

PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

1. Cable construction

Cable type	A-DQ(ZN)B2Y-(8-12)x24-200-652D/657A1-6323		
Cable construction 1. Outer sheath: UV-resistant PE 2. Strength element of core: Water swellable glass yarn 3. Water-blocking element of core: Water-swellable yarn 4. Rip-cord: Synthetic yarn 5. Optical loose tube: 1,75mm PBT Tube 6. Optical Fiber: 200 mkm Single-mode Fiber according to ITU-T G.652.D and G.657.A1 7. Intramodule compound: Thixotropic compound 8. Insulation of central strength element: PE 9. Water-blocking element: Water-swellable yarn 10. Central strength element: Glass reinforced plastic 2,5mm FRP-E with insulation up to 5,0mm			
Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -40 to +70 °C	from -15 to +50 °C	from -30 to +70 °C
Resistance to water penetration	Water resistant		
Relative humidity at +35 ⁰ C, %	98		
Outer diameter, mm	9,7±0,2		
Average weight of 1 km of the cable, kg	83±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)	0,15 (1500)
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 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 №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). M-fiber with black ring mark.

1	2	3	4	5	6	7	8	9	10	11	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>	<u>green+m</u>	<u>blue+m</u>	<u>yellow+m</u>	<u>white+m</u>	<u>slate+m</u>	<u>brown+m</u>	<u>violet+m</u>	<u>aqua+m</u>	<u>transparent</u>	<u>orange+m</u>	<u>pink+m</u>

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	192	288
Loose tubes x fibers	8x24	12x24