**TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE**

Cable type A-DQ(ZN)В2Y 16x12-G.652.D-UCF-6309

Cable formula F-PBT+ FGA-PE

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|  | 1. Outer sheath2. Peripheral water-blocking strength element3. Optical loose tube4. Intramodule compound5. Optical Fiber6. Water-blocking element7. Central strength element8. Core-filler9. Rip-cord |
| **Cable construction** |
| Outer sheath | UV-resistant PE |
| Peripheral water-blocking strength element | Water-swellable yarn |
| Optical loose tube | 2,0mm PBT tube |
| Intramodule compound | Thixotropic compound |
| Optical Fiber | Corning ® SMF-28® Ultra Optical Fiber according to ITU-T G.652.D and G.657.A1 |
| Water-blocking element | Water-swellable yarn |
| Central strength element | Glass reinforced plastic 2,0mm FRP-E |
| Core-filler | PE |
| Rip-cord | Synthetic yarn |
| Coloring of fibers in loose tube (According to Customer’s requirements color can be different) | Fiber №1Fiber №2Fiber №3Fiber №4Fiber №5Fiber №6Fiber №7Fiber №8Fiber №9Fiber №10Fiber №11Fiber №12 | BlueOrangeGreenBrownGreyWhiteRedBlackYellowPurpleRoseAqua |
| Coloring of optical loose tube (According to Customer’s requirements color can be different) | **1-st layer**Loose tube №1Loose tube №2Loose tube №3Loose tube №4Core-fillerCore-filler**2-st layer**Loose tube №5Loose tube №6Loose tube №7Loose tube №8Loose tube №9Loose tube №10Loose tube №11Loose tube №12 Loose tube №13Loose tube №14Loose tube №15Loose tube №16 | BlueOrangeGreenBrownNaturalNaturalBlueOrangeGreenBrownGreyWhiteRedBlackYellowPurpleRoseAqua |
| Number of the elements in a layer | 1+6+12 |
| Average weight of 1 km of the cable, kg | 151,6 |
| Average outer diameter (D), mm | 14,0±0,2 |
| **Optical parameters** |
| Operation wavelength, nm | 1310-1550 |
| Attenuation coefficient at wavelength, dB/km, not more than1310 nm1383 nm1550 nm | 0,360,350,22 |
| **Mechanical characteristics** |
| Calculated tensile strength, not less than, kN Dynamic  | 3,0 |
| Minimum bending radius | 20D |
| Short-term crush test, kN/cm (N/10cm) | 0,3 (3000) |
| Resistance to axial torsion at angle ± 3600 on 4 m length cable | Resistant |
| Resistance to bends at angle ± 900 with a radius equal to 20 nominal cable diameters | Resistant |
| Resistance to impact 15,0 J | Resistant |
| Operating temperature | from -30 tо +70 °С |
| Installation temperature | from -15 tо +50 °С |
| Storage and transportation temperature | from -40 tо +70 °С |
| Resistance to water penetration | Water resistant |
| Relative humidity at +350 C, % | 98 |
| Cable factory length, km | 5,0/6,0 |
| Package | Drum №17 (1765х940х1765)/Drum №18b (1870х1350х1870) |
| Tolerance, % | ±3 |
| Short lengths (customer approval) | Maximum 5% |
| The accuracy of marking | ±0,5 |