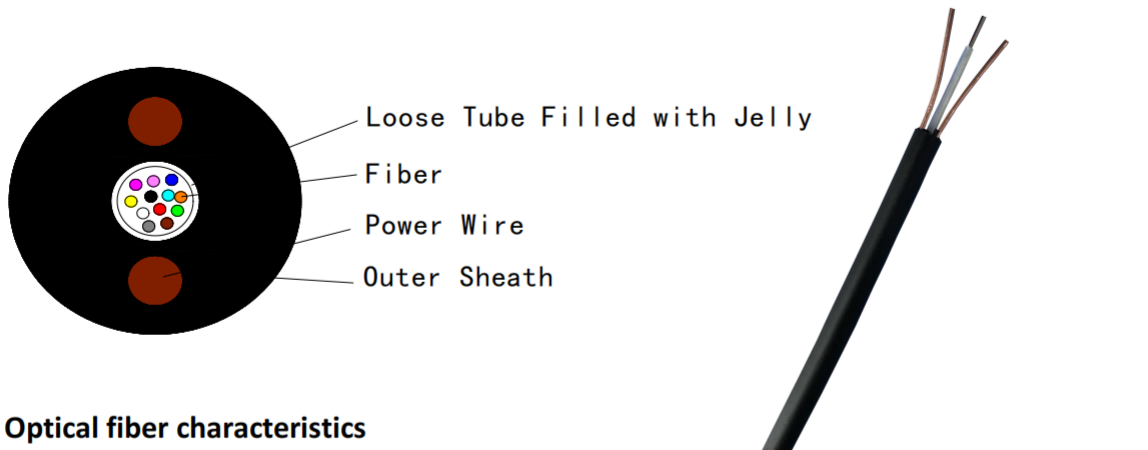


DYXY

Cable Design



Optical fiber characteristics

| Optical Characteristics | | | | | |
|---|--------|-------------------|-------------------|---------------------------|---------------------------|
| Fiber Type | | G.652 | G.655 | 50/125 μ m | 62.5/125 μ m |
| Attenuation (+20 $^{\circ}$ C) | 850nm | | | ≤ 3.0 dB/km | ≤ 3.3 dB/km |
| | 1300nm | | | ≤ 1.0 dB/km | ≤ 1.0 dB/km |
| | 1310nm | ≤ 0.36 dB/km | ≤ 0.40 dB/km | | |
| | 1550nm | ≤ 0.22 dB/km | ≤ 0.23 dB/km | | |
| Bandwidth | 850nm | | | ≥ 500 MHz \cdot km | ≥ 200 MHz \cdot km |
| | 1300nm | | | ≥ 500 MHz \cdot km | ≥ 500 MHz \cdot km |
| Numerical Aperture | | | | 0.200 \pm 0.015NA | 0.275 \pm 0.015NA |
| Cable Cut-off Wavelength λ_{cc} | | ≤ 1260 nm | ≤ 1450 nm | | |

Technical data

| Structure and Technical Specifications | | | | | | |
|--|-----------------------|------------------------|----------------------------|-----------|--------------------------------------|-----------|
| Fiber Count | Nominal Diameter (mm) | Nominal Weight (kg/km) | Allowable Tensile Load (N) | | Allowable Crush Resistance (N/100mm) | |
| | | | Short Term | Long Term | Short Term | Long Term |
| 2~12 | 6 | 60 | 1500 | 500 | 1000 | 300 |
| 14~24 | 6.8 | 85 | 1500 | 500 | 1000 | 300 |

Identification

| | | | | | | | | | | | | |
|-------|------|--------|-------|------|------|-------|-----|-------|--------|--------|------|------|
| No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Color | blue | orange | green | brow | grey | white | red | black | yellow | violet | pink | aqua |
| No. | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Color | blue | orange | green | brow | grey | white | red | black | yellow | violet | pink | aqua |

Loose tube & Filler color

| | |
|-------|-------|
| No. | 1 |
| Color | white |

Test

| Parameter | Test method | Test conditions | Acceptance criteria* | |
|---------------------|---|---|--|---------------------------------|
| Tensile strength | IEC 60794-1-2-E1 | Load: As per cable maximum tensile strength in table above. | Change in Attn <0.05 dB/Km. No damage or rack to cable & no fiber break | |
| Crush | IEC 60794-1-2-E3 | Short time: 10 min Long time: 120 min Load: As per maximum crush resistance in table above Number of positions: 3 adjacent sections (ensuring one over tube and one over lay reversal) | | |
| Impact | IEC 60794-1-2-E4 | Weight: 1.5 kg Height: 1.0 m Anvil radius: 12.5 mm Impacts: 1 | | |
| Torsion | IEC 60794-1-2-E7 | Sample length: 1 m Bends: 360° (1turn) clockwise and after measurement (one minute) 720° (2turns) anticlockwise (two minutes) | | |
| Bend | IEC 60794-1-2-E11 | Mandrel diameter: 180 mm Bend: 360° (1turn) | | |
| Bend under tension | Concurrent to tensile test IEC 60794-1-2-E18 | Mandrel diameter: 360 mm Bend: 360° (1turn) | | |
| Temperature cycling | IEC 60794-1-2-F1 | Sample length: 1000 m (minimum) Temperature range: From -10°C to +70°C | | |
| Compound Flow Test | IEC 60794-1-2 | Sample length: 300mm in an air oven(24Hour) Temperature of 50 °C No Dripping | | |
| Water penetration | IEC 60794-1-2-F5B | Sample length=3m, Water height=1m | | No water leakage after 24 hours |

Marking:

The color of marking is white, but if the remarking is necessary, the **black color** marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress