



# Duct dielectric optical standard Flextube® cable

Cable Design IEC/EN 60794



- not to scale -

Micro-module: Thin wall tubing (FlexTube®), filled with a suitable

compound, housing the single-mode optical fibres.

Water tightness: dry core with swellable elements.

Protection / reinforcement yarns.

**Strength members:** glass fibre reinforced plastic material. **Outer Sheath:** HDPE. Ripcord(s) underneath the sheath.

This Flextube dielectric optical cable is designed for outdoor installation in duct by pulling, jetting or floating technics.

The Flextube® design provides easier storage & faster installation.

Finger access to the fibres: no specific tools to open the Flextube.

#### Technical data

# Fibres (grouped by 12)*	≤	72	144	288
Module - Ø	mm		1.3	
Cable Diameter	mm	11.3	13.4	15.8
Cable Weight	kg / km	95	135	190
Max installation tension	daN	220	270	350

Min. bending radius	mm	Without Tension 10 x Cable-&	Under Maximum Tension 20 x Cable-Ø			
Temperature range	°C	Installation -5 -> +40;	 . & Storage > +70 ;	Operation -30 -> +60		

<sup>\*</sup> other configuration upon specific request

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

#### Main characteristics

Test	Standard	Valeur	Sanction*
Maximum Tension at installation (short term)	IEC 60794-1-2-E1	see table above	$\Delta \alpha$ reversible
Crush	IEC 60794-1-2-E3	300 daN / 100mm	$\Delta \alpha \leq 0.1 dB$
Impact	IEC 60794-1-2-E4	10 Nm, 3 impacts, r=300mm	$\Delta \alpha$ reversible
Torsion	IEC 60794-1-2-E7	1m, +- 180°	$\Delta \alpha \leq 0.1 dB$
Cable bend	IEC 60794-1-2-E11	$R = 10 \text{ x cable } \emptyset$	$\Delta \alpha$ reversible
Temperature range	IEC 60794-1-2-F1	-30 -> +60°C	$\Delta \alpha \leq 0.1 \ dB \ /km$
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water=1m	No water leakage after 24 hour

<sup>\*</sup> values for single-mode fibres, all optical measurements performed at 1550 nm

## **Optical Characteristics**

See the attached cabled optical fibre data sheet.









#### Identification

#### **Fibre Colours**

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	red	blue	green	yellow	violet	white	orange	grey	brown	black	aqua	pink

#### Flextube Colours for cables up to 144 fibres (≤12 modules)

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	red	blue	green	yellow	violet	white	orange	grey	brown	light green	aqua	pink

#### Flextube Colours for cables with more than 144 fibres (>12 modules)

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	red	blue	green	yellow	violet	white	orange	grey	brown	light green	aqua	pink
No.	13	14	15	16	17	18	19	20	21	22	23	24
Colour	red	blue	green	yellow	violet	white	orange	grey	brown	light green	aqua	pink
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#### **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> OPTICAL CABLE <optional: product type> <nb and type of fibre> <length marking in meter>

### Logistic

### Packing:

Wooden drums with protection.

### **Delivery Lengths:**

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

All sizes and values without tolerances are reference values. Specifications are for product as supplied by PrysmianGroup: any modification or alteration afterwards of product may give different result.

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