

FIBRE OPTIC CABLE

UNITUBE / CST / PE / MM

Construction

Made with high quality optical fibres suitable for operation at 850nm & 1300nm. The fibres conform to international standard ITU-T G651. The fibres have excellent geometrical properties to yield low splice loss. The fibres have dual acrylate coating and colour of the coating will not change over period of time.

Applications

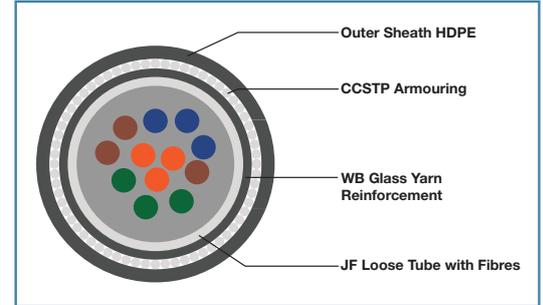
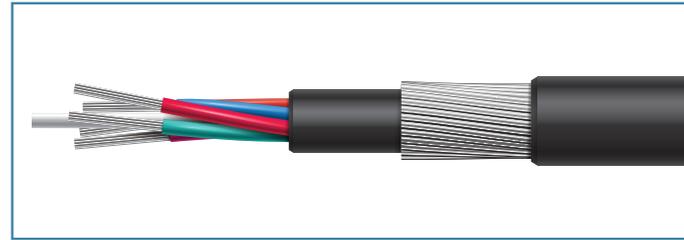
Communication applications.

Packaging

Available in 500 metre drums.
Cut lengths available on request.

Specification

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|--|--|
| Max. Permissible Tensile Force | 2000 N - Short Term & 1000 N - Long Term |
| Crush Resistance | 2000 Newton / 10 cm |
| Minimum Bending Radius | 20 x Cable Diameter |
| Max. Operating / Installation Temp. | -20°C to +70°C |
| Max. Span Length | 70 - 75 Mtr. |
| Cladding Diameter | 125.0 ± 2.0 µm |
| Core Diameter | 50 ± 1.0 µm |
| Coating Diameter | 245 ± 10 µm |
| Numerical Aperture | 0.200 ± 0.015 |
| Cladding Non-Circularity | ≤ 1.0% |
| Core Non-Circularity | ≤ 5.0% |
| Coated Fibre Diameter | 235 to 255 µm |
| Core/Cladding Concentricity Error | ≤ 2 µm |
| Coating/Cladding Concentricity Error | ≤ 12 µm |
| Minimum Proof Strength - Strain | 0.70 GPa (100 Kpsi) - 1% |
| Fiber Macrobend (100 turns around 75mm dia. Mandrel) | ≤ 0.05 dB @ 1310 nm & ≤ 0.10 dB @ 1550 nm |
| Fiber Macrobend (1 turn around 32mm dia. Mandrel) | ≤ 0.5 dB @ 850 nm & 1300 nm |
| Coating Strip Force | 1.3 N ≤ F ≤ 8.9 N |
| Bandwidth | 500/500 MHz.Km @ 850/1300 nm |
| Attenuation | ≤ 2.7 dB/Km @ 850 nm & ≤ 0.8 dB/Km @ 1300 nm |
| Dynamic Tensile Strength | Unaged: > 550 Kpsi (3.8 GPa) a Aged: > 440 Kpsi (3.0 GPa) |
| Dynamic Fatigue | ≥ 20 |
| Static Fatigue | ≥ 20 |



Physical and Dimensions Properties

Specification

| | |
|------------------------|---|
| Type of Fibre | 50/125 MMF |
| Loose Tube Diameter | 2.8 ± 0.1mm |
| Strength Member | Water Blocking Glass Yarn Reinforcement |
| Outer Sheath Material | HDPE |
| Outer Sheath Thickness | Min. 1.5mm |
| Outer Cable Diameter | 8.5 mm Nominal |
| Cable Weight | 80 kg/km Nominal |
| Printing on Cable | As per customer requirement |
| Standard Length | 2,4 ± 10% KMS |

| No. of Fibres | Colour of Fibre |
|---------------|--|
| 4F | Blue, Orange, Green & Brown |
| 6F | Blue, Orange, Green, Brown, Slate & White |
| 8F | Blue, Orange, Green, Brown, Slate, White, Red & Black |
| 12F | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose & Natural |

* Fibre optic HDD/CST with Steel Wire Armouring available on request.