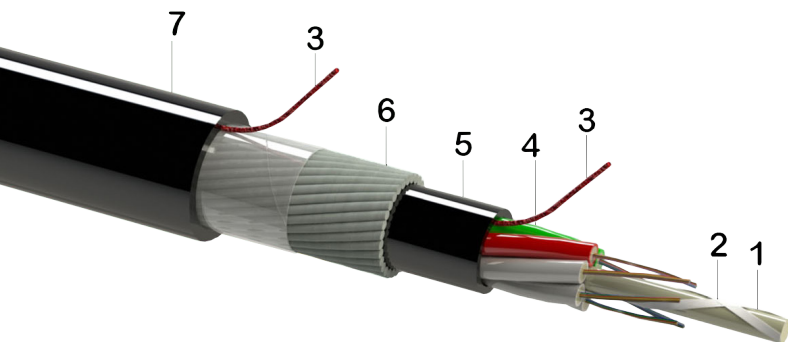


Cable construction code

UT.x2,3FWF xx.yy.zz.c

DIN code

J/A-DQHBH (R...vzk) nx2,3



1. FRP central strength member
2. Water swellable yarn
3. Rip-cord
4. Gel filled PBT loose tube with optical fibers
5. FRLSZH UV stable inner jacket
6. Zn galvanized steel wire armour fixed by PET tape
7. FRLSZH UV stable outer jacket

Cable general description

Multi Loose Tube steel wire armoured cable with two jackets for indoor or outdoor duct or direct buried installation.

| Construction and dimensions | UT6x2,3FWF | UT8x2,3FWF | UT3x2,3FWF |
|--------------------------------------|----------------|----------------|----------------|
| Max. fiber count (12 fibers/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) | 2,5 | 2,5 / 3,8 | 2,5 / 6,7 |
| Inner jacket nominal thickness (mm) | 1,0 | 1,0 | 1,0 |
| Steel wire nominal diameter (mm) | 1,0 | 1,0 | 1,3 |
| Outer jacket nominal thickness (mm) | 1,3 | 1,3 | 1,3 |
| Cable nominal outer diameter (mm) | 14,5 | 15,8 | 19,4 |
| Cable informative weight (kg/km) | 370 | 430 | 670 |
| Standard put-up length (m) | 2100/4100 ± 5% | 2100/4100 ± 5% | 2100/4100 ± 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 | 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 |
| Loose-tube colour coding | 1.red, 2.green (in each layer), rest of tubes white (fillers uncoloured or black) |
| Fiber type | Single- and multi-mode fibers (OS2, OM2, OM3, OM4, OM5) |

Geometrical and transmission parameters are available at separate generic datasheet

Mechanical characteristics

| Test | Test method | Value | Acceptance criteria* | | | |
|---------------------|--------------------|--|--|--------|--------|---|
| | | | UT6x.. | UT8x.. | UT3x.. | |
| Tensile performance | EN 60794-1-21:E1 | long term | n.a. | n.a. | n.a. | $\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test |
| | | short term | 5000 N | 6000 N | 8000 N | |
| Crush | EN 60794-1-21:E3A | 2000 N/100mm (long term) 4000 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 | 25 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 | | | |

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 under inner sheath |

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

Fire performance

| | | |
|-----------------------------|------------------------|------|
| 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 |

Cable expected lifetime / min. 30 years

Order information

| Construction | Diameter | CPR | Fiber count | OM3 | OM4 | G652.D | G657.A1 |
|--------------|----------|-----|---------------|------------|------------|------------|------------|
| UT6x2,3FWF | Ø 14,5 | Fca | 4 x 8f 32f | 04.08.M3.B | 04.08.M4.B | 04.08.S2.B | 04.08.S7.B |
| | | | 4 x 12f 48f | 04.12.M3.B | 04.12.M4.B | 04.12.S2.B | 04.12.S7.B |
| | | | 6 x 8f 48f | 06.08.M3.B | 06.08.M4.B | 06.08.S2.B | 06.08.S7.B |
| | | | 6 x 12f 72f | 06.12.M3.B | 06.12.M4.B | 06.12.S2.B | 06.12.S7.B |
| UT8x2,3FWF | Ø 15,8 | Fca | 8 x 8f 64f | 08.08.M3.B | 08.08.M4.B | 08.08.S2.B | 08.08.S7.B |
| | | | 8 x 12f 96f | 08.12.M3.B | 08.12.M4.B | 08.12.S2.B | 08.12.S7.B |
| UT3x2,3FWF | Ø 19,4 | Fca | 12 x 8f 96f | 12.08.M3.B | 12.08.M4.B | 12.08.S2.B | 12.08.S7.B |
| | | | 12 x 12f 144f | 12.12.M3.B | 12.12.M4.B | R851131 | 12.08.S7.B |

Order code e.g.: UT6x2,3FWF 06.08.M3.B (see page 136/137)

Other fiber counts and/or fiber types (e.g. G657.A2) on special request