

Fiber Optic Cable

Z-XOTKtsdDb 2-144 Fibres

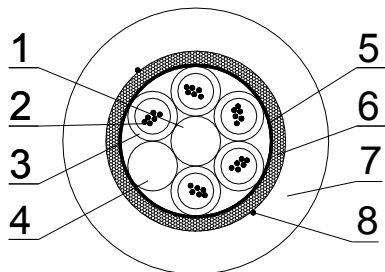
Spec. No. 2492/4/0 MB

IEC 60794-3-10

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Type: non-metallic, duct, reinforced, rodent protected



Cross section of 5x6 FO cable



Cable construction:

1. Central element non-metallic
2. Optical fibres
3. Loose tube
4. Filler
5. Waterblocking tape
6. Reinforcement (glass yarn)
7. Outer sheath
8. Ripcord

CONSTRUCTION			
Element	Type	Material	Dimension
Fibres	ITU-T G.652D or according to the attached specifications		
Identification of fibers	Comply to IEC 60304: Red; Green, Blue, White, Violet, Orange, Grey, Yellow, Brown, Pink, Black Turquoise		
Identification of tubes/ elements	First tube - red, second tube - blue, other tube - natural, filler (when needed) - black		
Central support member	Straight rod	Fibre Reinforced Plastic	φ 1.8mm, 2.5mm or 3.0mm
PE oversheath on central support member	Black	HDPE	φ 5.3mm for 12 elements cable φ 3.5mm for 9+15 elements cable
Secondary coating	loose tube - thermoplastic material, containing 2-12 fibres	PBT	φ 1.8 mm (approx.)
Filling of the tube	gel	Thixotropic gel	
Interstitial waterblocking	Dry sealed	Swelling tape	thickness: 0.15mm (approx.)
Reinforcement	Dielectric yarn	Glass yarns	
Outer sheath	Black	HDPE	thickness: minimum spot average
			1.3mm 1.5mm
Attenuation @1310nm	≤ 0.40 dB/km *)		
Attenuation @1550nm	≤ 0.25 dB/km *)		
Marking/Printing:	FIBRE OPTIC CABLE Z-XOTKtsdDb 24J TF Kable 1 year of production (or according to the agreement). Length marking every metre		
Standard delivery lengths	4200 ± 100 m; to be agreed		

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

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)
Up to 72	1.8	6	9.5 ± 0.2	75	2700	1350	15 x OD	20 x OD
Up to 96	1.8	8	10.6 ± 0.2	100	3000	1500	15 x OD	20 x OD
Up to 144	1.8	12	12.9 ± 0.2	140	4000	2000	15 x OD	20 x OD

REACTION TO FIRE	
CPR - class reaction to fire (acc EN 50575)	Fca

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ADDITIONAL MECHANICAL PROPERTIES

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

ENVIRONMENTAL SPECIFICATIONS

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

FEATURES

- fully dielectric
- resistant to electromagnetic interferences
- resistant to longitudinal water penetration
- can be installed in the proximity to electric installation
- easy to install

APPLICATIONS

Cables are designated for transmission of digital and analogue signals within the whole optical bandwidth. They are prepared for making fast connection between optoelectronics devices, laying in cable ducts, use in places with high risk of rodents attack.

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