

TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

Cable construction

Cable type	A-DQ(ZN)2Y-(1-12)x12/ A-DQ(ZN)4Y-(1-12)x12-1077		
Standards	IEC 60793, IEC 60794		
<p>Cable construction</p> <ol style="list-style-type: none"> 1. Outer sheath: UV-resistant PE/PA 2. Optical loose tube: PBT Tube 3. Intramodule compound: Thixotropic compound 4. Optical Fiber: Single-mode Fiber¹ 5. Insulation of central strength element: PE 6. Central strength element: Glass reinforced plastic FRP-E with insulation 7. Water-blocking element of core: Water-swellaable yarn 8. Rip-cord: Water-swellaable yarn 9. Core filler: PE 			
Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -40°C to +70°C	from -15°C to +50°C	from -30°C to +70°C
Resistance to water penetration	Water resistant		
Relative humidity at +35 ^o C, %	98		
Outer diameter, mm	7,6±0,2		
Average weight of 1 km of the cable, kg	49,5±5%		

Mechanical characteristics

Calculated tensile strength, not less than ² , kN	
Dynamic	3
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,1 (1000)
Resistance to axial torsion at angle ±360° on 2 m length cable	Resistant
Resistance to bends at angle ± 90 ^o with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 10 J	Resistant

¹Can 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 №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).											
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	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	PE						PA				
Color	black						orange				

Product data

Fiber count	12	24	36	48	72	96	144
Loose tubes x fibers	1x12	2x12	3x12	4x12	6x12	8x12	12x12