

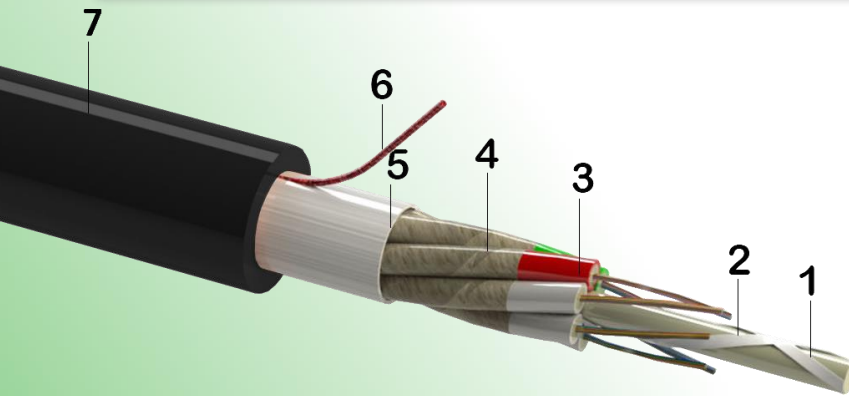
Cable construction code:

* for more details see "Coding of FOC constructions - guide"

DIN code:

QT.x2,3GF xx.yy.zz.c

J/A-DQ(BN)H wbg nx2,3 fr



1. FRP central strength member
2. Water swell-able yarn
3. Gel filled PBT loose tube with optical fibres
4. Fire-resistant tape
5. Water swell-able e-glass yarn
6. Rip-cord
7. FRLSOH UV stable outer jacket

Cable general description

Multi-loose-tube non-metallic fire-resistant cable with improved rodent protection for indoor or outdoor duct installation.

| Construction and dimensions | QT6x2,3GF | QT8x2,3GF | QT3x2,3GF |
|--------------------------------------|--------------|--------------|--------------|
| Max. fibre count (12 fibres/tube) | 72 | 96 | 144 |
| Loose-tubes count | 6 | 8 | 12 |
| Loose tube nominal diameter (mm) | 2,3 | 2,3 | 2,3 |
| FRP/coat. CSM nominal thickness (mm) | 2,8 | 2,5/4,5 | 2,8/7,8 |
| Outer jacket nominal thickness (mm) | 1,8 | 1,8 | 1,8 |
| Cable nominal outer diameter (mm) | 13,0 | 14,6 | 18,0 |
| Cable informative weight (kg/km) | 180 | 225 | 340 |
| Standard put-up length (m) | 2100/4100±5% | 2100/4100±5% | 2100/4100±5% |

Outer jacket

| | |
|----------------|--|
| Material | UV stable FRLSOH |
| Jacket colour | Black. Other colours available on request |
| Sheath marking | Ink-Jet, white or black depending on the jacket colour |
| Print legend | Trademark construction name cable type batch-number meter-marking CE marking Customer print legend available on request |

Optical fibres

Colour coding (IEC 60304) 1.-12.: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink

Loose-tube colour coding 1.red, 2.green, rest of tubes white (fillers uncoloured or black)

Fibre type Single- and multi-mode fibres (OS2, OM1, OM2, OM3, OM4)

Geometrical and transmission parameters are available at separate generic datasheet

Mechanical characteristics

| Test | Test method | Value | | | Acceptance criteria* | |
|---------------------|--------------------|---|--------|--------|--|---|
| Tensile performance | EN 60794-1-21:E1 | | QT6x.. | QT8x.. | QT3x.. | $\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test |
| | | long term | 1400 N | 1400 N | 1800 N | |
| | | short term | 4500 N | 4500 N | 6000 N | |
| Crush | EN 60794-1-21:E3A | 1000 N/100mm (long term) 2000 N/100mm (short term) | | | $\Delta\alpha \leq 0,05$ dB prior release, no damage $\Delta\alpha \leq 0,05$ dB after release, no damage | |
| Impact | EN 60794-1-21:E4 | 10 Nm, 3 impacts, d=20 mm, R=300 mm | | | $\Delta\alpha \leq 0,05$ dB after test, no damage | |
| Repeated bending | EN 60794-1-21:E6 | R=20 x cable diameter, 25 cycles | | | no damage | |
| Torsion | EN 60794-1-21:E7 | L=1 m, rotation angle $\pm 180^\circ$, 10 cycles | | | no damage | |
| Bend no tension | EN 60794-1-21:E11A | R=15 x cable diameter, 4 turns, 3 cycles | | | $\Delta\alpha \leq 0,05$ dB after test, no damage | |

* EN 60794-3-10, EN 60794-3-11

Environmental characteristics

| Test | Test method | Value | Acceptance criteria* |
|--------------------------|-------------------|---|---|
| Temperature cycling | EN 60794-1-22:F1 | -40°C ÷ 70°C | $\Delta\alpha \leq 0,05$ dB |
| Temperature range of use | | -5°C ÷ 50°C -40°C ÷ 70°C -40°C ÷ 70°C | installation operation storage, transport |
| Moisture resistance | EN 60794-1-22:F5B | L=3 m, 1 m water height, 24 h | no water leakage |

* EN 60794-3-10, EN 60794-3-11

Fire performance

| | | |
|-----------------------------|--------------------------------|------|
| Fire resistance | EN 60331-25 (180 min at 750°C) | Pass |
| Flammability - cable bundle | EN 60332-3-22 (cat.A) | Pass |
| Smoke density | EN 61034-1, EN 61034-2 | Pass |
| Halogen Free, Acid gases | EN 60754-2 | Pass |
| Euroclassification to CPR | EN 50575, EN 13501-6 | Fca |

Cable expected lifetime min. 30 years

