

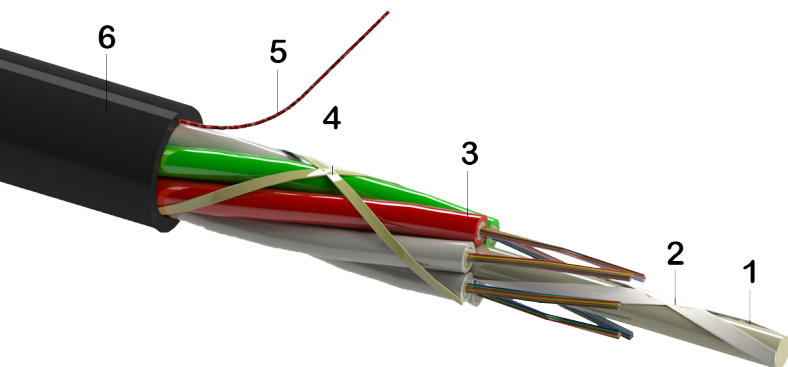
Microcables

Cable construction code

MT.x1,5AH xx.yy.zz.c

DIN code

A-DQ(ZN)2Y nx1,5



1. FRP central strength member
2. Water swellable yarn
3. Gel filled PBT loose tube with optical fibers
4. Water swellable aramid yarn
5. Rip-cord
6. HDPE UV stable outer jacket

Cable general description

Multi Loose Tube non-metallic micro-cable for outdoor installation to micro-tubes.

| Construction and dimensions          | MT6x1,5AH      | MT8x1,5AH      | H MT3x1,5AH    | MT9x1,5AH           |
|--------------------------------------|----------------|----------------|----------------|---------------------|
| Max. fiber count (12 fibers/tube)    | 72             | 96             | 144            | 216                 |
| Loose-tubes count                    | 6              | 8              | 12             | 18(6+12)-two layers |
| Loose tube nominal diameter (mm)     | 1,55           | 1,55           | 1,55           | 1,55                |
| FRP/coat. CSM nominal thickness (mm) | 1,7            | 2,5            | 2,5 / 4,5      | 1,7                 |
| Outer jacket nominal thickness (mm)  | 0,5            | 0,5            | 0,5            | 0,5                 |
| Cable nominal outer diameter (mm)    | 5,7            | 6,6            | 8,6            | 8,9                 |
| Cable informative weight (kg/km)     | 30             | 40             | 64             | 64                  |
| Standard put-up length (m)           | 2100 / 4100±5% | 2100 / 4100±5% | 2100 / 4100±5% | 2100 / 4100±5%      |

Outer jacket

|                |   |
|----------------|---|
| Material       | UV stable HDPE  |
| Jacket colour  | Black   |
| Sheath marking | Ink-Jet, white  |
| Print legend   | Construction name, cable type, batch-number, meter-marking,<br>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

Microcables

**Mechanical characteristics**

| Test                | Test method        | Value   |        |        |        | Acceptance criteria*                                 |  |
|---------------------|--------------------|---|--------|--------|--------|--|--|
|                     |                    |   | MT6x.. | MT8x.. | MT3x.. |  | MT9x..                                 |
| Tensile performance | EN 60794-1-21:E1   | short term  | 600 N  | 1200 N | 1200 N | 800 N  | $\Delta\alpha \leq 0,05$ dB after test |
| Crush               | EN 60794-1-21:E3A  | 1000 N/100mm (short term)                           |        |        |        | $\Delta\alpha \leq 0,05$ dB after release, no damage |  |
| Impact              | EN 60794-1-21:E4   | 5 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 = 40 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  |  |
| Kink                | EN 60794-1-21:E10  | d = 40 x cable diameter                             |        |        |        | no damage  |  |
| Bend no tension     | EN 60794-1-21:E11A | R = 40 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<br>-40°C ÷ 70°C<br>-40°C ÷ 70°C | installation<br>operation<br>storage, transport |
| Moisture resistance      | EN 60794-1-22:F5B | L = 3 m, 1 m water height, 24 h             | no water leakage                                |

\* EN 60794-5-10

Cable expected lifetime / min. 30 years

**Order information**

| Construction | Diameter | CPR | Fiber count   | OM3        | OM4        | G652.D     | G657.A1    |
|--------------|----------|-----|---------------|------------|------------|------------|------------|
| MT6x1,5AH    | Ø 5,7    |     | 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 6f 36f    | 06.06.M3.B | 06.06.M4.B | 06.06.S2.B | 06.06.S7.B |
|              |          |     | 6 x 8f 48f    | 06.08.M3.B | 06.08.M4.B | 06.08.S2.B | 06.08.S7.B |
| MT8x1,5AH    | Ø 6,6    |     | 6 x 12f 72f   | 06.12.M3.B | 06.12.M4.B | R851113    | 06.12.S7.B |
|              |          |     | 8 x 8f 64f    | 08.08.M3.B | 08.08.M4.B | 08.08.S2.B | 08.08.S7.B |
| MT3x1,5AH    | Ø 8,6    |     | 8 x 12f 96f   | 08.12.M3.B | 08.12.M4.B | 08.12.S2.B | 08.12.S7.B |
|              |          |     | 12 x 8f 96f   | 12.08.M3.B | 12.08.M4.B | 12.08.S2.B | 12.08.S7.B |
| MT9x1,5AH    | Ø 8,9    |     | 12 x 12f 144f | 12.12.M3.B | 12.12.M4.B | R851114    | 12.12.S7.B |
|              |          |     | 18 x 6f 108f  | 18.06.M3.B | 18.06.M4.B | 18.06.S2.B | 18.06.S7.B |
|              |          |     | 18 x 8f 144f  | 18.08.M3.B | 18.08.M4.B | 18.08.S2.B | 18.08.S7.B |
|              |          |     | 18 x 12f 216f | 18.12.M3.B | 18.12.M4.B | 18.12.S2.B | 18.12.S7.B |

Order code e.g.: MT9x1,5AH 18.06.M3.B (see page 136/137)

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