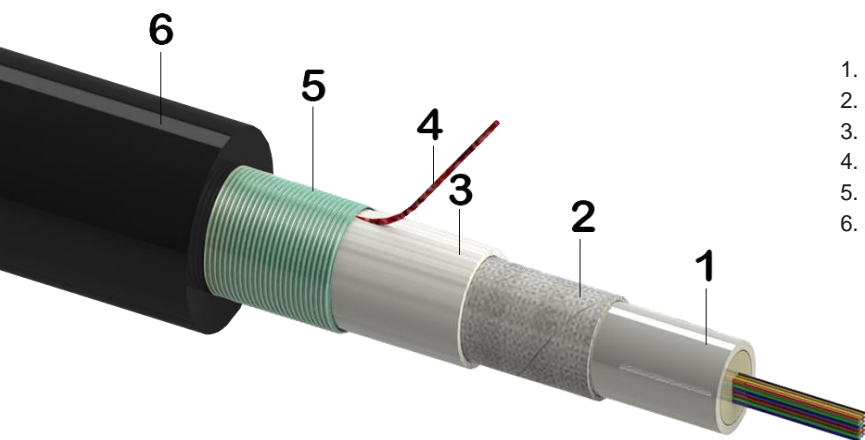


Cable construction code

QX1ECF xx.yy.zz.c

DIN code

J/A-DQ(ZN)(SR)H wbg fr



1. Gel filled PBT loose tube with optical fibers
2. Fire-resistant tape
3. Water swell-able e-glass yarn
4. Rip-cord
5. Corrugated steel tape armour
6. FRLSZH UV stable outer jacket

Cable general description

Max. 24 fibre uni-tube fire-resistant corrugated steel tape armoured cable for indoor or outdoor duct or direct buried installation. This cable construction offers good mechanical and full rodent protection.

Construction and dimensions

| | |
|--------------------------------|------------------|
| Loose tube nominal diameter | 3,0 mm |
| Outer jacket nominal thickness | 1,3 mm |
| Cable nominal outer diameter | 8,0 mm |
| Cable informative weight | 90 kg/km |
| Standard put-up length | 2100/4100 m ± 5% |

Outer jacket

| | |
|----------------|---|
| Material | UV stable FRLSZH |
| 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 fibers

| | |
|---------------------------|---|
| Colour coding (IEC 60304) | 1.-12.: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink 13.-24.: red, green, blue, yellow, white, grey, brown, violet, turquoise, natural, orange, pink (ring-marked) |
| Fiber type | Single- and multi-mode fibers (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 | IEC 60794-1-21:E1 | 500 N (long term) 1500 N (short term) | $\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test |
| Crush | IEC 60794-1-21:E3A | 2500 N/100mm (long term) 5000 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 | IEC 60794-1-21:E4 | 20 Nm, 3 impacts, d=20 mm, R=300 mm | $\Delta\alpha \leq 0,05$ dB after test, no damage |
| Repeated bending | IEC 60794-1-21:E6 | R=20 x cable diameter, 25 cycles | no damage |
| Torsion | IEC 60794-1-21:E7 | L=1 m, rotation angle $\pm 180^\circ$, 10 cycles | no damage |
| Bend | IEC 60794-1-21:E11A | d=20 x cable diameter, 4 turns, 3 cycles | $\Delta\alpha \leq 0,05$ dB after test, no damage |

Environmental characteristic

| Test | Test method | Value | Acceptance criteria* |
|--------------------------|--------------------|---|--|
| Temperature cycling | IEC 60794-1-22:F1 | -30°C ÷ 70°C -35°C ÷ 70°C | $\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,15$ dB, reversible |
| Temperature range of use | | -5°C ÷ 50°C -30°C ÷ 70°C -35°C ÷ 70°C | installation operation storage, transport |
| Moisture resistance | IEC 60794-1-22:F5B | L=3 m, 1 m water height, 24 h | no water leakage |

* IEC 60794-3-10, IEC 60794-3-11

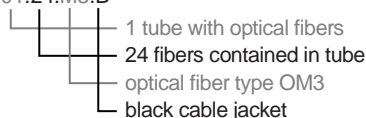
Cable expected lifetime / min. 30 years

Fire performance

| Test | Test method | Result |
|-----------------------------|---------------------------------|--------|
| Fire resistance | IEC 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 |
| Euro classification to CPR | EN 50575, EN 13501-6 | Fca |

Order information

Order code e.g.: QX1ECF 01.24.M3.B



Detailed explanation of the FOC constructions coding found in the file *FOC coding*.