

## **TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE**

## **Cable construction**

Cable type	A-DQ(ZN)2Y-16x12/A-DQ(ZN)4Y-16x12-1079
Standards	IEC 60793, IEC 60794
	1 2 3 4 5 6 7 8

Cable construction

1. Outer sheath: UV-resistant PE/PA

2. Optical loose tube: PBT Tube

3. Intramodule compound: Thixotropic compound

4. Optical Fiber: Single-mode Fiber <sup>1</sup>

5. Peripheral strength element: Glass reinforced plastic FRP-E

 ${\bf 6.\ Water-blocking\ element\ of\ core:\ Water-swellable\ yarn}$ 

7. Central strength element: Glass reinforced plastic FRP-E

8. Rip-cord: Water-swellable yarn

Temperature ranges	Storage and transportation	Installation	Operating	
	temperature	temperature	temperature	
	from -40 to +70 °C	from -15 to +50 °C	from -20 to +70 °C	
Resistance to water		Water resistant		
penetration				
Relative humidity at +35° C, %		98		
Outer diameter, mm		7,8±0,2		
Average weight of 1 km of the		50±5%		
cable, kg				

#### **Mechanical characteristics**

Calculated tensile strength, not less than <sup>2</sup> , kN	
Dynamic	0,8
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,05 (500)
Resistance to axial torsion at angle ±360° on 4 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 10 J	Resistant

<sup>&</sup>lt;sup>1</sup> Can be used:

– 250  $\mu m$  Single-mode Fiber according to ITU-T G.652.D or G.652.D/G.657.A1

<sup>- 200</sup>  $\mu m$  Single-mode Fiber according to ITU-T G.652.D/G.657.A1

<sup>&</sup>lt;sup>2</sup> Tensile strength value is for maximum number of fibers design



# Packaging and marking

Cable factory length, km	6
Package	Drum №12a (1200x855x1200)
Tolerance, %	±3,0
Short lengths (customer approval)	Maximum 5%
Marking method	Inkjet printing
The accuracy of marking, %	±0,5

# Coloring

Coloring	of fibers	in loose t	ube (Acco	rding to C	ustomer'	s requiren	nents colo	or can be o	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

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

Cable sheath coloring				
Sheath material	Р	Ē	PA	
Color	black	orange		

# **Product data**

Fiber count	192
Loose tubes x fibers	16x12