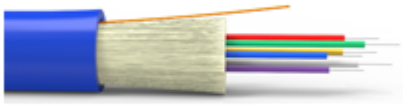
OPTICAL CABLE FIBER-LAN INDOOR



Product Type Optic Cable

Construction

RoHS-2 Compliant
Dielectric
Tight Buffer
Singlemode or Multimode

Description

Optical cable with singlemode or multimode optical fibers arranged in "tight" design. Optical fibers are coated with acrylate resin and a secondary coating of thermoplastic material. Dielectric strength members surround the set of fibers and a thermoplastic flame-retardant outer jacket covers it.

Applications

Installation Environment	Indoor
Operation Environment	Installation in ducts and connection between entrance rooms

Standards Compliance

- ITU-T G.651: "Characteristics of a 50/125 µm multimode graded index optical fibre and cable"
- ITU-T G.652: "Characteristics of a single-mode optical fibre and cable"
- ITU-T G.657: "Characteristics of a bending loss insensitive single mode optical fibre and cable for the access network"
- ICEA S-83-596: "Standard for optical fiber cable premises distribution cable"
- Telcordia GR-409-CORE: "Generic requirements for indoor fiber optic cable"
- ANSI/TIA 568-C.3: "Optical fiber cabling components standard".

Certifications

ETL (OFNR) Listed - Report N°: 100824709CRT-001
ETL (DMD) - Report N°: 3174638CRT-001

Constructive characteristic

Optical Fiber SM (Singlemode), MM (Multimode) OM1, OM2, OM3 and OM4.

Fiber Coating Acrylate

Fiber Identification

Fiber	Color
01	Blue
02	Orange
03	Green
04	Brown
05	Slate
06	White
07	Red
08	Black
09	Yellow
10	Violet
11	Pink
12	Acqua

Cabling

Fiber Count	Sub-units Count	Fibers per sub-unit
2 a 12	Single core, no sub-units	
16	4	4
24	4	6
36	6	6
48	4	12
72	6	12

obs.: Sub-units jacket (16, 24, 36, 48 e 72 fibers cables) and external jacket are made of the same color material and sub-unts are indentified by numbers (#1, #2, #3, #4, #5 e #6).

Tensile Strength Yarns

Dielectric yarns

Outer Jacket

Thermoplastic flame-retardant material. Outer and inner (when applicable) sheath color identification according to TIA-598-C, as table bellow.

CHARACTERISTIC	SINGLEMODE 9/125µm	MULTIMODE 50/125µm	MULTIMODE 62,5/125µm	MULTIMODE 50/125µm OM3/OM4
Outer sheath color	YELLOW	ORANGE	ORANGE	ACQUA
Inner sheath color				

Obs.: Other colors under consultation.

Cable Flammability Rating

Cable Flammability Rating	
Optical cable for general propouse	OFN
Optical cable "*Riser*"	OFNR
Optical cable with Low Smoke and Zero Halogen jacket	LSZH

Optical cable type **OFN**: Cable in accordance with international specification IEC 60332-3 - "Test On Electric Cables Under Fire Conditions".

Optical cable type **OFNR**: Cable in accordance with UL 1666 - "Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts".

Optical cable type **LSZH** : The cable is in accordance with the international specification IEC 60332-3 ("Test On Electric Cables Under Fire Conditions") and additionally the LSZH jacket with IEC60754-2 (Acidity of smoke) and IEC 61034-2 ("Measurement of smoke density of cables burning under defined conditions").

Dimension

Nominal outer diameter (mm)	2 Fibers	4.8
	4 Fibers	5.2
	6 Fibers	5.4
	8 Fibers	6.0
	10 Fibers	6.3
	12 Fibers	6.5
	16 Fibers	14.4
	24 Fibers	14.4
	36 Fibers	17.5
	48 Fibers	16.5
	72 Fibers	20.5
Nominal weight (kg/km)	2 Fibers	19
	4 Fibers	21
	6 Fibers	24
	8 Fibers	34
	10 Fibers	38
	12 Fibers	40
	16 Fibers	192
	24 Fibers	192
	36 Fibers	231
	48 Fibers	254
	72 Fibers	372
Outer jacket nominal thickness (mm)	2 to 12 Fibers	0.95
	16 to 72 Fibers	1.6
Inner jacket nominal thickness - sub-unit jacket (mm)	16 to 72 Fibers	0.65

Physical Characteristics

Minimum bending radius (mm)	- During Installation: 15 x outer diameter - After Installation: 10 x outer diameter
Maximum Tensile Load During Installation	- Cables up to 12F: 660 N - Cables with more than 12F: 1320 N
Installation Temperature	0 °C to 40 °C
Storage Temperature	0 °C to 40 °C
Operation Temperature	0 °C to 40 °C

Optical Characteristics

Fiber	Characteristics
Single mode	According to technical specification 2000 (Annex A)
Multi mode (OM1, OM2, OM3 and OM4)	According to technical specification 1999 (Annex B)

Marking

Outer Sheath:
"FURUKAWA FIBER-LAN INDOOR y wF z x month/year k "Customer name" LOTE nL (**)"
Inner Sheath:
"#n"

Where:
y = Type of optical fiber
SM Singlemode fiber
BLI Singlemode bending loss insensitive fiber
MM Multimode fiber

w = Fiber count

x = Cable protection grade

z = Denomination for special fiber
G-652D For singlemode ITU-T G-652D fiber
G-657-A1 For singlemode ITU-T G-657A1 fiber
G-657-A2 For singlemode ITU-T G-657A2 fiber
(62.5) For multimode 62.5µm fiber
(50) For multimode 50µm fiber
(50) OM3 For multimode 50µm EIA/TIA 492AAAC fiber
(50) OM4 For multimode 50µm EIA/TIA 492AAAD fiber

month/year MM/YYYY

k = TYPE OFNR C(ETL)US
Note: ETL Listed certificate applicable only for cables with PVC jacket and up to 12 fibers count.

Customer name = when requested in the purchase order*
*Under consult for feasiability analysis.

nL = Lot number

(**) = Length marking xxxx m

n = Sub-unit number (1, 2, 3, 4, 5 and 6) printed each 60mm

Package

Type	Wooden reel
Length	2, 4, 6, 8, 10 or 12 fiber count: 2100m ±5% 16, 24 or 36 fiber count: 900m ±5% 48 or 72 fiber count: 500m ±5%