

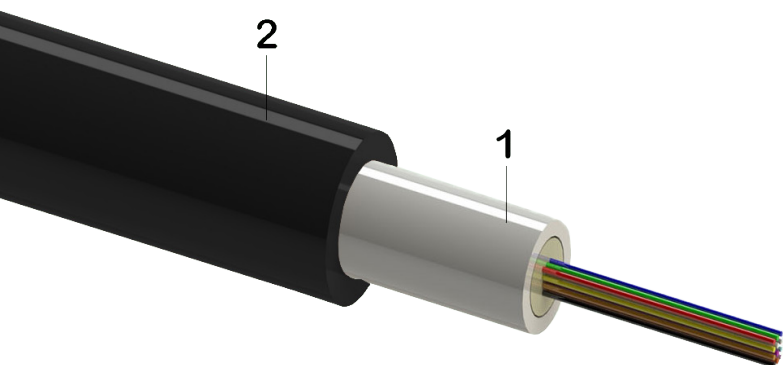
Microcables

Cable construction code

MX1F xx.yy.zz.c

DIN code

J/A-DH



1. Gel filled PBT loose tube with optical fibers
2. FRLSZH UV stable outer jacket

Cable general description

Max. 24 fiber uni-tube non-metallic micro-cable for indoor or outdoor installation to micro-tubes.

Construction and dimensions

Loose tube nominal diameter	3,0 mm
Outer jacket nominal thickness	0,5 mm
Cable nominal outer diameter	4,0 mm
Cable informative weight	17 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	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, OM2, OM3, OM4, OM5)

Geometrical and transmission parameters are available at separate generic datasheet

Microcables

Mechanical characteristics

Test	Test method	Value	Acceptance criteria*
Tensile performance	EN 60794-1-21:E1	50 N (short term)	$\Delta\alpha \leq 0,05$ dB after test
Crush	EN 60794-1-21:E3A	500 N/100mm (short term)	$\Delta\alpha \leq 0,05$ dB after release, no damage
Impact	EN 60794-1-21:E4	1 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	-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	EN 60794-1-22:F5B	L = 3 m, 1 m water height, 24 h	no water leakage

* EN 60794-5-10

Fire performance

Euro classification to CPR	EN 50575, EN 13501-6	Fca
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Cable expected lifetime / min. 30 years

Order information

Construction	Diameter	CPR	Fiber count	OM3	OM4	OM5	G652.D	G657.A1
MX1F	Ø 4,0	Fca	16	01.16.M3.B	01.16.M4.B	01.16.M5.B	01.16.S2.B	01.16.S7.B
			20	01.20.M3.B	01.20.M4.B	01.20.M5.B	01.20.S2.B	01.20.S7.B
			24	01.24.M3.B	R848282	01.24.M5.B	01.24.S2.B	R848283

Order code e.g.: MX1F 01.04.M3.B (see page 136/137)

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