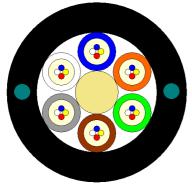




# **Optical fiber cable**

Cable Design IEC/EN 60794



- not to scale -

- Central Strength Member (CSM): glass fibre reinforced plastic rod (FRP), with plastic oversheathing when needed.
- **Loose Tube:** thermoplastic material, containing optical fibres and filled with a suitable water tightness compound.
- Filler Elements: thermoplastic rods, where needed.
- Stranding: loose tubes (and fillers), SZ stranded around the CSM.
- Longitudinal Water Tightness: dry core with water swellable tape.
- **Strength Elements:** 2 steel wires, diametrically opposed, embedded in the outer sheath. Nom. diameter: 1.3 mm.
- 2 Ripcords
- Outer Sheath: HDPE.

# **Technical data**

No. of Fibres		24			
Design		6 x 4			
Loose Tube / Filler - Ø	mm	2.1			
CSM - Ø	mm		2	.3	
CSM-Oversheathing - Ø	mm	-			
Outer Sheath Thickness	mm	2.2			
Cable Diameter	mm	11.4			
Cable Weight	kg / km	120			
Minimum Bending Radius	mm	Without Tension 15 x Cable-Ø		Under Maximum Tension 20 x Cable-Ø	
Temperature Range	°C	Installation - 10 to + 50		& Storage o + 70	Operation - 40 to + 70

Please refer to our General Installation, Safety & Handling recommendations before handling.

#### **Main characteristics**

Test	<b>Test Standard</b>	Specified Value	Acceptance Criteria
Max. Installation Tension	IEC 60794-1-2-E1	2700 N	$\Delta\alpha$ reversible, fibre strain $\leq 0.33\%$
Crush	IEC 60794-1-2-E3	2000 N / 100 mm, max. 15 min	$\Delta \alpha \leq$ 0.05 dB after the test
Impact	IEC 60794-1-2-E4	10 Nm, 3 impacts, R= 300 mm	$\Delta \alpha \leq 0.05$ dB after the test
Cable Bend	IEC 60794-1-2-E11	R=20x D, 4 turns, 3 cycles	$\Delta \alpha \leq 0.05$ dB, no damage
Temperature Cycling	IEC 60794-1-2-F1	-40°C to +70°C	$\Delta \alpha \leq 0.05 \text{ dB/km}$
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water column=1m	no water leakage in 24h

All optical measurements at 1550 nm.

# **Optical Characteristics**

See the attached cabled optical fibre data sheet.





# **Identification**

#### **Fibre Colours**

No.	1	2	3	4
Colour	blue	orange	green	brown

#### **Buffer Tube Colours**

No.	1	2	3	4	5	6
Colour	blue	orange	green	brown	grey	white

#### **Filler Elements Colours:**

All filler elements are uncoloured (natural).

#### **Sheath Colour:**

The outer sheath colour is black.

## **Sheath Marking:**

The outer sheath is marked in 1 meter intervals as follows:

<Manufacturer> <year of manufacture> <no. and type of fibre> <length marking in meter>

# Logistic

## Packing:

Wooden drums with protection.

## **Delivery Length:**

Standard delivery length is 4 km with a tolerance of -1% / + 3%

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