


## TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

### 1. Cable construction

Cable type	A-DQ(ZN)B4Y 18x12-G.652.D/G.657.A1-6309		
			
<p>Cable construction</p> <ol style="list-style-type: none"> <li>1. Outer sheath: PA</li> <li>2. Strength element of core: Water swellable glass yarn</li> <li>3. Optical loose tube: 2,0mm PBT Tube</li> <li>4. Intramodule compound: Thixotropic compound</li> <li>5. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D and G.657.A1</li> <li>6. Water-blocking element of core: Water-swellable yarn</li> <li>7. Central strength element: Glass reinforced plastic 2,0mm FRP-E</li> <li>8. Core filler: PE</li> <li>9. Rip-cord: Water-swellable yarn</li> </ol>			
Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -40 to +70 °C	from -15 to +50 °C	from -30 to +70 °C
Resistance to water penetration	Water resistant		
Relative humidity at +35° C, %	98		
Outer diameter, mm	13,8±0,2		
Average weight of 1 km of the cable, kg	153±5%		

### 2. Mechanical characteristics

Calculated tensile strength, not less than <sup>1</sup> , kN Dynamic	3
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,3 (3000)
Resistance to axial torsion at angle ±360° on 4 m length cable	Resistant
Resistance to bends at angle ± 90° with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 15 J	Resistant

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

### 3. Packaging and marking

Cable factory length, km	6
Package	Drum №18b (1820x1375x1820)
Tolerance, %	±3,0
Short lengths (customer approval)	Maximum 5%
Marking method	Inkjet printing
The accuracy of marking, %	±0,5

### 4. 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.

Layer 1						Layer 2					
1	2	3	4	5	6	1	2	3	4	5	6
red	green	blue	yellow	white	slate	red	green	blue	yellow	white	slate
Layer 2											
7		8		9		10		11		12	
brown		violet		aqua		black		orange		pink	

### 5. Product data

Fiber count	216
Loose tubes x fibers	18x12