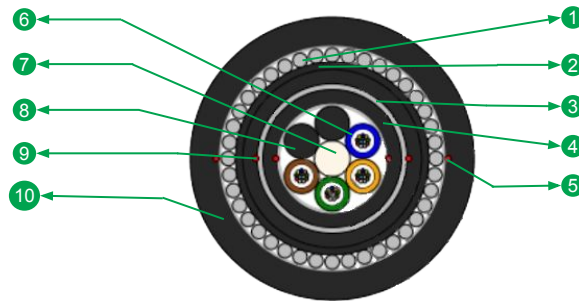


ArmorLite®

OSP QJ Wire Armored G.652 D Gel Filled OFC



Steel Wire Armored Design

- | | | | | |
|-------------------|---------------------|----------------------------|----------------|-----------------------|
| 1 STEEL WIRE | 2 SEPARATION SHEATH | 3 LAMINATED ALUMINIUM TAPE | 4 INNER JACKET | 4 WATER BLOCKING TAPE |
| 5 GEL FILLED TUBE | 6 RIPCORD(S) | 7 STRENGTH MEMBERS | 8 FILLER | 8 OUTER JACKET |

* Typical Construction Diagram - Not to Scale

Features & Benefits

- Steel wire armour provide rodent protection improved crush and impact protection
- Jelly filled tube and dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket
- Flexible, easy to handle & install
- Tensile and crush resistant
- Harsh Hydrocarbon environment resistant

Product Details

STL ARMOR-LITE® Multitube Quadruple Jacket Steel Wire Armored Cables are suitable for direct buried applications. 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 the cable core.

Cable Performance Standards

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

Printing Details

Sterlite sm “fiber count” g652d armor laser symbol telephone symbol year of manufacture length code meter marking

Note : Printing shall be done with white hot foil. 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.

Specifications

| Physical Characteristics | |
|--|--|
| Fibre Type | Sterlite Fibre ITU-T G.652 D |
| Maximum Cabled Attenuation (dB/km) | 1310nm : 0.36 & 1550nm : 0.23 |
| PMD/LDV (ps/sqrt.km) | </= 0.1 |
| Fibre Color Sequence | Blue,Orange,Green,Brown,Slate,White,Red,Black,Yellow,Violet,Pink,Aqua |
| Tube Material | PBT & Filling gel |
| Central Strength Members | FRP (Fibre Reinforced Plastic) |
| Water Blocking | Black |
| Metallic Armoring (For Armored Design) | Black Thermoplastic Flame Retardant Polyolefin (1.0mm nominal thickness) |
| No of Ripcords Below Aluminium Tape | 2 |
| Moisture Barrier | Aluminium Tape |
| Intermediate sheath- 1 | Black HDPE (1.0mm nominal thickness) |
| Intermediate sheath- 2 | Black Nylon (0.5mm nominal thickness) |
| No of Ripcords Below Intermediate Sheath-1 | 2 |
| Metallic Armoring | Steel Wire Armoring |
| No of Ripcords Below Outer Sheath | 2 |
| Outer Sheath | UV Proof Black Thermoplastic Flame Retardant Polyolefin Sheath |

| Optical Characteristics | |
|-------------------------------------|---|
| ITU-T Standards | STL NOVA 250 (ITU-T G.657.A1/G.652.D) |
| Mode Field Diameter at 1310nm | 9.1 ± 0.4 μm |
| Mode Field Diameter at 1550nm | 10.3 ± 0.5 μm |
| Cladding Diameter | 125 ±0.7 μm |
| Coating Diameter (Uncolored) | 242 ± 5 μm |
| Cutoff Wavelength | ≤1260 nm |
| Max Core Concentricity Error | 0.50μm |
| Cladding Non-circularity | 0.70% |
| Chromatic Dispersion at 1285-1330nm | 3.5 ps/(nm x km) |
| Chromatic Dispersion at 1550nm | 17.5 ps/(nm x km) |
| Macro Bend Loss | 1 turn 10mm radius : ≤0.5dB @1550nm & ≤1.5 dB@1625nm 10 turns 15mm radius : ≤0.1dB @1550nm & ≤ 0.3 dB@1625nm 1 turn 16mm radius : ≤ 0.03dB@1550nm |

Cable Characteristics

| Fibre Count | Fibre Per Tube | No. of Tubes/Filler | Tubes Color Sequence | Cable Diameter (+/- 2.0 mm) | Cable Weight (kg/km +/- 10%) |
|-------------|----------------|---------------------|--|-----------------------------|------------------------------|
| 4 | 4 | 1/5 | Blue, Filler, Filler, Filler, Filler, Filler | 20.0 | 600 |
| 24 | 12 | 2/4 | Blue, Orange, Filler, Filler, Filler, Filler | 20.0 | 600 |
| 48 | 12 | 4/2 | Blue, Orange, Green, Brown, Filler, Filler | 20.0 | 600 |
| 72 | 12 | 6/0 | Blue,Orange,Green,Brown,Slate,White | 20.0 | 600 |

Mechanical & Environmental Characteristics

| Cable Characteristics | Testing Standard | Cable Performance |
|--|--------------------|--------------------------------|
| Tensile Strength(N) | IEC-60794-1-21-E1 | 5000 |
| Crush Resistance (N/100mmX100mm) | IEC-60794-1-21-E3 | 4000 |
| Impact Strength(Nm) | IEC-60794-1-21-E4 | 20 |
| 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 | 12.5 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 | |
| Installation | | -10°C to +70°C |
| Operation | | -40°C to +70°C |
| Storage | | -40°C to +70°C |
| Flame Retardant Test Standards | IEC 60332-3-22 | |

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.

Packing and Lengths

| Drum Type | Length Multiple (in KM) | Order Tolerance | Short Lengths |
|--------------|-------------------------|-----------------|---------------------------|
| Wooden Drums | 4 ± 5% | ± 5% | Max 5%, Customer Approval |

For additional information please contact your sales representative.

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