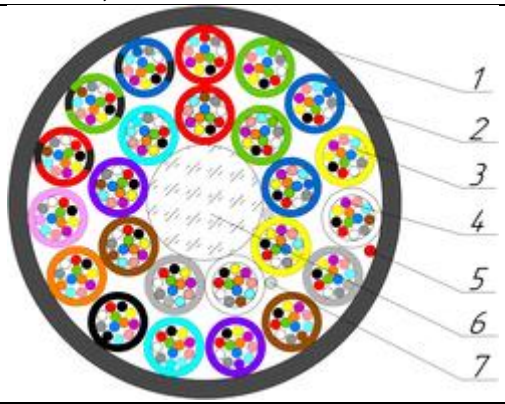
TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

Cable construction

Cable type	A-DQ(ZN)2Y 24x12/A-DQ(ZN)4Y 24x12-10147
Standards	IEC 60793, IEC 60794



Cable construction
1. Outer sheath: UV-resistant PE/PA
2. Optical loose tube: PBT Tube
3. Intramodule compound: Thixotropic compound
4. Optical Fiber: 200 µm Single-mode Fiber according to ITU-T G.652.D/G.657.A1
5. Rip-cord: Water-swellable yarn
6. Central strength element: Glass reinforced plastic FRP-E
7. 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 +35^0 C, %	98		
Outer diameter, mm	7,5±0,2		
Average weight of 1 km of the cable, kg	52±5%		

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 ± 90^0 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

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. "+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

Cable sheath coloring		
Sheath material	PE/PA	
Color	black	orange

Product data

Fiber count	288
Loose tubes x fibers	24x12