

## INDOOR USE, OPTICAL FIBRE CABLE – LSZH SHEATH



Optic Fibre



Fire retardant



Low smoke emission



Halogen free



Water blocked



UV resistant



Dielectric



ROHS Compliant

## STANDARDS

Mechanical measuring methods: IEC 60794-1

Optic fibre measuring methods: IEC 60793-1

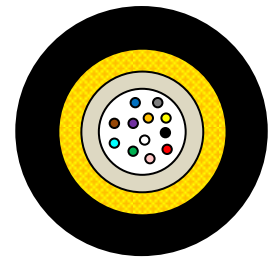
## DESCRIPTION AND APPLICATION

Central Loose Tube cables up to 24 optical fibres, totally dielectric, reinforced, protected with aramid yarns and a black LSZH outer sheath.

The recommended installation of the KT cable is in indoors with a maximum installation load of 1.5 kN.

## CONSTRUCTION

- **Loose tube:** PBT Central Loose Tube filled with thixotropic compound, containing up to 24 optical fibers Colour coding of tubes and fibres according to table 1.
- **Mechanical reinforcement:** Waterblocking Aramid yarns as traction resistant reinforcement
- **Outer sheath:** Black coloured LSZH compound, UV resistant.
- **Sheath marking:** The cables will be marked with the following information:
  - manufacturer / year / Modelo / Nº Fibres / Fibre type / Length marking ( m)
  - Other marks are available upon request



## OPTICAL FIBRE CHARACTERISTICS

The parameters of the optical fiber used in these cables meet the specific fiber datasheet parameters. See our fibre product for the characteristics of the fibre.

However, in case singlemode G.652D fiber is used, optical transmission parameters are as follows:.

**Optical transmission characteristics of cabled fibre :**

Attenuation coefficient:

Average/ máximo at 1310 nm: 0,36 / 0,38 dB/km

Average / Maximum at 1550 nm: 0,22 / 0,25 dB/km

$PMD \leq 0,20 \text{ ps/km}^{1/2}$

$PMD \text{ link} \leq 0,10 \text{ ps/km}^{1/2}$

Cut-off wavelength ( $\lambda_{cc}$ )  $\leq 1260\text{nm}$

All drawings, designs, specifications and particulars of weights, dimensions, etc. in this documentation are only indicative and must not be considered contractual.

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TABLE 1: OPTICAL FIBERS COLOUR CODE

<b>Fibre</b>	1	2	3	4	5	6	7	8	9	10	11	12
<b>Colour</b>	Green	Red	Blue	Yellow	Grey	Violet	Brown	Orange	White	Black	Turquoise	Pink
<b>Abrev.</b>	Gr	Rd	Bl	Y	G	Vi	Br	Or	W	B	Tu	Pk
<b>Fibre</b>	13	14	15	16	17	18	19	20	21	22	23	24
<b>Colour</b>	Green	Red	Blue	Yellow	Grey	Violet	Brown	Orange	White	Natural	Turquoise	Pink
<b>Abrev.</b>	Gr(*)	Rd(*)	Bl(*)	Y*	G(*)	Vi(*)	Br(*)	Or(*)	W(*)	Nt(*)	Tu(*)	Pk(*)

(\*): The fibres 13 to 24 are marked with black rings separated up to 50 mm apart

MECHANICAL CHARACTERISTICS	Specification	Test Conditions
Installation Tensile strength ( $\Delta\alpha = 0,33dB$ )	IEC 60794-1 Met E1A	1500 N
Permanent Tensile strength ( $\Delta\alpha = 0,05dB$ )	IEC 60794-1 Met E1A	900 N
Crush resistance ( $\Delta\alpha < 0.05 dB$ )	IEC 60794-1 Met E3	1500 N / 10cm
Impact resistance ( $\Delta\alpha < 0.05 dB$ )	IEC 60794-1 Met E4	3 J / radius 300mm
Bending radius ( $\Delta\alpha < 0.05 dB$ )	IEC 60794-1 Met E11	$r = 15 \times$ cable diameter
Water penetration	IEC 60794-1 Met F5B	$L_{pwater} \leq 3$ m (24 hours)
Temperature cycling ( $\Delta\alpha < 0.05 dB$ )	IEC 60794-1 Met F1	-20°C / 70°C
Flame retardancy	IEC 60332-1-2	
Zero halogen	IEC 60574 -1 -2	
Low smoke emission	IEC 61034 -1 -2	

## DIMENSIONS AND WEIGHTS

Nr. Fibres	Diameter (mm)	Weight (kg/km)
1 a 12	7,0	55
16 a 24	7,6	65

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