



Fibre Optic Cable

Z-XXOTKtsdDb CABFibre 24 Fibres

Non Metallic · Multi Tube Duct · Glass Reinforced · Anti Rodent



CABLEOLOGY



APPLICATION

Fibre Optic Cable consisting of an inner and outer PE sheath designated for transmission of digital and analogue data within the Optical fibres. Intended for use in cable ducts for the implementation of backbone and trunk networks. Suitable for use in primary and secondary cabling ducts or in close proximity to High Voltage lines and in spaces exposed to mechanical stresses and rodent attacks. For horizontal applications offering excellent tensile performance.

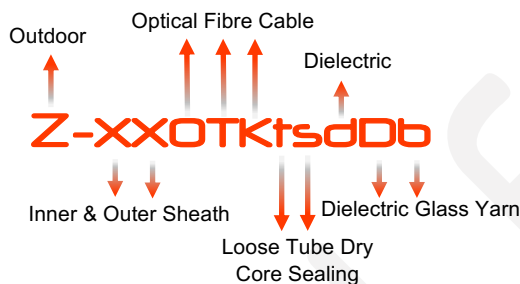
STANDARDS

ITU-T G.652D

Custom specification no. 2362/2/4 RB

Identification of fibres in compliance to EIA/TIA-598 or PN-IEC 60304

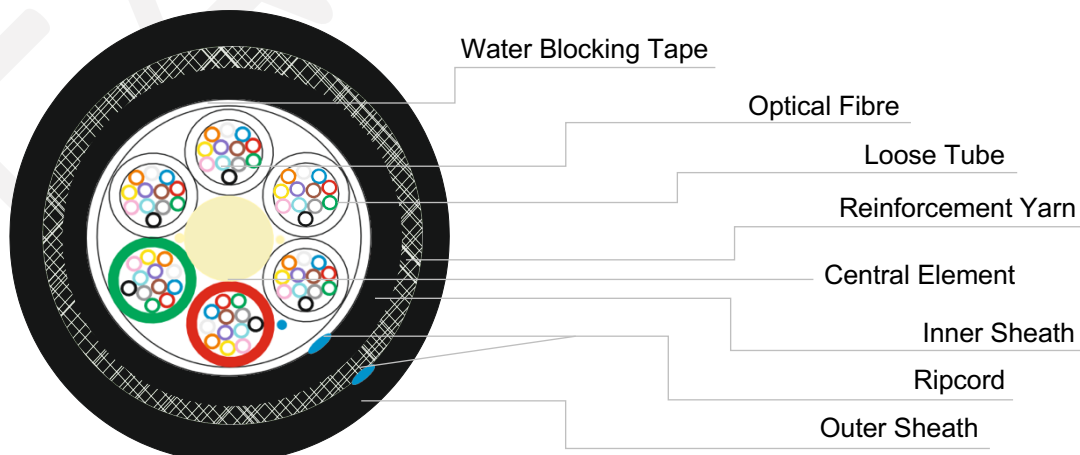
Identification of tubes/elements to EIA/TIA-598 or PN-IEC 60304



KEY FEATURES

- # For outdoor application with anti-rodent protection properties
- # Resistant to moisture and longitudinal water penetration
- # Dielectric Glass Yarn
- # Resistant to electromagnetic interferences
- # Suitable for installation in proximity with HV lines

CONSTRUCTION



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Optical Fibre	Optical telecommunication fibre strands complying to ITU-T G.652D or according to custom specification
Central Element	Fibre reinforced plastic support rod
Loose Tube	Thermoplastic PBT material with secondary coating
Water Blocking Tape	Dry sealed water blocking tape across the cores
Inner Sheath	● Black High Density Polyethylene (HDPE)
Reinforcement	Dielectric reinforced glass yarn
Rip Cord	A conductive material operative as a single or double component in the form of a strong yarn situated under the jacket for purpose of facilitating jacket removal
Outer Sheath	● Black High Density Polyethylene (HDPE) resistant to abraision, UV light and stress corrosion cracking

CHARACTERISTICS

Maximum Tensile Load During installation
3kN

Temperature Range
Transport/Storage: -40°C to +70°C
Installation: -15°C to +60°C
Operational: -40°C to +70°C

Minimum Bending Radius
Installation: 15 x Overall Diameter
Operational: 20 x Overall Diameter

Resistant to Water Penetration
Tested for a period of 24-36 hours to environmental specification IEC 60794-1-2-F5B

STANDARD PACKAGING

3,000m or 4,000m on wooden drums, other forms of packing lengths and delivery are available on

STANDARD PRINT LEGEND

CABLEOLOGY CABFibre Z-XX0TKtsdDb (SIZE) (YEAR)

FIBRE AND TUBE COLOURS

Identification of Fibres

In compliance to EIA/TIA-598: ● Blue ● Orange ● Green ● Brown
● Grey ● White

Identification of Tubes

In compliance to EIA/TIA-598: ● Blue ● Orange ● Green ● Brown
● Filler ● Filler

TECHNICAL PARAMETERS

No. of fibres	Outer diameter of tube [mm]	No. of Tubes/Filers	Cable dimensions		Mechanical properties			
			Outer diameter	Cable weight	Max. tensile load [N]		Min. bending radius [mm]	
			[mm] Approx	[kg/km] Approx	Dynamic (during the Installation)	Static (during the Installation)	Dynamic (during installation)	Static (during the operation)
24	1.8	6	9.6	85	3000	1500	15 x OD	20 x OD



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KEY DATA TABLE

Component	Description	Material	Dimension(s)	
Fibres	ITU-T G.652D according to EETC specifications			
Colour of fibres	Identification of Fibres In compliance to EIA/TIA-598: Blue Orange Green Brown Grey White Identification of Tubes In compliance to EIA/TIA-598: Blue Orange Green Brown. Filler Filler			
Colour of tubes				
Central support member	aligned rod	fibre reinforced Plastic	ϕ 1.8, 2.5 or 3.0mm	
PE oversheath on central support member	Black	HDPE	ϕ 5.3 mm for upto 12 elements ϕ 5 mm for 9+15 elements	
Secondary coating diameter tube	loose tube - thermoplastic material, containing 2, 4, 6 or 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.)	
Inner sheath	 Black	HDPE	thickness: minimum rated average	0.45mm 0.55mm
Reinforcement	dielectric yarn	glass yarns		
Rip cord	strong yarn	oolyester or aramid		
Outer sheath	 Black	HDPE	thickness: minimum rated average	1.0mm 1.15mm
Attenuation @1310nm	dB/km	≤ 0.4 *) *Max attenuation for Single Mode Fibre type		
Attenuation @1550nm	dB/km	≤ 0.25 *) *Max attenuation for Single Mode Fibre type		
Attenuation @1625nm	dB/km	≤ 0.4 *) *Max attenuation for Single Mode Fibre type		
Marking/Printing:	CABLEOLOGY FIBRE OPTIC CABLE Z-XXOTKtsdDb 24J [year of production]  [metre mark] (custom marking available upon request)			
Standard delivery lengths	3,000m / 4,000m custom lengths available upon request)			
Cable weight (Approx)	Kg/km	85		

*) Max attenuation for Single Mode Fibre in cable - additional properties available in Fibre specification

Mechanical and Non mechanical testing criteria, available upon request

All measurements provided in the Table above where minimum value is not stipulated are approximates and subject to manufacturing tolerances to relevant standard(s)

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