

TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

Cable construction

Cable type	A-DQ(ZN)B2Y-(1-4)x12/A-DQ(ZN)B4Y-(1-4)x12-1033	
Standards	IEC 60793, IEC 60794	
	1 2 3 4 5 6	

Cable construction

1. Outer sheath: UV-resistant PE/PA

2. Strength element of core: Aramid yarns

3. Optical loose tube: PBT Tube

4. Intramodule compound: Thixotropic compound

5. Optical Fiber: Single-mode Fiber¹

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

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

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

9. Rip-cord: Water-swellable yarn

Temperature ranges	Storage and transportation	Installation	Operating	
	temperature	temperature	temperature	
	from -30 to +70 °C	from -5 to +50 °C	from -20 to +70 °C	
Resistance to water		Water resistant		
penetration				
Relative humidity at +35° C, %		98		
Outer diameter, mm		4,2±0,2		
Average weight of 1 km of the		15±5%		
cable, kg				

Mechanical characteristics

Calculated tensile strength, not less than ² , kN	
Dynamic	0,75
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,12 (1200)
Resistance to axial torsion at angle ±360° on 1 m length cable	Resistant
Resistance to bends at angle ± 90° with a radius equal to 20 nominal	Resistant
cable diameters	
Resistance to impact 2 J	Resistant

¹ Can be used:

– 250 μm Single-mode Fiber according to ITU-T G.652.D or G.652.D/G.657.A1

^{- 200} μm Single-mode Fiber according to ITU-T G.652.D/G.657.A1

² Tensile strength value is for maximum number of fibers design



Packaging and marking

Cable factory length, km	6
Package	Drum №8 (800x620x800)
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).											
1	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.					
1	2	3	4		
red	green	blue	yellow		

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

Product data

Fiber count	12	24	36	48
Loose tubes x fibers	1x12	2x12	3x12	4x12