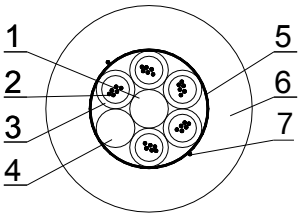
Z-XOTKtsd 12 - 192 Optical Fibre

Spec. No. 2557/1/6/3 MB

24.06.2020, page 1/2

Type: outdoor, fully dielectric



Cable construction:

1. Central element, non-metallic
2. Optical fibres
3. Loose tube
4. Filler
5. Waterblocking yarn
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 EN 60304 : Red; Green; Blue; White; Violet; Orange; Grey; Yellow; Brown; Pink; Black; Turquoise fibres above 12 in tube: Red; Green; Blue; White; Violet; Orange; Grey; Yellow; Brown; Pink; Natural; Turquoise with black ring			
Identification of tubes/elements	for each of the layers: First tube - Red, second tube - Green, other tube - natural, filler (when needed) - black			
Central support member	straight rod	Fibre Reinforced Plastic	ϕ 1.8 mm for 12, 24, 48, 72 fibres ϕ 2.3 mm for 96 and 144 fibres ϕ 3.0 mm for 192 fibres	
Secondary coating	loose tube - thermoplastic material 12 or 24 fibres	PBT	ϕ 1.8 mm for 12, 24, 48, 72 fibres 250µm ϕ 2.2 mm for 96 and 144 fibres 250µm ϕ 1.8 mm for 192 fibres 200µm	
Filling of the tube	gel	tixotropic gel		
Interstitial waterblocking	dry sealed	swelling yarn		
Outer sheath	black	HDPE	Thickness for 12, 24, 48, 72 fibres: minimum spot average	 0.40 mm 0.55 mm
			Thickness for 96 and 144 fibres: minimum spot average	 0.45 mm 0.60 mm
			Thickness for 192 fibres: minimum spot average	 0.55 mm 0.70 mm
Attenuation @1310 nm	≤ 0.36 dB/km			
Attenuation @1550 nm	≤ 0.23 dB/km			
Marking/Printing:	**TF Kable 1 cavo ottico Z-XOTKtsd 24 J (2x12) INF-ING-ST-007-18 4.0** ***year of production*** (or according to the agreement). Length marking every meter			
Standard delivery lengths	4200 ± 100 m on wooden drums			

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

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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)
12 (1x12 250µm)	1.8	1T + 5F	6.5	35	1000	500	15 x outer diameter	20 x outer diameter
24 (2x12 250µm)	1.8	2T + 4F	6.5	35	1000	500	15 x outer diameter	20 x outer diameter
48 (4x12 250µm)	1.8	4T + 2F	6.5	35	1000	500	15 x outer diameter	20 x outer diameter
72 (6x12 250µm)	1.8	6T	6.5	35	1000	500	15 x outer diameter	20 x outer diameter
96 (4x24 250µm)	2.2	4T + 2F	8.0	52	1500	750	15 x outer diameter	20 x outer diameter
144 (6x24 250µm)	2.2	6T	8.0	52	1500	750	15 x outer diameter	20 x outer diameter
192 (8x24 200µm)	1.8	8T	8.0	58	1500	750	15 x outer diameter	20 x outer diameter

ADDITIONAL MECHANICAL PROPERTIES

Test	Standard	Value	Acceptance criteria
Crush	IEC 60794-1-2-E3	1000 N; t =15 min	Δα ≤ 0.05 dB, no damage
Impact	IEC 60794-1-2-E4	3 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.