

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

### **Cable construction**

Cable type	A-DQ(ZN)2Y-(8-12)x24/A-DQ(ZN)4Y-(8-12)x24-1091				
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. Optical Fiber: 200  $\mu m$  Single-mode Fiber according to ITU-T G.652.D/G.657.A1

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

5. Intramodule compound: Thixotropic compound

6. Insulation of central strength element: PE

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

8. Rip-cord: Water-swellable yarn

Temperature ranges	Storage and transportation	Installation	Operating			
	temperature	temperature	temperature			
	from -30 to +70 °C	from -15 to +50 °C	from -30 to +70 °C			
Resistance to water	Water resistant					
penetration						
Relative humidity at +35° C, %	98					
Outer diameter, mm	8,0±0,2					
Average weight of 1 km of the	65±5%					
cable, kg						

#### **Mechanical characteristics**

Calculated tensile strength, not less than <sup>1</sup> , kN	
Dynamic	3,5
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,15 (1500)
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 2 J	Resistant

<sup>&</sup>lt;sup>1</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 tube (According to Customer's requirements color can be different). M-fiber with											
black r	ing mark.										
1	2	3	4	5	6	7	8	9	10	11	12
red	green	blue	yellow	white	slate	brown	violet	aqua	black	orange	pink
13	14	15	16	17	18	19	20	21	22	23	24
<u>red+m</u>	green+m	<u>blue+m</u>	vellow+m	white+m	slate+m	brown+m	<u>violet+m</u>	aqua+m	transparent	orange+m	pink+m

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

Cable sheath coloring				
Sheath material	Р	Ē	PA	
Color	black	orange		

## **Product data**

Fiber count	192	288
Loose tubes x fibers	8x24	12x24