

TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

Cable construction

Cable type	A-DQ(ZN)2Y (12-24)x24/A-DQ(ZN)4Y (12-24)x24-10129
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: 200 μ m Single-mode Fiber according to ITU-T G.652.D/G.657.A1

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

6. Insulation of central strength element: PE

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

8. Rip-cord: Water-swellable yarn

Temperature ranges	Storage and transportation	Installation	Operating	
	temperature	temperature	temperature	
	from -20 to +70 °C	from -10 to 50 °C	from -20 to +70 °C	
Resistance to water		Water resistant		
penetration				
Relative humidity at +35° C, %		98		
Outer diameter, mm		9,8±0,2		
Average weight of 1 km of the	ne 98±5%			
cable, kg				

Mechanical characteristics

Calculated tensile strength, not less than ¹ , kN	
Dynamic	3
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,03 (300)
Resistance to axial torsion at angle ±180° 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 2 J	Resistant

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¹ Tensile strength value is for maximum number of fibers design



Packaging and marking

Cable factory length, km	6		
Package	Drum №14 (1400x815x1400)		
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 ring mark.											
1	1 2 3 4 5 6 7 8 9 10 11 12								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>	<u>vellow+m</u>	white+m	slate+m	brown+m	<u>violet+m</u>	agua+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. "+m"- denotes single black stripe marking via co-extrusion, white stripe marking for black loose tube. Layer 2 Layer 1 1 2 3 4 5 7 8 9 2 3 6 1 blue yellow white slate violet blue red green brown aqua red green Layer 2 4 5 6 7 8 9 10 11 12 13 14 15 white slate black yellow brown violet aqua orange pink green+m blue+m

Cable sheath coloring							
Sheath material	th material PE PA						
Color	black	orange					

Product data

Fiber count	288	384	432	576
Loose tubes x fibers	12x24	16x24	18x24	24x24