



## ОПТ \* 10 – 4 ТУ У 31.3-00214534-047:2005

Fiber optic overhead module-core cables, with polyethylene outer sheath

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### Mark formation:

ОПТ-[a]-[b] [c]10(10x[e])-4

[a] central strength element

- C – steel
- No marks – dielectric

[b] quantity of optical fibers in the cable, possible values

- 60, 80, 100, 120, 130, 140, 150, 160

[c] type of optical fiber

- E – single-mode (ITU-T G.652B)
- A – single-mode with extended wavelength band (ITU-T G.652D, ITU-T G.657A1)
- C – single-mode with non-zero shifted dispersion (ITU-T G.655)
- M – multimode with core and sheath diameter ratio 50 : 125 mm (ITU-T G.651)
- B – multimode with core and sheath diameter ratio 62.5 : 125 mm (IEC 60793-2)

[e] quantity of optical fibers in the module:

- 1 ... 16
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Manufacturing of cables in climate version F is possible

Manufacturing of cables with steel strength element is possible

Manufacturing of cables with armouring (aramid yarns and/or corrugated steel tape) is possible

Manufacturing of cables with steel or dielectric wire rope (glass fiber rod) is possible

Manufacturing of cables with flame-retardant polymer compound outer sheath is possible

It is possible to manufacture cables with gel-filled core or dry core (with water-blocking yarns and tapes)

It is possible to manufacture cables with a number of core elements up to and including 18

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Order placing: sample of indication (corresponds to configuration pattern)

ОПТ-100A10(10x10)-4 • ТУ У 31.3-00214534-047:2005

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Cables are used for:

- suspensions and operation at supports of aerial contact-lines, urban electric transport and aerial power transmission lines under impact of wind, ice or their combination loads



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**TECHNICAL SPECIFICATIONS**

|  |           |                                       |
|--|-----------|---------------------------------------|
| Number of cable core elements  | units     | 10                                    |
| Number of optical fibers in cable  | units     | 60 ... 160                            |
| Electrical resistance of sheath insulation, not less than                                  | MOhm · km | 2000                                  |
| Permissible tensile force  | kN        | 4                                     |
| Permissible crushing force, no less than   | N/10 sm   | 3000                                  |
| Operating temperature range  | °C        | -40 ... +60                           |
| Operating temperature range (in climate version F)   | °C        | -60 ... +60                           |
| Cable weight (approximate, depending on construction)                                      | kg/km     | 180 ... 220                           |
| Rated outer diameter of the cable (for reference only, depending on construction) **       | mm        | 13 ... 15                             |
| Cable width with suspension element (for reference only, depending on construction design) | mm        | 21 ... 23                             |
| Minimum bending radius during laying   | mm        | 300                                   |
| Rated factory cable length and gross weight of the delivery on the drums ***               | m, t      | # 12a: 2360 · 0.6<br># 14: 3210 · 0.8 |

Notes:

When ordering it is necessary to agree the factory length of the product with the manufacturer

\*\* The external diameter may differ from the rated up to ± 10 %

**CONSTRUCTION**

**1. Central dielectric strength element**

Note: Manufacturing of cables with steel strength element is possible

**2. Optic fibers**

**3. Tube of fiber optic module**

**4. PET film winding**

**5. Extended strength member (rope)**

Note: Manufacturing of cables with steel or dielectric wire rope (glass fiber rod) is possible

**6. Polyethylene outer sheath**

Note: Manufacturing of cables with flame-retardant polymer compound outer sheath is possible

Notes:

- Optical module twisting is not illustrated.
- Manufacturing of cables with armoring (aramid yarns and/or corrugated steel tape) is possible
- It is possible to manufacture cables with gel-filled core or dry core (with water-blocking yarns and tapes)
- It is possible to manufacture cables with a number of core elements up to and including 18

