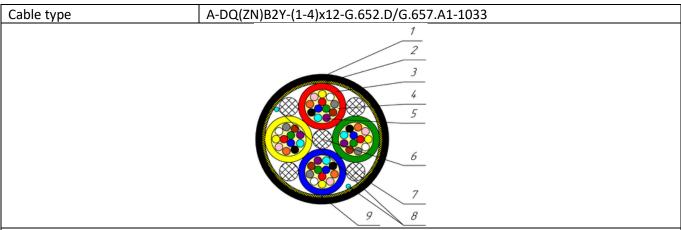


TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

1. Cable construction



Cable construction

- 1. Outer sheath: UV-resistant PE
- 2. Strength element of core:aramid yarns
- 3. Optical loose tube: 1,45mm PBT Tube
- 4. Intramodule compound: Thixotropic compound
- 5. Optical Fiber: Single-mode Fibre according to ITU-T G.652.D and G.657.A1
- 6. Central strength element: Glass reinforced plastic 6,0mm FRP-E
- 7. Peripheral strength element: Glass reinforced plastic 0,6mm FRP-E
- 8. Water-blocking element of core: Water-swellable yarn
- 9. Rip-cord: Water-swellable yarn

| Temperature ranges | Storage and transportation | Installation | Operating | | |
|--------------------------------|----------------------------|-------------------|--------------------|--|--|
| | temperature | temperature | temperature | | |
| | from -30 to +70 °C | from -5 to +50 °C | from -20 to +60 °C | | |
| Resistance to water | Water resistant | | | | |
| penetration | | | | | |
| Relative humidity at +35° C, % | 98 | | | | |
| Outer diameter, mm | | 4,2±0,2 | | | |
| Average weight of 1 km of the | 15±5% | | | | |
| cable, kg | | | | | |

2. Mechanical characteristics

| Calculated tensile strength, not less than ¹ , kN Dynamic | 0,75 |
|---|-------------|
| 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 $\pm 90^{\circ}$ with a radius equal to 20 nominal | Resistant |
| cable diameters | |
| Resistance to impact 2 J | Resistant |

 $^{^{\}rm 1}$ Tensile strength value is for maximum number of fibers design



3. Packaging and marking

| Cable factory length, km | 6 |
|-----------------------------------|-----------------------|
| Package | Drum №8 (801x625x801) |
| 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 | 2 | 3 | 4 | | |
| red | green | blue | yellow | | |

5. Product data

| Fiber count | 12 | 24 | 48 |
|----------------------|------|------|------|
| Loose tubes x fibers | 1x12 | 2x12 | 4x12 |