



Micro Tube-HF 192 * (16x12)-2.2 **TY Y 27.3-00214534-116:2019**

Fiber optic distribution cables of micro-tube construction with flame-retardant, halogen-free and low smoking (HFFR) polymer compound sheath

Mark formation:

Micro Tube-HF 192[c](16x12)-2.2

[c] type of optical fiber

- *A – single-mode with extended wavelength band (ITU-T G.652D, ITU-T G.657A1)*
- *D – single-mode, not sensitive to losses on macro-bending (ITU-T G.657A2)*

Order placing: sample of indication

Micro Tube-HF 192A(16x12)-2.2

Cable construction provides fast access to micro-tubes and fibres (no tools required), minimum of sealing compound and avoiding the risk of micro-tube kinking

Cables are used for:

- *for digital signal transmission in optic local networks as distribution cables*
- *for compact outdoor installation in PE ducts by pulling or floating techniques*
- *in areas with exclusive fire safety requirements*

Fire safety code in accordance with ДСТУ 4809:2007: ПБ103122000

Products of this mark meet the requirements:

- *single wire cable flame retardance*
- *toxicity class Tk3 of the combustion products of nonmetallic elements (toxicity index over 120 g/m³)*
- *class ДТк1 on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m²/kg)*
- *class ДПк2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)*
- *corrosive class Kк2 of combustion products of non-metallic elements (the number of halogen hydrides less than 150 mg/g, pH more than 4.3, specific conductivity less than 10 μS/mm)*



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TECHNICAL SPECIFICATIONS

| | | |
|--|---------|-------------|
| Number of optical micro-tube in cable | | 16 |
| Number of optical fibers in cable | units | 192 |
| Permissible tensile force (short-term) | N | 2200 |
| Permissible tensile force (continuous) | N | 1100 |
| Permissible crushing force, no less than | N/10 sm | 1500 |
| Ambient temperature | | |
| • during operation | °C | -30 ... +70 |
| • during storage and transportation | °C | -30 ... +70 |
| • during laying and installation | °C | -10 ... +40 |
| Cable weight (approximate) | kg/km | 120 |
| Rated outer diameter of the cable (for reference) ** | mm | 12.2 |
| Minimum bending radius during laying | mm | 244 |
| Minimum bending radius during operation | mm | 122 |

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. Optic fibers
2. Tube of fiber optic micromodule
3. Fiberglass rod in sheath
4. Water-blocking thread
5. Aramid-thread or glass-thread layer
6. Lapping layer of water-blocking tape
7. Outer sheath of halogen-free flame retardant polymer composition with low smoke emission

Note: Optical module twisting is not illustrated.

