

FTTH Outdoor μ Duct Flextube® Cable XS-line

Cable Design

Micro-module structure - dielectric reinforcement – watertight dry core - single sheath



- not to scale -

- **Central strength member (CSM):** glass fibre reinforced plastic material (FRP).
- **Micro-module:** Thin wall tubing, filled with a suitable compound, housing the single-mode optical fibres.
- **Water tightness:** dry core with swellable elements.
- **Reinforcement:** dielectric yarns.
- **Outer Sheath:** HDPE. 1 Ripcord underneath the sheath.

Configuration

No. of Fibres		48	72	96	144
Design		6x8	6x12	8x12	12x12
Cable Diameter	mm	6		6.5	8.5
Cable Weight	daN	30		40	60
Max tension	daN	90		120	180

For cables containing 6 and 12 fibres, please refer to the data sheet Std FUMDFT-D2-P-(6-12)

Application

Installation in μ duct. The flexible micro-modules provide easier storage & faster installation and access to the fibres without specific tools.

Temperature Range	Transportation & Storage: - 30 -> + 70°C	Minimum Bending Radius	
	Installation: - 20 -> + 60°C		Dynamic: 20 x \varnothing cable
	Operation: - 30 -> + 60°C		Static: 15 x \varnothing cable

Main Mechanical and Environmental Characteristics

Test	Test Standard	Specified Value	Acceptance Criteria*
Max. Installation Tension	IEC 60794-1-2-E1	See table above	$\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	100 daN / 100 mm	$\Delta\alpha$ reversible
Impact	IEC 60794-1-2-E4	5 Nm	$\Delta\alpha$ reversible
Torsion	IEC 60794-1-2-E7	25N,+/- 180°, 10 cycles	$\Delta\alpha \leq 0.1$ dB
Cable kink	IEC 60794-1-2-E10	R= 10 x \varnothing	No kink
Cable Bend	IEC 60794-1-2-E11	R=20 x \varnothing , 5 cycles	$\Delta\alpha \leq 0.1$ dB
Temperature Cycling	IEC 60794-1-2-F1	-30°C to +60°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 and Packing

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

Buffer Tube 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

Sheath Colour:

The outer sheath colour is black.

Sheath Marking:

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

DRAKA <Year of manufacture> <Number and type of fibre> <Length marking in meter>

Packing:

Wooden drums with protection.

Delivery Lengths:

Standard delivery lengths are 2 km, 4 km, 6 km, 8 km with a tolerance of - 1% / + 3%