## TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

## 1. Cable construction

| Cable type | A-DQ(ZN)4Y (1-12)x12-G.652.D/G.657.A1-200-1037 |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Cable construction <br> 1. Outer sheath: PA <br> 2. Optical loose tube: $1,7 \mathrm{~mm}$ PBT Tube <br> 3. Intramodule compound: Thixotropic compound <br> 4. Optical Fiber: 200 mkm Single-mode Fiber according to ITU-T G.652.D and G.657.A1 <br> 5. Insulation of central strength element: PE <br> 6. Central strength element: Glass reinforced plastic $2,3 \mathrm{~mm}$ FRP-E with insulation up to $4,9 \mathrm{~mm}$ <br> 7. Rip-cord: Water-swellable yarn |  |  |  |
| Temperature ranges | Storage and transportation temperature from -40 to $+70^{\circ} \mathrm{C}$ | Installation temperature from -10 to $+50^{\circ} \mathrm{C}$ | $\qquad$ |
| Resistance to water penetration | Water resistant |  |  |
| Relative humidity at $+35^{\circ} \mathrm{C}, \%$ | 98 |  |  |
| Outer diameter, mm | 9,1 $\pm 0,2$ |  |  |
| Average weight of 1 km of the cable, kg | 77さ5\% |  |  |

## 2. Mechanical characteristics

| Calculated tensile strength, not less than ${ }^{1}, \mathrm{kN}$ <br> Dynamic | 2,5 |
| :--- | :--- |
| Minimum bending radius | 20 D |
| Short-term crush test, $\mathrm{kN} / \mathrm{cm}(\mathrm{N} / 10 \mathrm{~cm})$ | $0,175(1750)$ |
| Resistance to axial torsion at angle $\pm 360^{\circ}$ on 4 m length cable | Resistant |
| Resistance to bends at angle $\pm 90^{\circ}$ with a radius equal to 20 nominal <br> cable diameters | Resistant |
| Resistance to impact 2 J | Resistant |

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## 3. Packaging and marking

| Cable factory length, km | 6 |
| :--- | :---: |
| Package | Drum №14 (1401x813x1401) |
| Tolerance, $\%$ | $\pm 3,0$ |
| Short lengths (customer approval) | Maximum 5\% |
| Marking method | Inkjet printing |
| The accuracy of marking, \% | $\pm 0,5$ |

## 4. 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 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| red | green | blue | yellow | white | slate | brown | violet | aqua | black | orange | pink |

## 5. Product data

| Fiber count | 12 | 24 | 48 | 96 | 144 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Loose tubes $x$ fibers | $1 \times 12$ | $2 \times 12$ | $4 \times 12$ | $8 \times 12$ | $12 \times 12$ |


[^0]:    ${ }^{1}$ Tensile strength value is for maximum number of fibers design

