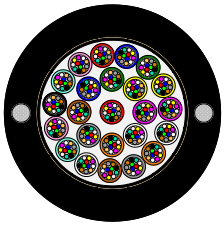
Duct & µDuct dielectric optical micro Flextube® cable, fibre BendBright®XS 200µm

Cable Design

IEC/EN 60794



- not to scale -

Micro-module: Thin skin tubing (FlexTube®), filled with a suitable compound, housing the single-mode optical fibres.
Water tightness: dry core with swellable elements.
Strength members: aramid yarns if needed; glass fibre reinforced plastic material embedded in the outer sheath.
Outer Sheath: HDPE. Ripcord(s) underneath the sheath.

This thin skin micro Flextube dielectric optical cable is designed for outdoor installation in µduct by jetting or floating technics. Mainly used in µduct for FTTx and access network.
This cable, equiped with the PrysmianGroup BendBright-XS 200µm fibre, provides the lowest attenuation at 1625nm after installation and splicing with miniaturized equipments.
The Flextube® design provides easier storage & faster installation.
Finger access to the fibres: no specific tools to open the Flextube.
One cable only will be installed in the same duct and the cable must be protected inside the manhole.

Technical data

# Fibres (grouped by 12)*	≤	**12**	**24**	**36**	**48**	**72**	**96**	**144**	**288**
Module - Ø	mm	1.2							
Cable Diameter	mm	4,2	6,2	6,2	6,2	7.2	7,5	8.4	10.8
Cable Weight	kg / km	12	21	23	24	32	36	46	75
Max installation tension	daN	20	50	60	60	70	90	100	150
Suggested duct inner dia.**	mm	8	8	8	8	10	10	12	14

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

* *other configuration upon specific request.* ** *suggested optimized inner diameter for better air blowing performance*
Please refer to our General Installation, Safety & Handling recommendations before handling.

Main characteristics

Test	**Standard**	**Value**	**Acceptance criteria***
Maximum Tension at installation (short term)	IEC 60794-1-2-E1	see table above	$\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	150 daN / 100mm	$\Delta\alpha$ reversible
Cable bend	IEC 60794-1-2-E11	R = 10 x cable Ø	$\Delta\alpha$ 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

* *values for single-mode fibres, all optical measurements performed at 1550 nm*

Optical Characteristics

See the attached cabled optical fibre data sheet, BendBright-XS 200µm C35 here attached.

Identification *(order of assignment in case of intermediate capacity: from left to right)*

Fibre Colours

fibres 1 -> 12											
red	blue	green	yellow	violet	white	orange	grey	brown	black	aqua	pink

Flextube Colours (cables up to 12 modules)

tubes 1 -> 12											
red	blue	green	yellow	violet	white	orange	grey	brown	black	aqua	pink

Flextube Colours (cables above 12 modules)

tubes 1 -> 12											
red	blue	green	yellow	violet	white	orange	grey	brown	light green	aqua	pink
tubes 13 -> 24											
red	blue	green	yellow	violet	white	orange	grey	brown	light green	aqua	pink

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 <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%

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