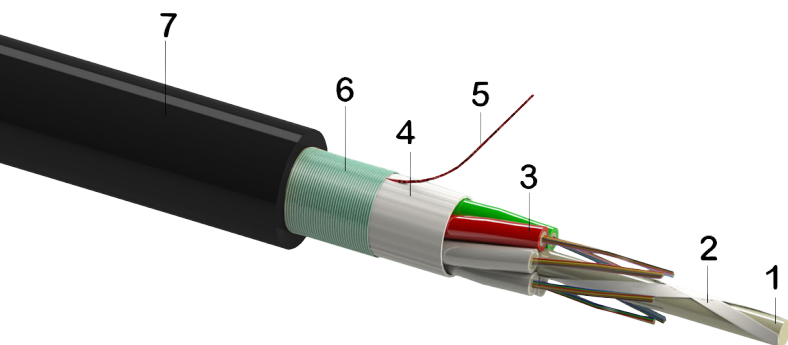


Cable construction code

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

DIN code

A-DQ(ZN)(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. Corrugated steel tape armour
7. HDPE UV stable outer jacket

Cable general description

Multi Loose Tube corrugated steel tape armoured cable for outdoor duct or direct buried installation. This cable construction offers full rodent protection.

Construction and dimensions	OT6x1,7ECH	OT8x1,7ECH	OT3x1,7ECH	OT9x1,7ECH
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
Outer jacket nominal thickness (mm)	1,3	1,3	1,3	1,3
Cable nominal outer diameter (mm)	11,0	12,0	14,0	14,0
Cable informative weight (kg/km)	115	140	185	185
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	1100 N	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test
		short term	2500 N	4000 N	4000 N	3500 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	20 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	installation
		-40°C ÷ 70°C	operation
		-40°C ÷ 70°C	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	G652.D	G657.A1
OT6x1,7ECH	Ø 11,0		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
OT8x1,7ECH	Ø 12,0		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
OT3x1,7ECH	Ø 14,0		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
OT9x1,7ECH	Ø 14,0		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	R851132	18.12.S7.B

Order code e.g.: OT6x1,7ECH 04.08.M3.B (see page 136/137)

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