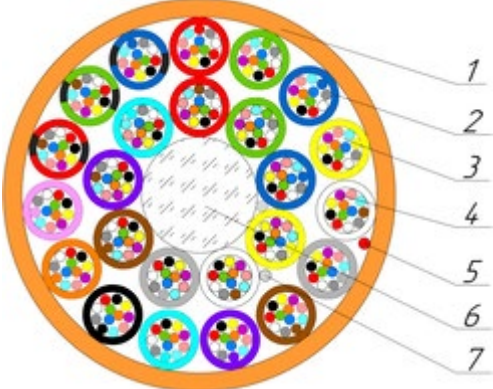


TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

1. Cable construction

Cable type	A-DQ(ZN)4Y 24x12-G.652.D/G.657.A1-200-10102		
			
<p>Cable construction</p> <ol style="list-style-type: none"> Outer sheath: PA Optical loose tube: 1,2mm PBT Tube Intramodule compound: Thixotropic compound Optical Fiber: 200 mkm Single-mode Fiber according to ITU-T G.652.D and G.657.A1 Rip-cord: Water-swellable yarn Central strength element: Glass reinforced plastic 2,3mm FRP-E Water-blocking element of core: Water-swellable yarn 			
Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -40 to +70 °C	from -10 to +50 °C	from -20 to +70 °C
Resistance to water penetration	Water resistant		
Relative humidity at +35° C, %	98		
Outer diameter, mm	7,9±0,2		
Average weight of 1 km of the cable, kg	61±5%		

2. Mechanical characteristics

Calculated tensile strength, not less than ¹ , kN Dynamic	2
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,05 (500)
Resistance to axial torsion at angle ±360° on 2 m length cable	Resistant
Resistance to bends at angle ± 90° with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 5 J	Resistant

¹ Tensile strength value is for maximum number of fibers design

3. Packaging and marking

Cable factory length, km	6
Package	Drum №12a (1221x855x1221)
Tolerance, %	±3,0
Short lengths (customer approval)	Maximum 5%
Marking method	Inkjet printing
The accuracy of marking, %	±0,5

4. 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. "+m"- denotes single black stripe marking via co-extrusion, white stripe marking for black loose tube.

Layer 1									Layer 2		
1	2	3	4	5	6	7	8	9	1	2	3
red	green	blue	yellow	white	slate	brown	violet	aqua	red	green	blue
Layer 2											
4	5	6	7	8	9	10	11	12	13	14	15
yellow	white	slate	brown	violet	aqua	black	orange	pink	red+m	green+m	blue+m

5. Product data

Fiber count	192	216	288
Loose tubes x fibers	16x12	18x12	24x12