



## ОApΠ \* 4 – 20 TY Y 31.3-00214534-036-2004

Fiber optic module-core cables, aramid-yarn armoured, with polyethylene outer sheath

### Mark formation:

ОApΠ-[a]-[b] [c]4([d]x[e]+[f])-20

[a] central strength element

- C – steel
- No marks – dielectric

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

- 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 30, 32, 36, 40, 48, 52, 56, 60, 64

[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)

[d] 1 ... 4 – number of optical modules in cable

[e] quantity of optical fibers in the module:

- 1 ... 16

(f) quantity of insulated copper conductors in cable

Optical modules are completed with string fillers up to total number of core elements

Manufacturing of cables with two copper insulated remote power conductors instead of two string fillers is possible

Manufacturing of cables in climate version F is possible

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

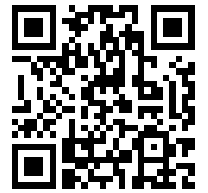
It is possible to manufacture cables with a number of core elements up to and including 18

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

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Cables are used for:

- suspensions between buildings and facilities, at power substations, at contact-line supports, at communication and lightning, power transmission lines supports



**ОАРП \* 4 – 20**  
**ТУ У 31.3-00214534-036-2004**

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**TECHNICAL SPECIFICATIONS**

|  |           |             |
|--|-----------|-------------|
| Number of cable core elements  | units     | 4           |
| Number of optical fibers in cable  | units     | 4 ... 64    |
| Electrical resistance of sheath insulation, not less than                            | MOhm · km | 2000        |
| Permissible tensile force  | kN        | 20          |
| 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     | 230 ... 260 |
| Rated outer diameter of the cable (for reference only, depending on construction) ** | mm        | 21 ... 23   |
| Minimum bending radius during laying   | mm        | 460         |

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  $\pm 10\%$

**CONSTRUCTION**

1. Central dielectric strength element
2. Optic fibers
3. Tube of fiber optic module
4. String filler
- Note: Optical modules are completed with string fillers up to total number of core elements
5. PET film winding
6. Polyethylene inner sheath
7. Aramid-thread layer
8. Polyethylene inner sheath
9. Aramid-thread layer
10. Polyethylene outer sheath

Notes:

- Optical module twisting is not illustrated.
- Manufacturing of cables with two copper insulated remote power conductors instead of two string fillers 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

