

# **TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE**

# 1. Cable construction

Cable type	A-DQ(ZN)B2Y-24x12-250-652D/657A1-6318	
Cable type	A-DQ(ZN)BZ1-Z4X1Z-Z30-03ZD/037A1-0318	
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#### Cable construction

1. Outer sheath: UV-resistant PE

2. Strength element of core: Water swellable glass yarn

3. Optical loose tube: 1,4mm PBT Tube

4. Intramodule compound: Thixotropic compound

5. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D and G.657.A1

6. Water-blocking element of core: Water-swellable yarn

7. Central strength element: Glass reinforced plastic 2,8mm FRP-E

8. Rip-cord: Synthetic yarn

Temperature ranges	Storage and transportation	Installation	Operating			
	temperature	temperature	temperature			
	from -40 to +70 °C	from -15 to +60 °C	from -30 to +70 °C			
Resistance to water	Water resistant					
penetration						
Relative humidity at +35° C, %		98				
Outer diameter, mm		10,4±0,2				
Average weight of 1 km of the		90±5%				
cable, kg						

#### 2. Mechanical characteristics

Calculated tensile strength, not less than <sup>1</sup> , kN	
Dynamic	2,5
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,1 (1000)
Resistance to axial torsion at angle ±360° on 2 m length cable	Resistant
Resistance to bends at angle $\pm 90^{\circ}$ with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 5 J	Resistant

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<sup>&</sup>lt;sup>1</sup> Tensile strength value is for maximum number of fibers design



# 3. Packaging and marking

Cable factory length, km	6		
Package	Drum №14 (1401x813x1401)		
Tolerance, %	±3,0		
Short lengths (customer approval)	Maximum 5%		
Marking method	Inkjet printing		
The accuracy of marking, %	±0,5		

# 4. Coloring

Coloring	Coloring of fibers in loose tube (According to Customer's requirements color can be different).										
1	2	3	4	5	6	7	8	9	10	11	12
red	green	blue	yellow	white	slate	brown	violet	aqua	black	orange	pink

Coloring of optical loose tube (According to Customer's requirements color can be different). Core-filler color is natural. "+m"- denotes single black stripe marking via co-extrusion, white stripe marking for black loose tube. Layer 1 Layer 2 2 3 5 7 9 2 3 1 4 6 8 1 slate blue yellow white violet blue red green brown aqua red green Layer 2 5 7 8 9 10 13 15 4 6 11 12 14 black pink yellow white slate brown violet aqua orange <u>red+m</u> green+m blue+m

# 5. Product data

Fiber count	288
Loose tubes x fibers	24x12