

## Паспорт изделия

### GYXTZW type armored cable, indoor/outdoor, нг(А)-HF jacket

**Product Code:** [LAN-OFC-GYXTZWxxyy](#)

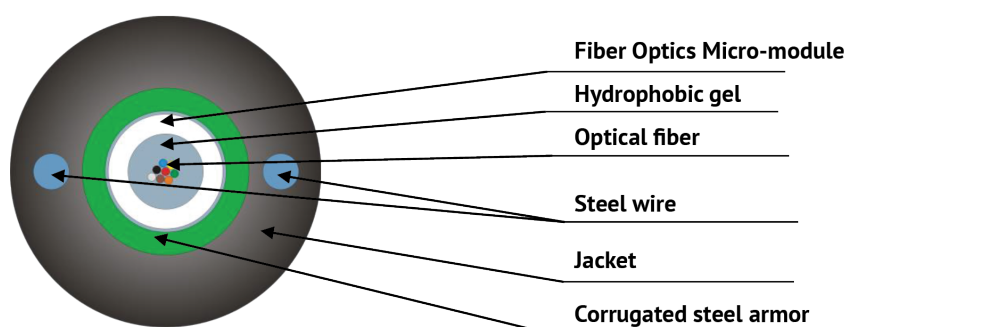
GYXTZW type armored cable, indoor/outdoor, нг(А)-HF jacket



### Description

Used for cabling in cable ducts, pipes, trays, tunnels, collectors, over bridges and overpasses, into the ground, and between buildings, as well as inside buildings.

### Design



The cable has two types (#1- LAN-OFC-GYXTZWxxyy1; #2 - LAN-OFC-GYXTZWxxyy2)

The cable contains an optical module with loosely laid fibers. The free space in the optical module is filled with a hydrophobic gel. Over the module, a water-blocking tape can be applied (for LAN-OFC-GYXTZWxxyy1), as well as a corrugated steel tape armor and a jacket made of a flame retardant, halogen free, low smoke emission polymer composition. The free space under the corrugated tape is filled with a hydrophobic gel. Two steel wires are located diametrically opposite in the cable jacket and serve as strength members.

The maximum possible count of optical fibers in the cable is 24.

#### Color identification of buffered optical fibers

| №  | Fibers 1-12 | №  | Fibers 13-24       |
|----|-------------|----|--------------------|
| 1  | Blue        | 13 | Blue + 1 ring      |
| 2  | Orange      | 14 | Orange + 1 ring    |
| 3  | Green       | 15 | Green + 1 ring     |
| 4  | Brown       | 16 | Brown + 1 ring     |
| 5  | Grey        | 17 | Grey + 1 ring      |
| 6  | White       | 18 | White + 1 ring     |
| 7  | Red         | 19 | Red + 1 ring       |
| 8  | Black       | 20 | Black + 1 ring     |
| 9  | Yellow      | 21 | Yellow + 1 ring    |
| 10 | Violet      | 22 | Violet + 1 ring    |
| 11 | Pink        | 23 | Pink + 1 ring      |
| 12 | Turquoise   | 24 | Turquoise + 1 ring |

#### Weight and Dimensions

| Cable type<br>Fiber count in<br>the cable: | LAN-OFC-GYXTZWxxyy1 |       |       | LAN-OFC-GYXTZWxxyy2 |       |       |
|--------------------------------------------|---------------------|-------|-------|---------------------|-------|-------|
|                                            | 2~8                 | 10~12 | 16~24 | до 12               | до 16 | до 24 |
| Cable diameter,<br>(±0.3) mm               | 7.5                 | 7.5   | 8.5   | 7,3                 | 7,5   | 7,8   |
| Cable weight,<br>□±5□ kg/km                | 77,0                | 77,0  | 90,0  | 89,9                | 92,7  | 97,0  |

#### Operating conditions

| Cable type:              | LAN-OFC-GYXTZWxxyy1                                                                             | LAN-OFC-GYXTZWxxyy2         |
|--------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|
| Cable type               | -40°C...+70°C                                                                                   | -60°C...+70°C               |
| Installation Temperature | -20°C...+60°C                                                                                   | -30°C...+50°C               |
| Storage Temperature      | -40°C...+70°C                                                                                   | -50°C...+50°C               |
| Minimum Bend Radius      | 10 cable diameters (without pulling tension), 20 cable diameters (with maximum pulling tension) | At least 15 cable diameters |
| Lifetime                 | 25 years                                                                                        | 25 years                    |

#### Physical specifications for LAN-OFC-GYXTZWxxyy2 cable:

Optical cable is resistant to the following impacts

| Impact type                      | Nominal value | Criteria for evaluation       |
|----------------------------------|---------------|-------------------------------|
| Pulling tension                  | 2,7 kN        | $\Delta\alpha^* \leq 0,05$ dB |
| (IEC 794-1-93 E1 test procedure) | 0,5 kN/cm     | no damage                     |

