

BiTfiber Z-XOTKtsd 2-144

Multi-tube, fiber optic cable for external application



Cable equivalent acc. to VDE: A-DQ2Y

Technical data:

Optotelecommunication cable - **OTK**, outdoor cable - **Z**, Polyethylene outer sheath – **X**, tube - **t**, With dry core sealing - **s**, Entirely dielectric – **d**

Application:

Fibre optic cable intended for use in cable ducts for the implementation of backbone and trunk networks. Can not be used in places endangered by damage by rodents. In particular, it is suitable for use in sewerage systems.

Construction:

Fiber optic: Optical telecommunication fiber in accordance with ITU-T-G652D standard or customer requirements (confirmed in the enclosed fiber specification)

Secondary coating: loose tube made of PBT

Central strenght element: dielectric FRP

Filling pads (if used inside cable)

Core sealing – dry: waterblocking yarns on FRP and waterblocking tape on the core.

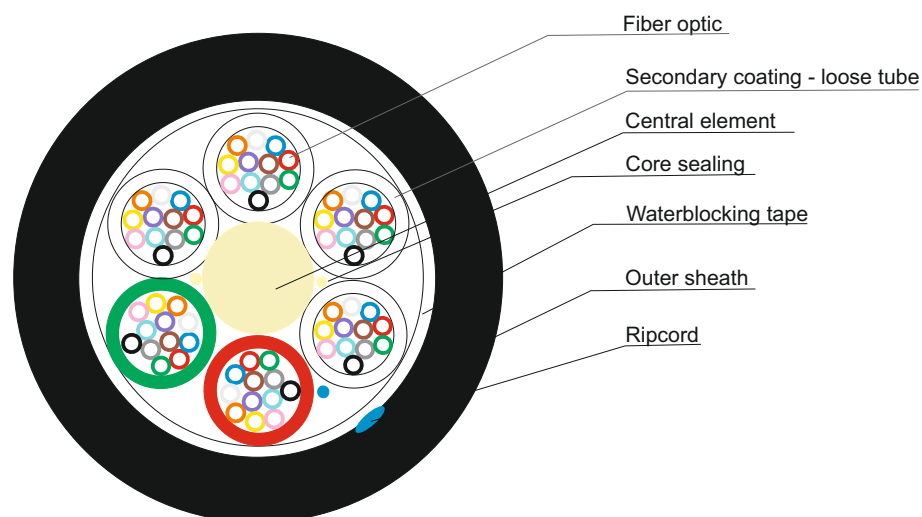
Outer sheath: made of HDPE

Fiber colours acc. to PN-IEC 60304: red; green, blue, white, violet, orange, grey, yellow, brown, pink, black, turquoise

Tube colours acc. to PN-IEC 60304: red; green, blue, white, violet, orange, grey, yellow, brown, pink, black, turquoise

Optional: red, green and others in natural color

Outer sheath colour (HDPE): black



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Optical parameters:

Description	Unit	Value
Attenuation at 1310 nm	dB/km	≤ 0,35 (max 0,4)
Attenuation at 1550 nm	dB/km	≤ 0,22 (max 0,25)
Attenuation at 1625 nm	dB/km	≤ 0,35 (max 0,4)

Additional properties enclosed in fiber specification

Physical parameters:

Description	Unit	Value		
Secondary coating diameter-tube	mm	1,8		
Core construction		6x1,8	8x1,8	12x1,8
Central strenght element	mm	1,9	3,0	5,3
Outer jacket thickness	mm	min. 1,0 mm; rated 1,15mm		
Cable outer diameter	mm	8,0	9,2	11,5
Cable weight	kg/km	50	70	100

Basic mechanical properties:

Description	Method	Unit	Value		
Tensile strength	dynamic	N	1000	1500	2000
	static		500	750	1000
Min. bending radius	dynamic	mm	120	140	170
	static		160	180	230

Additional mechanical properties:

Description	Method	Value	Criteria of positive test
Crush resistance	PN-EN 60794-1-2-E3	1500 N; t=1 min	Change in fiber attenuation ≤ 0,1 dB @1550 nm (SMF) ≤ 0,2 dB @1300 nm (MMF) without any sheath damages
Impact resistance	PN-EN 60794-1-2-E4	5 Nm; 3 strikes	
Multiple bending resistance	PN-EN 60794-1-2-E6	R=20xØ of cable; F=100N 100 cycles, 90°, 15cycles/min	
Torsion resistance	PN-EN 60794-1-2-E7	100N, 5 cycles, 360°	

Temperature parameters:

Temperature range	Operation	-40/+70°C
	Installation	-15/+60°C
	Transport and storage	-30/+70°C

Standard marking:

OPTIC CABLE BITNER BiTfiber Z-XOTKtsd (number and type of fiber optic) year of production meter marking

Packaging:

Wooden drums