



## MICRO INDOOR LOW FRICTION OPTICAL CABLE (CFOI-BLI-CM-BA)

### Construction

- ROHS Compliant;
- Low friction;
- Non dielectric;

Description	Compact dimensions cable with outer jacket made up of low friction material. The strength material is made up of 2 steel wires that can be used to push the cable through ducts.
Application	Developed specially for internal installations in FTTH and MDU networks.
Installation Environment	Indoor
Operation Environment	Indoor network

### Standard

- ITU-T G 657;
- ANATEL - Lista de Requisitos Técnicos para Produtos de Telecomunicações Categoria I (Compact Fiber Optic Cable for Internal Installation).
- EN 60332-1-2: "Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame";
- EN 61034-2: "Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements";
- EN 50399: "Common test method for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results";
- EN 50267-2-3: "Common test method for cables under fire conditions. Test on gases evolved during combustion of materials from cables. Procedures. Determination of degree of acidity of gases for cables by determination of the weighted average of pH and conductivity";

Standard	Requirement	Limit
EN 50399	Total Heat Release	70 MJ
	Peak Heat Release Rate	400 kW
	Fire index growth rate	1300 W/s
EN 60332-1-2	Height	425 mm

Certifications	ANATEL EUROCLASS Dca (s1a, d1, a1)
----------------	---------------------------------------

Fiber Coating	Acrylate
---------------	----------

**Fiber Identification**
**1 Fiber**

- Blue;

**2 Fibers**

- Blue and Orange;

**4 Fibers**

- Blue, Orange, Green and Brown.

**Strength member**

Two steel wires with 0.5 mm nominal diameter.

**Outer Jacket**

Low friction thermoplastic material, flame retardant, LSZH (low smoke zero halogen).

**Cable Flammability Rating**

LSZH

**Dimension**
**1 Fiber**

- $1.6 \pm 0.16 \times 2.0 \pm 0.20$

**2 Fibers**

- $1.6 \pm 0.16 \times 2.3 \pm 0.23$

**4 Fibers**

- $1.9 \pm 0.16 \times 2.9 \pm 0.23$

**Nominal mass**
**1 Fiber**

- 7.3 kg/km

**2 Fibers**

- 7.73 kg/km

**4 Fibers**

- 9.20 kg/km

 Minimum radius of curvature 15 mm  
 during intallation

 Minimum curvature radius 30 mm  
 during operation

**Mechanical and  
Environmental  
Characteristics**

Test	Type	Procedures	Singlemode Fibers
Mechanical	Tensile Strenght	230 N	Maximum: 0.6 % Tensioned 0.2% Rest
	Compressive Strenght	480 N/cm	0.4 dB
	Twist	10 cycles	0.4 dB
	Cyclic Flexing	25 cycles x 2 kgf (30 mm)	0.4 dB
	Bending	5 turns	0.4 dB

	Dynamic Friction Coefficient*	Weight 2.0 kg	0.125
--	-------------------------------	---------------	-------

\* The dynamic friction coefficient is defined, in accordance to ANATEL Standarts for Compact Optical FiberCableforInternal Installation, as:

$$\mu = Ft/(2*Fo)$$

Where:

$\mu$  = Dynamic friction coefficient

$Ft$  = Slip force [N]

$Fo$  = Compression loadstrength [N]

Installation Temperature (°C) -10 to +40 °C

Operation Temperature (°C) -10 to +40 °C

Storage Temperature (°C) -10 to +40 °C

Marking **FURUKAWA CFOI-BLI-CM-xx-BA-LSZH EUROCLASS Dca (s1a, d1, a1) YYYYYYYY-ZZ-WW MM/AA (\*\*)**

Where:

xx	Number of fibers
YYYYYYYY	Serial number
ZZ	Verificator number
WW	Bath
MM	Month of Manufacture
AA	Year of Manufactures
(**)	Length marking in meters (xxxxxm)

Package Type RIB or Wood reel

Standard Length  
 500 m (RIB)  
 1000 m (RIB)  
 1000 m (Wood reel)

Package Nominal Dimensional  
 RIB 500 m= (250x255x215) mm  
 RIB 1000 m= (345x365x265)mm  
 Wood reel = Outer diameter: 350 mm / Internal diameter: 220 mm / Central hole diameter: 80 mm

[Part Numbers](#)