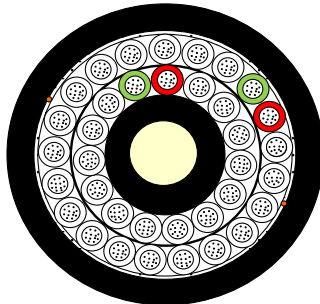


Outdoor microduct optical fibre cable

TV05778



-not to scale-

Cable Design

According to IEC/EN 60794

- **Optical Fibres:** 250µm single-mode.
- **Central Strength Member (CSM):** glass fibres reinforced plastic rod (GRP) with over-sheath.
- **Tubes:** thermoplastic material containing 12 optical fibres and filled with a suitable water tightness compound.
- **Stranding:** loose tubes, SZ stranded around the CSM.
- **Longitudinal Water Tightness:** water swellable materials (dry core).
- **Outer Sheath:** UV resistant HDPE, 2 ripcords beneath.

Cable Application

These outdoor Sirocco microduct optical fibre cables are optimized for installation by blowing into microducts and protected microducts. Please refer to our General Installation, Safety & Handling recommendations handling.

Technical Data

| | | |
|------------------------------------|---------|-----------|
| No. of Fibres | | 432 |
| Layout (Tubes x Fibres) | - | 36 x 12 |
| Tube Diameter – Ø | mm | 1.65 |
| CSM/Enlargement – Ø | mm | 3.0 / 6.5 |
| Sheath Thickness | mm | 0.8 |
| Cable Diameter – Ø | mm | 15.0 |
| Cable Weight | kg / km | 185 |
| MIT (Maximum Installation Tension) | N | 1850 |

| | | | |
|------------------------|----|-------------------------------------|--|
| Minimum Bending Radius | mm | Under Maximum Tension: 20 x Cable Ø | Without Tension: 10 x Cable Ø |
| Temperature Range | °C | Transport & Storage: -40 → +70 | Installation: -20 → +45 Operation: -30 → +60 |

Main Characteristics

| Test | Standard | Specified Value | Acceptance Criteria |
|---------------------|--------------------|--------------------------------------|--|
| Tensile Performance | IEC 60794-1-21-E1 | 1 x W, see table above | $\Delta\alpha \leq 0.05$ dB, $\Delta I/I \leq 0.60\%$ |
| Crush | IEC 60794-1-21-E3 | 1500 N / 100 mm, 1 min | $\Delta\alpha \leq 0.05$ dB |
| Impact | IEC 60794-1-21-E4 | 1 J, 3 impacts, R = 300 mm | $\Delta\alpha \leq 0.05$ dB |
| Repeated Bending | IEC 60794-1-21-E6 | R = 10 x OD, 25 cycles | Cable integrity |
| Torsion | IEC 60794-1-21-E7 | $\pm 360^\circ$, 2 m | $\Delta\alpha \leq 0.05$ dB |
| Kink | IEC 60794-1-21-E10 | R = 10 x OD | Cable integrity |
| Bend | IEC 60794-1-21-E11 | R = 10 x OD, 4 turns, 3 cycles | $\Delta\alpha \leq 0.05$ dB |
| Temperature Cycling | IEC 60794-1-22-F1 | -30 °C to +60 °C -40 °C to +60 °C | $\Delta\alpha \leq 0.05$ dB/km $\Delta\alpha \leq 0.15$ dB/km |
| Water Penetration | IEC 60794-1-22-F5B | 3 m sample, 1 m water, 24 h | no water penetration |
| Ageing | IEC 60794-1-22-F9 | 168 hours, +85 °C | $\Delta\alpha \leq 0.25$ dB/km, 0.10 dB/km average |

Optical Characteristics

See the attached 250µm cabled optical fibre data sheet.

Identification

Fibre Colours ⁽¹⁾:

| No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------|------|--------|-------|-----|------|--------|-------|--------|-------|-------|------|-----------|
| Colour | blue | orange | green | red | grey | yellow | brown | violet | black | white | pink | turquoise |

Tube Colours (inner and outer layer) ⁽¹⁾:

| No. | Pilot | Intermediate | Marker |
|--------|-------|--------------|--------|
| Colour | red | white | green |


(1) Other colour set available upon agreement.

Sheath Colour:

The outer sheath colour is black.

Sheath Marking ⁽²⁾:

The outer sheath is marked in 1-meter intervals as follows:

<length marking in meters>M  <no. of fibres>F <fibre type> PRYSMIAN PGH <year of manufacture>

(2) Customized marking available upon agreement.

Logistic

Packing: Plywood reels or wooden drums with protection.

Delivery Lengths ⁽³⁾: Standard delivery length is 2 km.
Maximum delivery length is 4 km.

(3) Other delivery lengths available upon agreement.

All optical measurements in accordance with ITU-T G650 recommendations

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