

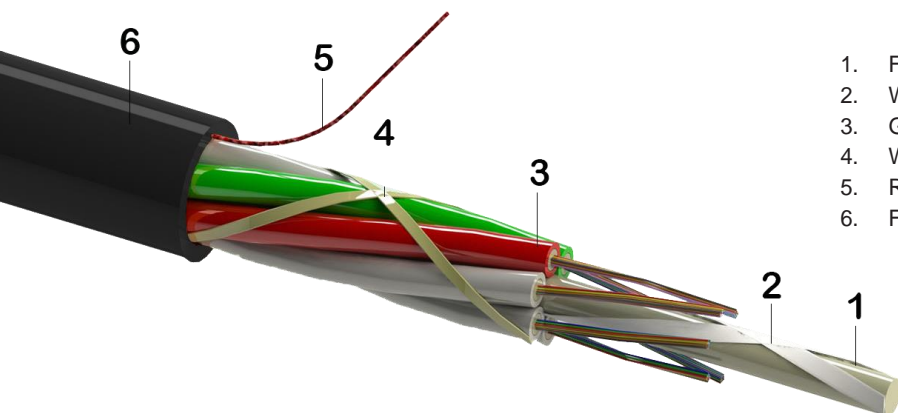
Microcables

Cable construction code

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

DIN code

J/A-DQ(ZN)H nx1,5



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

Cable general description

Multi-loose-tube non-metallic micro-cable for indoor or outdoor installation to micro-tubes.

Construction and dimensions	MT6x1,5AF	MT8x1,5AF	MT3x1,5AF
Max. fibre count (12 fibres/tube)	72	96	144
Loose-tubes count	6	8	12
Loose tube nominal diameter (mm)	1,55	1,55	1,55
FRP/coat. CSM nominal thickness (mm)	1,7	2,5	2,5/4,5
Outer jacket nominal thickness (mm)	1,0	1,0	1,0
Cable nominal outer diameter (mm)	6,8	7,6	9,6
Cable informative weight (kg/km)	50	64	95
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	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
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, OM1, OM2, OM3, OM4)

Geometrical and transmission parameters are available at separate generic datasheet

Microcables

**Mechanical characteristics**

Test	Test method	Value			Acceptance criteria*	
			MT6x	MT8x		MT3x
Tensile performance	IEC 60794-1-21:E1	short term	600 N	1200 N	1400 N	$\Delta\alpha \leq 0,05$ dB after test
Crush	IEC 60794-1-21:E3A	1000 N/100mm (short term)			$\Delta\alpha \leq 0,05$ dB after release, no damage	
Impact	IEC 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	IEC 60794-1-21:E6	R=40 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	
Kink	IEC 60794-1-21:E10	d=40 x cable diameter			no kink	
Bend	IEC 60794-1-21:E11A	d=40 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	-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	IEC 60794-1-22:F5B	L=3 m, 1 m water height, 24 h	no water leakage

\* IEC 60794-5-10

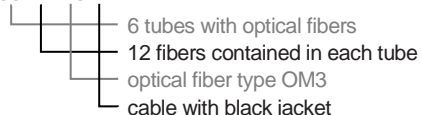
Cable expected lifetime / min. 30 years

**Fire performance**

Test	Test method	Result
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.: MT6x1,5AF 06.12.M3.B



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