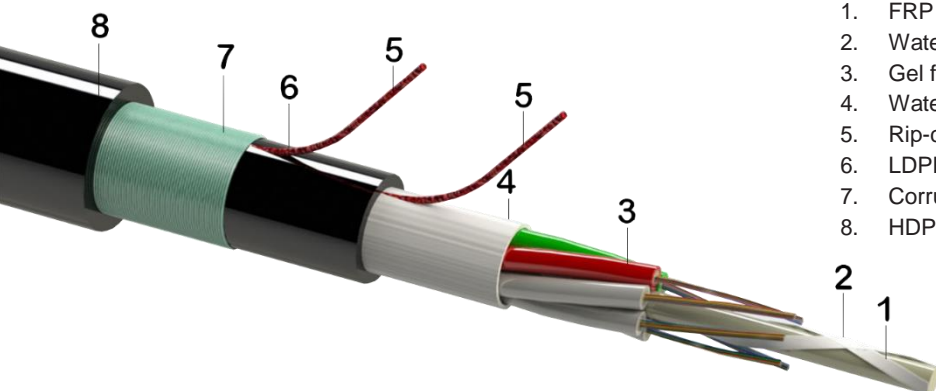


Cable construction code

OT.x1,7ELCH xx.yy.zz.c

DIN code

A-DQ(ZN)2Y(SR)2Y wbg nx1,7



1. FRP central strength member
2. Water swell-able yarn
3. Gel filled PBT loose tube with optical fibers
4. Water swell-able e-glass yarn
5. Rip-cords
6. LDPE UV stable inner jacket
7. Corrugated steel tape armour
8. HDPE UV stable outer jacket

Cable general description

Multi-loose-tube corrugated steel tape armoured cable with two jackets for outdoor duct or direct buried installation. This cable construction offers excellent mechanical and full rodent protection.

Construction and dimensions	OT6x1,7ELCH	OT8x1,7ELCH	OT3x1,7ELCH	OT9x1,7ELCH
Max. fibre count (12 fibres/tube)	72	96	144	216
Loose-tubes count	6	8	12	18(6+12) - two layers
Loose tube nominal diameter (mm)	1,7	1,7	1,7	1,7
FRP/coat. CSM nominal thickness (mm)	1,7	2,8	2,5/5,0	1,7
Inner jacket nominal thickness (mm)	0,9	0,9	0,9	0,9
Outer jacket nominal thickness (mm)	1,3	1,3	1,3	1,3
Cable nominal outer diameter (mm)	12,1	13,1	15,1	16,1
Cable informative weight (kg/km)	145	175	220	240
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	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
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

Mechanical characteristics

Test	Test method	Value				Acceptance criteria*	
			OT6x	OT8x	OT3x		OT9x
Tensile performance	IEC 60794-1-21:E1	long term	800 N	1200 N	1200 N	1200 N	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test
		short term	2500 N	4000 N	4000 N	4000 N	
Crush	IEC 60794-1-21:E3A	2500 N/100mm (long term) 5000 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	25 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

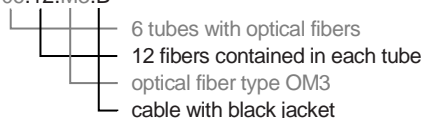
Test	Test method	Value	Acceptance criteria*
Temperature cycling	IEC 60794-1-22:F1	-40°C ÷ 70°C	$\Delta\alpha \leq 0,05$ dB
Temperature range of use		-5°C ÷ 50°C	installation
		-40°C ÷ 70°C	operation
		-40°C ÷ 70°C	storage, transport
Moisture resistance	IEC 60794-1-22:F5B	L=3 m, 1 m water height, 24 h	no water leakage under inner sheath

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

Cable expected lifetime / min. 30 years

Order information

Order code e.g.: OT6x1,7ELCH 06.12.M3.B



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