

FTTH Outdoor Distribution Flextube® Cable

Cable Design



- not to scale -

- **Micro-module:** Thin wall tubing, filled with a suitable compound, housing 12 single-mode optical fibres.
- **Water tightness:** dry core with swellable elements.
- **Reinforcement:** dielectric yarns.
- **Strength members:** glass fibre reinforced plastic material, embedded in the outer sheath.
- **Outer Sheath:** HDPE. 1 Ripcord underneath the sheath.

This mini Flextube dielectric optical cable is designed for outdoor installation in duct by pulling, jetting or floating technics. Mainly used for distribution and access network. The Flextube® design provides easier storage & faster installation. Finger access to the fibres : no specific tools to open the Flextube.

Technical data

No. of Fibres		12	24	36	48	72	96	144	288	
Design	mm	1 x 12	2 x 12	3 x 12	4 x 12	6 x 12	8 x 12	12 x 12	24 x 12	
Module diameter	mm	1.3								
Cable Diameter	mm	6.0	7.6	7.6	7.6	10	11.3	11.3	14	
Cable Weight	kg / km	30	41	43	43	69	83	90	140	
Max tension	daN	80	100	100	100	160	220	220	270	
Minimum Bending Radius	mm	Static 10 x Ø cable				Dynamic 20 x Ø cable				
Temperature Range	°C	Installation - 5 -> + 40			Transport & Storage - 40 -> + 70			Operation - 40 -> + 70		

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

Main characteristics

Test	Test Standard	Specified Value	Acceptance Criteria*
Max. Installation Tension	IEC 60794-1-2-E1	See above	$\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	200 daN / 100 mm	$\Delta\alpha \leq 0.1$ dB
Impact	IEC 60794-1-2-E4	5 Nm, 3 impacts , R=300 mm	$\Delta\alpha$ reversible
Torsion	IEC 60794-1-2-E7	1 m,+/- 180°,	$\Delta\alpha \leq 0.1$ dB
Cable Bend	IEC 60794-1-2-E11B	R=10 x Ø	$\Delta\alpha$ reversible
Temperature Cycling	IEC 60794-1-2-F1	-40°C to +70°C	$\Delta\alpha \leq 0.1$ dB/km
Water penetration	IEC 60794-1-2-F5B	sample=3m, water=1m	No water leakage after 24h

* values for single-mode fibres, measurement 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	blue	orange	green	red	grey	yellow	brown	violet	pink	white	black	acqua

Flextube Colours

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

No.	13	14	15	16	17	18	19	20	21	22	23	24
Color	blue	orange	green	red	grey	yellow	brown	violet	pink	white	l.green	acqua

Sheath Colour:

The outer sheath colour is black.

Sheath Marking:

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

<Manufacturer> <cable type> <year of manufacture> <customer name>
 <length marking in meter>

Logistic

Packing:

Wooden drums with protection.

Delivery Lengths:

Standard delivery lengths are 2, 4 km with a tolerance of - 1% / + 3%

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