

### PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

### 1. Cable construction

1 2 3 4 5 6	

Cable construction

1. Outer sheath: UV-resistant PE

2. Peripheral water-blocking strength element: Water swellable glass yarn

3. Optical loose tube: 2,0mm PBT Tube

4. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D

5. Water-blocking element of core: Water-swellable yarn

6. Intramodule compound: Thixotropic compound

7. Central strength element: Glass reinforced plastic 2,0mm FRP-E

8. Rip-cord: Synthetic yarn

Temperature ranges	Storage and transportation	Installation	Operating			
	temperature	temperature	temperature			
	from -20 to +70 °C	from -10 to +50 °C	from -20 to +60 °C			
Resistance to water	Water resistant					
penetration						
Relative humidity at +35° C, %	98					
Outer diameter, mm		8,4±0,2				
Average weight of 1 km of the	60±5%					
cable, kg						

### 2. Mechanical characteristics

Calculated tensile strength, not less than <sup>1</sup> , kN	3
Dynamic	5
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 $\pm 90^{\circ}$ with a radius equal to 20 nominal	Resistant
cable diameters	
Resistance to impact 10 J	Resistant

<sup>&</sup>lt;sup>1</sup> 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	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	1 2 3 4 5 6						
red	green	blue	yellow	white	slate		

## 5. Product data

Fiber count	24	72
Loose tubes x fibers	2x12	6x12