|                                                          |                                                                                       |                                |
|----------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------|
| Crush resistance                                         |                                                                                       |                                |
| (IEC 794-1-93 E3 test procedure)                         |                                                                                       |                                |
| Dynamic bending stresses                                 | 20 cycles at an angle $\pm 90^\circ$                                                  |                                |
| (IEC 794-1-93 E6 test procedure)                         |                                                                                       |                                |
| Axial twisting stresses                                  | 10 cycles at an angle of $\pm 360^\circ$                                              |                                |
| (IEC 794-1-93 E7 test procedure)                         |                                                                                       |                                |
| Impact (IEC 794-1-93 E4 test procedure)                  | at a length of 4 m<br>Impact energy is 10 J                                           |                                |
| Water resistance                                         | Sample length: 3m                                                                     | No water                       |
| (IEC 60794-1-2 para. 25, F5B test procedure)             | at the end of the sample                                                              |                                |
|                                                          | Duration: 24 hours                                                                    |                                |
| Climatic impact                                          | - temperature range                                                                   | $\Delta\alpha \leq 0,05$ dB/km |
| low and high temperature resistance                      |                                                                                       |                                |
| (IEC 794-1-93 F1 test procedure)                         | from minus 60 to 70 °C<br>- 2 cycles<br>- cycle duration $\geq 16$ hours<br>- 2 hours |                                |
| Climatic impact                                          |                                                                                       | No cracks or other damage      |
| - Climatic impact (GOST 20.57.406, 218-1 test procedure) |                                                                                       |                                |
| - salt fog                                               | - 2 days                                                                              |                                |
| (GOST 20.57.406, 215-1 test procedure)                   |                                                                                       |                                |
| - dew and frost                                          | - 2 hours                                                                             |                                |
| (GOST 20.57.406, 206-1 test procedure)                   |                                                                                       |                                |
| - solar radiation                                        | - 5 days                                                                              |                                |

(GOST 20.57.406, 211-1 test procedure)

Dripping of hydrophobic compound

at 70 °C

No dripping

(IEC 60794-1-2 E14 test procedure)

No dripping (GOST 2990-78)

 AC Voltage 10  
kV, 50 Hz

No breakdown

Pulse spreading current (K.25 MCЭ-T)

 - duration 60 μs  
- 105 кA

 -  $\Delta\alpha^* \leq 0,05$  dB  
- no damage

\* - increase in attenuation of an optical fiber in a cable at specific wavelengths.

Physical specifications for LAN-OFC-GYXTZWxxyy1 cable:

| No | Specification           | Value                                                                    |
|----|-------------------------|--------------------------------------------------------------------------|
| 1  | Maximum pulling tension | Short term impact<br>850 N<br>Long term impact<br>250 N                  |
| 2  | Crush resistance        | Short term impact<br>1000 (N/100mm)<br>Long term impact<br>300 (N/100mm) |

Applicable optical fibers:

| Identifier | Description                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| SU         | Single-mode fiber with extended operating wavelength and reduced attenuation and low bending loss (ITU G.652D+G.657.A1 recommendation)        |
| S2         | Single-mode fiber with an extended bandwidth of operating wavelengths (ITU-T G.652D recommendation)                                           |
| S5         | Single-mode fiber with an extended bandwidth of operating wavelengths (ITU-T G.652D recommendation)                                           |
| S7         | Single-mode with low bending loss (ITU-T G.657 recommendation)                                                                                |
| M1         | Single-mode with low bending loss (ITU-T G.657 recommendation)                                                                                |
| M2         | Multi-mode with core to cladding ratio 50/125 μm (ITU-T G.651 recommendation and IEC 60793-2-10 type A1a.1 requirements)                      |
| M3         | Multi-mode with low bending loss and core to cladding ratio 50/125 μm (ITU-T G.651 recommendation and IEC 60793-2-10 A1a.2 type requirements) |
| M4         | Multi-mode with low bending loss and core to cladding ratio 50/125 μm (ITU-T G.651 recommendation and IEC 60793-2-10 A1a.3 type requirements) |

| Product code        | Description                                                                                                     |
|---------------------|-----------------------------------------------------------------------------------------------------------------|
| LAN-OFC-GYXTZWxxyyk | FO cable, armored with steel tape, GYXTZW, нг(А)-HF/LSZH, indoor/outdoor, xx x OS2<br>Ultra/OS2/OM1/OM2/OM3/OM4 |

xx – fiber count

**yy** – fiber type (SU, S2, S5, S7, M1, M2, M3, M4)

**k** - maximum pulling tension identifier:

k = 1 - 0,85 kN

k = 2 - 2,7 kN

## Model range

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| LAN-OFC-GYXTZW04M22 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 4 x OM2        |
| LAN-OFC-GYXTZW04M32 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 4 x OM3        |
| LAN-OFC-GYXTZW08SU2 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 8 x OS2 Ultra  |
| LAN-OFC-GYXTZW08M22 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 8 x OM2        |
| LAN-OFC-GYXTZW08M32 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 8 x OM3        |
| LAN-OFC-GYXTZW16SU2 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 16 x OS2 Ultra |
| LAN-OFC-GYXTZW16M32 | FO cable armored with steel tape, GYXTZW, 2.7 kN, нг(А)-HF, indoor/outdoor, 16 x OM3       |
| LAN-OFC-GYXTZW04S21 | FO cable armored with steel tape, GYXTZW, LSZH, indoor/outdoor, 4 x OS2                    |
| LAN-OFC-GYXTZW08S21 | FO cable armored with steel tape, GYXTZW, LSZH, indoor/outdoor, 8 x OS2                    |
| LAN-OFC-GYXTZW16S21 | FO cable armored with steel tape, GYXTZW, LSZH, indoor/outdoor, 16 x OS2                   |

Product descriptions are listed according to the available information at the time of publication. Product specifications can be changed without advanced notification. More detailed and exact information can be obtained from the official partners and distributors of LANMASTER.