**PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE**

### Cable construction

| Cable type | A-DQ(ZN)2Y-(1-6)x24/A-DQ(ZN)4Y-(1-6)x24-1067 |
|---|---|
| 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: Single-mode Fiber[1]
5. Rip-cord: Water-swellable yarn
6. Central strength element: Glass reinforced plastic FRP-E
7. Water-blocking element of core: Water-swellable yarn
8. Core filler: PE

| Temperature ranges | Storage and transportation temperature | Installation temperature | Operating temperature |
|---|---|---|---|
| | from -40 to +70 °C | from -15 to +70 °C | from -40 to +70 °C |
| Resistance to water penetration | Water resistant | | |
| Relative humidity at +35$^0$ C, % | 98 | | |
| Outer diameter, mm | 7,8±0,2 | | |
| Average weight of 1 km of the cable, kg | 49±5% | | |

### Mechanical characteristics

| | |
|---|---|
| Calculated tensile strength, not less than[2], kN Dynamic | 1,5 |
| Minimum bending radius | 20D |
| Short-term crush test, kN/cm (N/10cm) | 0,12 (1200) |
| Resistance to axial torsion at angle ±360° on 1 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 |

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[1] Can be used:

- 250 μm Single-mode Fiber according to ITU-T G.652.D or G.652.D/G.657.A1
- 200 μm Single-mode Fiber according to ITU-T G.652.D/G.657.A1

[2] 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). M-fiber with black ring mark. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| red | green | blue | yellow | white | slate | brown | violet | aqua | black | orange | pink |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| red+m | green+m | blue+m | yellow+m | white+m | slate+m | brown+m | violet+m | aqua+m | transparent | orange+m | pink+m |

| Coloring of optical loose tube (According to Customer's requirements color can be different). Core-filler color is natural. | | | | | |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| red | green | blue | yellow | white | slate |

| Cable sheath coloring | | |
|---|---|---|
| Sheath material | PE | PA |
| Color | black | orange |

**Product data**

| Fiber count | 24 | 48 | 72 | 96 | 144 |
|---|---|---|---|---|---|
| Loose tubes x fibers | 1x24 | 2x24 | 3x24 | 4x24 | 6x24 |