

FTTH Cable with a Messenger



Product Code: [LAN-OFC-FUFx-yy-zz-T](#)

FTTH Cable with a Messenger

Description

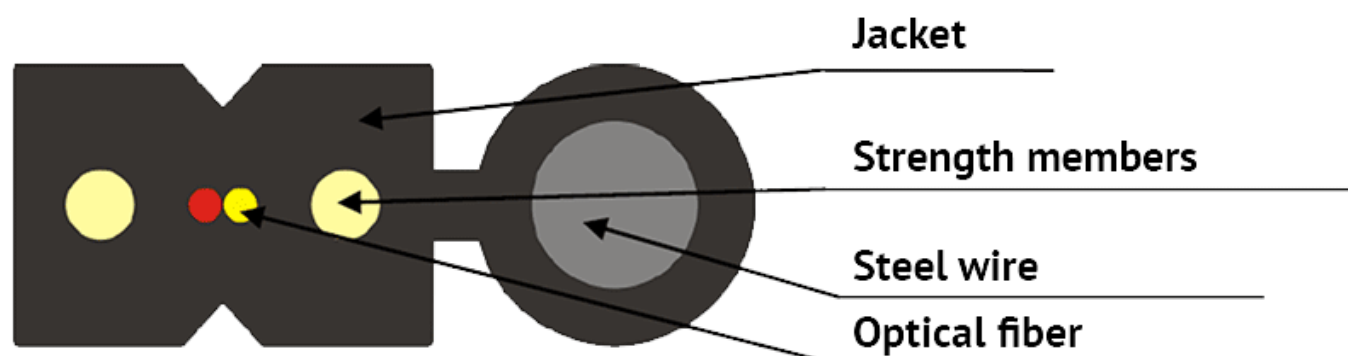
Used as a distribution cable for suspension on the utility poles, electricity pylons, between buildings, and for cabling inside buildings, in cable ducts, pipes, also for outdoor cabling along the external facades of buildings.

The cable has loose tube (? Or tight tube) optical fibers. FRP rods are used as strength members. Steel wire is used as a messenger. Fibers, the strength members, and the messenger are covered with overall jacket. The cable jacket is made of a flame retardant, halogen-free, low-smoke polymer composition.

The cable jacket color is black.

The maximum possible count of optical fibers in the cable is 8.

Design



Color identification of tight buffer optical fibers:

Nº	Fibers 1-8
1	Blue

2	Orange
3	Green
4	Brown
5	Grey
6	White
7	Red
8	Black

Weight and dimensions

Fiber count in the cable	Up to 4	Up to 8
Cable dimensions, mm	2,0 x 5,2	2,1 x 5,6
Cable weight, kg/km	19,6	21,0
Minimum bend radius, mm	20	21

Operating conditions

Operating Temperature	-50°C...+70°C
Installation Temperature	-10°C...+50°C
Storage Temperature	-50°C...+50°C
Minimum Bend Radius	At least 10 cable diameters
Lifetime	25 years

Physical specifications

Optical cable is resistant to the following impacts

Impact type	Nominal value	Criteria for evaluation
Installation pulling tension (IEC 794-1-93 E1 test procedure)	730 N	$\Delta\alpha^* \leq 0,05$ dB no damage
Crush resistance (IEC 794-1-93 E3 test procedure)	200 N/cm 100 N/cm (for micro-module design)	
Dynamic bending stresses (IEC 794-1-93 E6 test procedure)	20 cycles at an angle $\pm 90^\circ$	
Axial twisting stresses (IEC 794-1-93 E7 test procedure)	10 cycles at an angle of $\pm 360^\circ$ at a length of 4 m	$\Delta\alpha \leq 0,05$ dB/km
Impact (IEC 794-1-93 E4 test procedure)	Impact energy is 1 J	
Climatic impact* (IEC 794-1-93 F1 test procedure)	Temperature range from - 50 °C to +70 °C;	
	2 cycles cycle duration ≥ 16 hours	

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

Applicable optical fibers

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 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)

- M4 recommendation and IEC 60793-2-10 A1a.2 type requirements)
Single-mode fiber with extended operating wavelength and reduced attenuation and low bending loss (ITU G.652D+G.657.A1 recommendation)

Model range

LAN-OFC-FUF2-SU-HF-T	Indoor/Outdoor FO FTTH Drop cable with the messenger, flat, FRP, HГ(A)-HF, 2 fibers, OS2 Ultra, black
LAN-OFC-FUF4-SU-HF-T	Indoor/Outdoor FO FTTH Drop cable with the messenger, flat, FRP, HГ(A)-HF, 4 fibers, OS2 Ultra, black
LAN-OFC-FUF4-S7-LS-T	Indoor/Outdoor FO FTTH Drop cable with the messenger, flat, FRP, LSZH, 4 fibers, G657 SM, black

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.