## PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

## Cable construction

| Cable type | A-DF(L)2Y(ZN)B2Y4Y-(1-6)x12-6312 |  |  |
| :---: | :---: | :---: | :---: |
| Standards | IEC 60793, IEC 60794 |  |  |
|  |  | 1 2 3 4 5 6 7 7 8 9 10 11 12 |  |
| Cable construction <br> 1. Outer sheath: UV-resistant PA <br> 2. Inner sheath: UV-resistant PE <br> 3. Peripheral water-blocking strength element: Water swellable glass yarn <br> 4. Inner sheath: UV-resistant PE <br> 5. Armoring: Aluminum polymer tape <br> 6. Water blocking element of core: Water blocking compound <br> 7. Optical loose tube: PBT Tube <br> 8. Intramodule compound: Thixotropic compound <br> 9. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D or G.652.D/G.657.A1 <br> 10. Central strength element: Glass reinforced plastic <br> 11. Core filler: PE <br> 12. Rip cord: Synthetic yarn |  |  |  |
| Temperature ranges | Storage and transportation temperature | Installation temperature | Operating temperature |
|  | from -40 to $+70{ }^{\circ} \mathrm{C}$ | from -10 to $+50^{\circ} \mathrm{C}$ | from -40 to $+70^{\circ} \mathrm{C}$ |
| Resistance to water penetration | Water resistant |  |  |
| Relative humidity at $+35^{\circ} \mathrm{C}, \%$ | 98 |  |  |
| Outer diameter, mm | 12,9 $\pm 0,2$ |  |  |
| Average weight of 1 km of the cable, kg | 129 $\pm 5 \%$ |  |  |

## Mechanical characteristics

| Calculated tensile strength, not less than <br>  <br> Dynamic, kN | 3,3 |
| :--- | :--- |
| Minimum bending radius | 20 D |
| Short-term crush test, $\mathrm{kN} / \mathrm{cm}(\mathrm{N} / 10 \mathrm{~cm})$ | $0,3(3000)$ |
| 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 10 J | Resistant |

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## Packaging and marking

| Cable factory length, km | 6 |
| :--- | :---: |
| Package | Drum №17 (1700×965×1700) |
| Tolerance, $\%$ | $\pm 3,0$ |
| Short lengths (customer approval) | Maximum 5\% |
| Marking method | Inkjet printing |
| The accuracy of marking, \% | $\pm 0,5$ |

## 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).

| 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| red | green | blue | yellow | white | slate |

## Product data

| Fiber count | 12 | 24 | 36 | 48 | 72 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Loose tubes $x$ fibers | $1 \times 12$ | $2 \times 12$ | $3 \times 12$ | $4 \times 12$ | $6 \times 12$ |


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

