



«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

## DPD – Direct Buried Loose Tube Double Jacket Dielectric Armor



- 1. Outer sheath
- 2. Fiberglass armor
- 3. Hydrophobic gel
- 4. Intermediate PE sheath
- 5. Hydrophobic gel
- 4. Optical loose tube
- 5. Hydrophobic gel
- 6. Optical fiber
- 7. Central strength element

\* It is possible to produce a cable with flame-redundant outer sheath, with low smoke and gas emission (ng(A)-HF)

### Application

Optical cable is designed for installation in ground including swamps and shallow non-navigable river, in ducts, in pipes, in blocks, in trays, in tunnels, in headers, on bridges and skyways, between and inside buildings, for suspension on the supports of overhead communication lines towers, contact network and railways auto-blocking, power lines, lighting columns, power facilities, as well as with increased requirements for resistance to external electromagnetic influences.

### Technical characteristics

Parameter	Value						
	Up to 16	Up to 32	Up to 48	Up to 64	Up to 72	Up to 96	Up to 144
Number of optical fibers							
Tensile strength, kN	7						
Cable diameter, mm	12,4	12,6	13,0	13,2	14,4	14,4	17,6
Cable weight, kg/km	136,1	139,1	147,9	151,1	179,6	179,6	292,9
Bending radius, mm	186	189	195	198	216	216	264
Tensile strength, kN	16						
Cable diameter, mm	14,6	14,8	15,2	15,4	16,2	16,2	17,6
Cable weight, kg/km	209,2	212,9	225,2	227,8	248,4	248,4	292,9
Bending radius, mm	219	222	228	231	243	243	264
Tensile strength, kN	20						
Cable diameter, mm	15,6	15,8	16,2	16,4	17,0	17,0	17,6
Cable weight, kg/km	245,4	249,3	264,5	268,6	282,1	282,1	292,9
Bending radius, mm	234	237	243	246	255	255	264
Crushing force, kN/sm	0,4						
Operating temperature	-50°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						

### 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 DPD-P-48Y (6x8) 16kN

The cable consists of a loose tube core with a central strength element made of a dielectric around which optical loose tubes with freely laid fibers are twisted. The free space is filled with a hydrophobic gel in the optical loose tubes and in the core. The core is covered with intermediate PE sheath. The intermediate PE sheath is spirally covered with the dielectric rods armor. The free space is filled with a hydrophobic gel between rodes. The armor is covered with HDPE sheath.