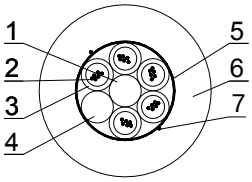
Z-XOTKtsd 2 - 288 Optical Fibre tube 1.8

EN 60794-3

Spec. No. 2557/1/0

Type: outdoor, fully dielectric



Cable construction:

1. Central element, non-metallic
2. Optical fibres
3. Loose tube
4. Filler
5. Waterblocking tape
6. Outer sheath
7. Ripcord

CONSTRUCTION				
Element	Type	Material	Dimensions	
Fibres	ITU-T G.652D , ITU-T G.657A or according to the attached specifications			
Identification of fibres	comply to IEC 60304: red; green, blue, white, violet, orange, grey, yellow, brown, pink, black turquoise			
Identification of tubes/elements **6 to 12 elements** **Above 12 elements - two layers** **18 elements (6+12)** **24 elements (9+15)**	first tube - red, second tube - blue, other tube - natural, filler (when needed) - black the above sequence of colours repeats in every layer			
Central support member	straight rod	Fibre Reinforced Plastic	1,8 or 2.5 mm	
PE oversheath on the central support member	black	HDPE	ϕ 3.0mm for 8-element cable ϕ 5.3mm for 12-element cable ϕ 3.5 mm for 9+15-element cable	
Secondary coating	loose tube - thermoplastic material 2, 4, 6 or 12 fibres	PBT	ϕ 1.8 mm (approx.)	
Filling of the tube	gel	tixotropic gel		
Interstitial waterblocking	dry sealed	swelling tape	Thickness: 0.2 mm	
Outer sheath	black	extruded HDPE polymer density ≥ 0.945 g/cm^3	thickness: minimum spot average	1.0 mm 1.15 mm
Attenuation @1310 nm	≤ 0.4 dB/km *)			
Attenuation @1550 nm	≤ 0.25 dB/km *)			
Marking/Printing:	**FIBRE OPTIC CABLE Z-XOTKtsd 24J TF Kable 1 2012** (or according to the agreement). Length marking every metre.			
Standard delivery lengths	2100; 4200 ±50 m on wooden drums			

*) Max attenuation for SMF in cable - other parameters of the fibre according to the attached specifications

Z-XOTKtsd 2 - 288 Optical Fibre tube 1.8

EN 60794-3

Spec. No. 2557/1/0

PARAMETERS

No. of fibres in a cable	Outer diameter of tube [mm]	No. of elements in a cable (tubes/filers)	Cable dimensions		Mechanical properties			
			Outer diameter [mm]	Cable weight [kg/km]	Max. tensile load [N]		Min. bending radius [mm]	
					Dynamic (during installation)	Static (during the operation)	Dynamic (during installation)	Static (during the operation)
4 - 72	1,8	6	8	50	1000	500	120	160
74 - 96	1,8	8	9,2	70	1500	750	140	180
98 - 144	1,8	12	11,5	105	2200	1100	170	230
146 - 216	1,8	18 (6+12)	11,9	110	1000	500	180	240
218 - 288	1,8	24 (9+15)	13,6	140	2500	1250	200	270

ADDITIONAL MECHANICAL PROPERTIES

Test	Standard	Value	Acceptance criteria
Crush	IEC 60794-1-2-E3	1500 N; t =15 min	Δα ≤ 0.05 dB, no damage
Impact	IEC 60794-1-2-E4	5 Nm, 3 impacts	Δα ≤ 0.05 dB after the test
Repeated bending	IEC 60794-1-2-E6	R=20×D; F=100 N 100 cycles, 90 °, 15 cycles/min	Δα ≤ 0.1 dB, no damage
Torsion	IEC 60794-1-2-E7	100 N, 5 cycles, 360	Δα ≤ 0.05 dB, no damage

ENVIRONMENTAL SPECIFICATIONS

Water penetration	IEC 60794-1-2-F5B	sample 1 m, water head 1 m, 24 hours	
Temperature range		- transport/storage	-40/+70 °C
		- installation	-15/+60 °C
		- operation	-30/+70 °C

FEATURES

- fully dielectric
- resistant to electromagnetic interferences
- secured from longitudinal water penetration
- resistant to abrasion, UV and stress corrosion

APPLICATIONS

Cable is designated for a long distance transmission of digital and analogue signals within the whole optical bandwidth used in wide and local telecom networks of any spatial configuration. Suitable for use in primary and secondary cable ducts or in the proximity to HV lines.