TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE
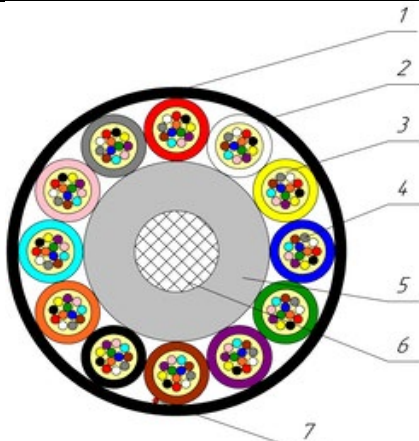
1. **Cable construction**

Cable type	A-DQ(ZN)2Y (1-12)x12-G.652.D/G.657.A1-1037

Cable construction
1. Outer sheath: UV-resistant PE
2. Optical loose tube: 1,7mm PBT Tube
3. Intramodule compound: Thixotropic compound
4. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D and G.657.A1
5. Insulation of central strength element: PE
6. Central strength element: Glass reinforced plastic 2,3mm FRP-E with insulation up to 4,9mm
7. Rip-cord: Water-swellable yarn

Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -40 to +70 °C	from -10 to +50 °C	from -40 to +60 °C
Resistance to water penetration	Water resistant		
Relative humidity at +35^0 C, %	98		
Outer diameter, mm	9,1±0,2		
Average weight of 1 km of the cable, kg	77±5%		

2. **Mechanical characteristics**

Calculated tensile strength, not less than[1], kN Dynamic	2,5
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,175 (1750)
Resistance to axial torsion at angle ±360° on 4 m length cable	Resistant
Resistance to bends at angle ± 90^0 with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 2 J	Resistant

[1] Tensile strength value is for maximum number of fibers design

3. Packaging and marking

Cable factory length, km	6
Package	Drum №14 (1401x813x1401)
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.

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

5. Product data

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