



«Prime-C» LLP  
BIN 170940000095  
100000, Republic of Kazakhstan, Karaganda, Erzhanova 18, BC «Respect», off. №817  
IIC KZ06914052203KZ002W3 in "Sberbank" SB JSC  
Phone: +7(7212)910-116; Mob.: +7(701)806-75-06, +7(775)700-30-30  
e-mail: info@prime-c.kz

## DOTs – All Dialectic Self-Support Glass Yarns



- 1. Outer sheath
- 2. Fiberglass yarns
- 3. Water swellable yarn
- 4. Core filler
- 5. Optical loose tube
- 6. Hydrophobic gel
- 7. Optical fiber
- 8. Central strength element

### Application

Optical cable is designed for suspension on overhead communication lines towers, contact network and railways auto-blocking, power lines, lighting columns, power facilities, between buildings; for direct ground installation, in cable ducts, in pipes (including the blowing installation method), in blocks, in trays, in tunnels, in headers, on bridges and skyways, inside buildings.

### Technical characteristics

Parameter	Value			
Number of optical fibers	Up to 48	Up to 72	Up to 96	Up to 144
Tensile strength, kN		2		
Cable diameter, mm	8,4	9,0	9,9	11,3
Cable weight, kg/km	54,7	61,9	72,5	93,6
Bending radius, mm	126,0	135,0	148,5	169,5
Tensile strength, kN		4		
Cable diameter, mm	11,1	11,7	12,4	12,9
Cable weight, kg/km	96,1	104,5	114,3	123,4
Bending radius, mm	166,5	175,5	186,0	193,5
Tensile strength, kN		7		
Cable diameter, mm	11,3	11,8	12,4	12,9
Cable weight, kg/km	100,4	105,9	114,3	123,4
Bending radius, mm	169,5	177,0	186,0	193,5
Tensile strength, kN		10		
Cable diameter, mm	11,7	12,2	12,6	13,2
Cable weight, kg/km	111,0	116,1	121,2	131,6
Bending radius, mm	175,5	183,0	189,0	198,0
Crushing force, kN/sm		0,3		
Operating temperature		-60°C...+70°C		
Installation temperature		-30°C...+50°C		
Transportation and storage temperature		-60°C...+70°C		
Minimum bending radius		Not less than 15 cable diameters		
Factory length, km		4 KM		

### Technical characteristics of optical fiber

Type of optical fiber	Corning SMF 28 Ultra	Corning SMF28e+BB
ITU-T recommendations	G.657A1 G.652D	G.657A1 G.652D
Deviation from the concentricity of the core, microns, not more	0,5	
Diameter of fiber sheath, microns	125±0,7	
Deviation from the roundness of the sheath, %, not more	0,7	
The diameter of the protective covering, microns	242±5	
Maximum attenuation at wavelength 1310 nm	0,32	0,34
Maximum attenuation at wavelength 1550 nm	0,18	0,20

### Full name example

**Optical cable DOTs-P-48Y (6x8) 4kN**

The cable consists of a loose tube core with a central strength element made of a dielectric rod with a spiral-twisted water blocking yarn around which optical loose tubes with freely laid fibers are twisted. The core is fastened with two winding threads with a water-blocking property. Fiberglass yarns and a MDPE sheath are laid on the core.

