

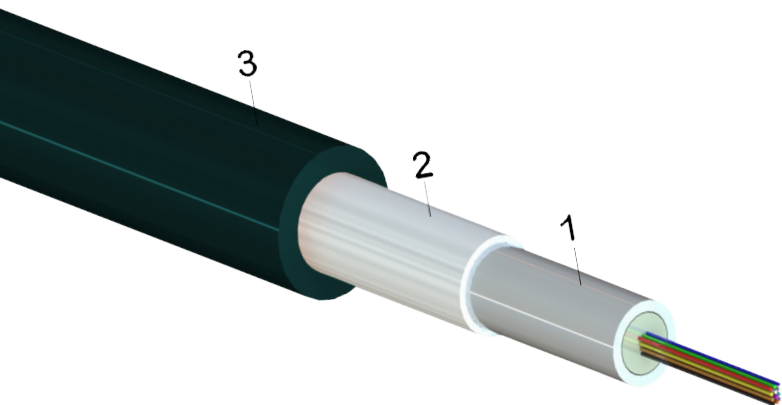
All-dielectric Duct Cables

Cable construction code

OT1EL xx.yy.zz.c

DIN code

A-DQ(ZN)2Y wbg



1. Gel filled PBT loose tube with optical fibers
2. Water-blocking e-glass yarn
3. LDPE UV stable outer jacket

Cable general description

Max. 12 fiber uni-tube non-metallic cable with standard level of rodent protection for outdoor duct installation.

Construction and dimensions

Loose tube nominal diameter	2,8 mm
Outer jacket nominal thickness	1,0 mm
Cable nominal outer diameter	5,8 mm
Cable informative weight	29 kg/km
Standard put-up length	2100/4100 m ± 5%

Outer jacket

Material	UV stable LDPE
Jacket colour	Black
Sheath marking	Ink-Jet, white
Print legend	Construction name, cable type, batch-number, meter-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
Fiber type	Single- and multi-mode fibers (OS2, OM2, OM3, OM4, OM5)

*Geometrical and transmission parameters are available at separate generic datasheet*

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Mechanical characteristics

Test	Test method	Value	Acceptance criteria*
Tensile performance	EN 60794-1-21:E1	300 N (long term) 1000 N (short term)	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test
Crush	EN 60794-1-21:E3A	1000 N/100mm (long term) 2000 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	10 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	-20°C ÷ 70°C -25°C ÷ 70°C	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,15$ dB, reversible
Temperature range of use		-5°C ÷ 50°C -20°C ÷ 70°C -25°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 60794-3-10, EN 60794-3-11

Cable expected lifetime / min. 30 years

Order information

Construction	Diameter	CPR	Fiber count	OM3	OM4	OM5	G652.D	G657.A1
OT1EL	Ø 5,8		4	01.04.M3.B	01.04.M4.B	01.04.M5.B	01.04.S2.B	01.04.S7.B
			6	01.06.M3.B	01.06.M4.B	01.06.M5.B	01.06.S2.B	01.06.S7.B
			8	01.08.M3.B	01.08.M4.B	01.08.M5.B	01.08.S2.B	01.08.S7.B
			12	01.12.M3.B	01.12.M4.B	01.12.M5.B	R848284	01.12.S7.B

Order code e.g.: OT1EL 01.04.M3.B (see page 136/137)

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