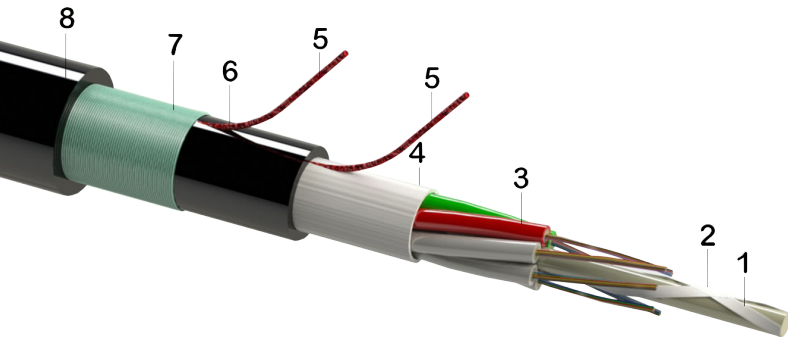


Cable construction code

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 swellable yarn
3. Gel filled PBT loose tube with optical fibers
4. Water swellable e-glass yarn
5. Rip-cord
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. fiber count (12 fibers/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	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, OM2, OM3, OM4, OM5)

Geometrical and transmission parameters are available at separate generic datasheet

**Mechanical characteristics**

Test	Test method	Value				Acceptance criteria*	
			OT6x..	OT8x..	OT3x..		OT9x..
Tensile performance	EN 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	EN 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	EN 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	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	-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	EN 60794-1-22:F5B	L = 3 m, 1 m water height, 24 h	no water leakage under inner sheath

\* EN 60794-3-10, EN 60794-3-11

Cable expected lifetime / min. 30 years

**Order information**

Construction	Diameter	CPR	Fiber count	OM3	OM4	G652.D	G657.A1
OT6x1,7ELCH	Ø 12,1		4 x 8f 32f	04.08.M3.B	04.08.M4.B	04.08.S2.B	04.08.S7.B
			4 x 12f 48f	04.12.M3.B	04.12.M4.B	04.12.S2.B	04.12.S7.B
			6 x 6f 36f	06.06.M3.B	06.06.M4.B	06.06.S2.B	06.06.S7.B
			6 x 8f 48f	06.08.M3.B	06.08.M4.B	06.08.S2.B	06.08.S7.B
			6 x 12f 72f	06.12.M3.B	06.12.M4.B	06.12.S2.B	06.12.S7.B
OT8x1,7ELCH	Ø 13,1		8 x 8f 64f	08.08.M3.B	08.08.M4.B	08.08.S2.B	08.08.S7.B
			8 x 12f 96f	08.12.M3.B	08.12.M4.B	08.12.S2.B	08.12.S7.B
OT3x1,7ELCH	Ø 15,1		12 x 8f 96f	12.08.M3.B	12.08.M4.B	12.08.S2.B	12.08.S7.B
			12 x 12f 144f	12.12.M3.B	12.12.M4.B	R851129	12.12.S7.B
OT9x1,7ELCH	Ø 16,1		18 x 6f 108f	18.06.M3.B	18.06.M4.B	18.06.S2.B	18.06.S7.B
			18 x 8f 144f	18.08.M3.B	18.08.M4.B	18.08.S2.B	18.08.S7.B
			18 x 12f 216f	18.12.M3.B	18.12.M4.B	R851134	18.12.S7.B

Order code e.g.: OT6x1,7ELCH 18.06.M3.B (see page 136/137)

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