

Outdoor fiber optics cable, unarmored, GYXY type



Product Code: [LAN-OFC-GYXYnnyy](#)

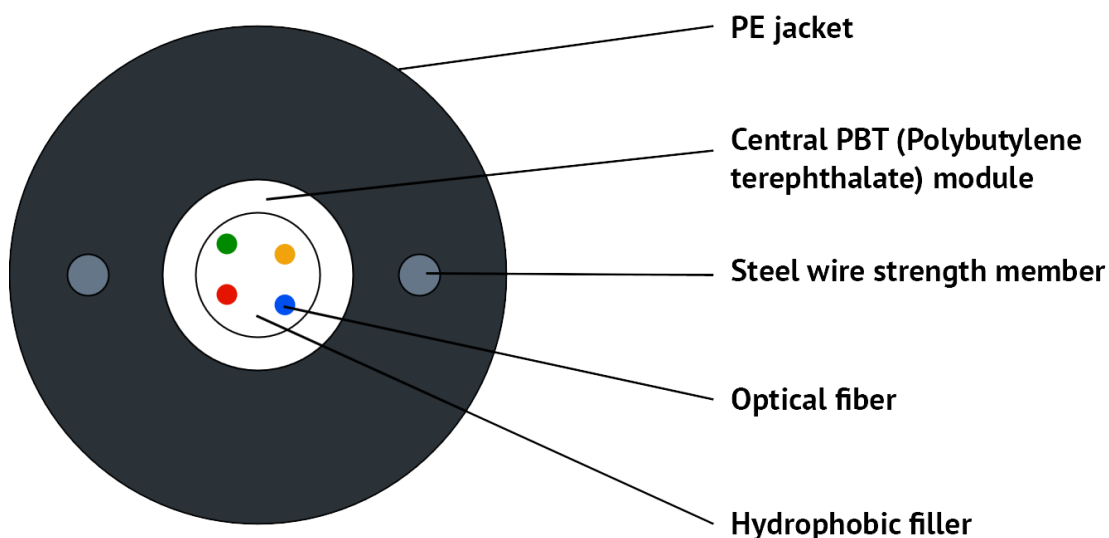
Outdoor fiber optics cable, unarmored, GYXY type

Description

Application:

Used for cabling in cable ducts with no external mechanical impacts, trays, tunnels, and collectors.

Design:



The cable contains a central optical module with loosely laid fibers. The free space in the optical module is filled with a hydrophobic filler. The module is covered with a medium density polyethylene jacket. 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 optical fibers

Nº	Fibers 1-12	Nº	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

Fiber count	4	8	12	16	24
Strength member	Steel wire				
Material	Diameter 0.8				
Diameter (±0.05) mm					
Central module	Polybutylene terephthalate / PBT				
Material					
Diameter	2.0	2.0	2.2	2.8	2.8
±0.06 mm					
Thickness ±0.00.30	0.30	0.32	0.40	0.40	0.40
3) mm					
Maximum fiber count per module	4	8	12	16	24
Jacket	Middle Density Polyethylene				
Material	2.5				
Thickness ±0.2) mm					
Cable diameter (±0.2) mm	6.3	6.3	6.3	7.0	7.0
Cable weight (±5) kg/km	38	38	38	46	46

Operating conditions

Minimum Bend Radius	Without pulling tension	10 cable diameters
	With maximum pulling tension	20 cable diameters
Temperature range °C	Installation	-20~+60
	Storage	-40~+70
	Operating	-40~+70
Lifetime	25 years	

Physical specifications

Nº	Specification	Value
1	Maximum pulling tension	Short term impact 1000 N
		Long term impact 400 N
2	Crush resistance	Short term impact 600 (N/100mm)
		Long term impact 200 (N/100mm)

Basic operational testing of mechanical and environmental impact

Test	Test procedure	Test procedure
Pulling tension IEC 794-1-93-E1 test	- Load: short-term pulling	- Fiber stretching ≤ 0.36%
	- Cable length: about 50 m	- Change in attenuation ≤ 0.1 dB @1550 nm
		- No damage to fibers and sheath

Crush resistance IEC 794-1-93-E3 test	- Load: short-term crushing - Duration of the load: 1 minute	- Change in attenuation ≤ 0.05 dB @1550 nm - No damage to fibers and sheath
Impact test IEC 60794-1-2-E4	- Impact points: 3 - Impacts per point: 1 - Impact energy: 5 J	- Change in attenuation ≤ 0.1 dB @1550 nm - No damage to fibers and sheath
Cyclic temperature test YD/T901-2001-4.4.4.1	- Temperature points +20°C→-40°C→+70°C→+20°C - Duration for each temperature point: 12 hours - Temperature cycles count: 2	- Change in attenuation ≤ 0.05 dB @1550 nm - No damage to fibers and sheath

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 positive non-zero dispersion shifted fiber (ITU-T G.655 recommendation)
S7	Single-mode with low bending loss (ITU-T G.657 recommendation)
M1	Multi-mode with core to cladding ratio 62,5/125 μm (IEC 60793-2-10 A1b type recommendation)
M2	Multi-mode with core to cladding ratio 62,5/125 μm (IEC 60793-2-10 A1b type recommendation)
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-GYXYnnny	FO cable, unarmored, loose tube, 2 steel wire strength members, GYXY, PE, outdoor, nn x OS2 Ultra/OS2/OM1/OM2/OM3/OM4

nn – fiber count

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

Model range

LAN-OFC-GYXY04S2	FO cable, unarmored, loose tube, 2 steel wire strength members, GYXY, PE, outdoor, 4 x OS2
LAN-OFC-GYXY08S2	FO cable, unarmored, loose tube, 2 steel wire strength members, GYXY, PE, outdoor, 8 x OS2
LAN-OFC-GYXY12S2	FO cable, unarmored, loose tube, 2 steel wire strength members, GYXY, PE, outdoor, 12 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.