

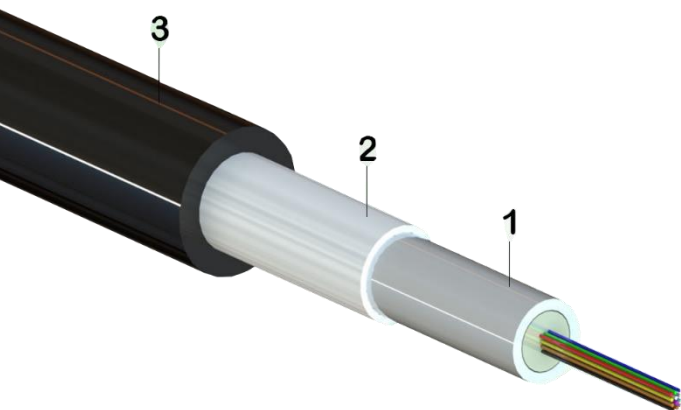
All-dielectric Duct Cables

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 swell-able e-glass yarn
3. LDPE UV stable outer jacket

Cable general description

Max. 12 fibre uni-tube non-metallic cable with standard 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	Trademark, 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, OM1, OM2, OM3, OM4)

Geometrical and transmission parameters are available at separate generic datasheet

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Mechanical characteristics

Test	Test method	Value	Acceptance criteria*
Tensile performance	IEC 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	IEC 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	IEC 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	IEC 60794-1-21:E6	R=20 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
Bend	IEC 60794-1-21:E11A	d=20 x cable diameter, 4 turns, 3 cycles	$\Delta\alpha \leq 0,05$ dB after test, no damage

Environmental characteristic

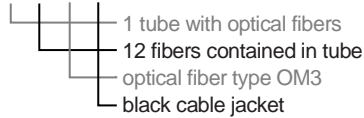
Test	Test method	Value	Acceptance criteria*
Temperature cycling	IEC 60794-1-22:F1	-20°C ÷ 70°C -25°C ÷ 70°C	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,15$ dB, reversible
Temperature range of use		-5°C ÷ 50°C -20°C ÷ 70°C -25°C ÷ 70°C	installation operation storage, transport
Moisture resistance	IEC 60794-1-22:F5B	L=3 m, 1 m water height, 24 h	no water leakage

* IEC 60794-3-10, IEC 60794-3-11

Cable expected lifetime / min. 30 years

Order information

Order code e.g.: OT1EL 01.12.M3.B



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