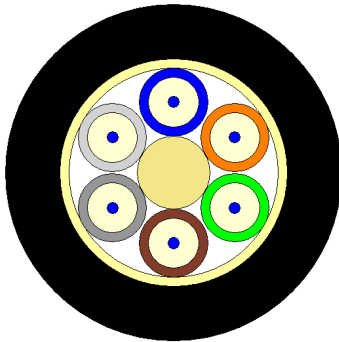


Optical cables for drop aerial installation (ADSS)

Cable Design

Acc. to IEC 60794



- Figure : 6 fibres cable (not to scale) -

- **Central Strength Member (CSM):** glass fibre reinforced plastic rod (FRP)
- **Loose tube:** thermoplastic material, containing optical fibres and filled with a suitable water tightness compound.
- **Stranding:** loose tubes SZ stranded around the CSM.
- **Longitudinal water tightness:** dry core with water swellable elements.
- **Peripheral strength elements :** aramid yarns.
- **Outer sheath:** PE. One ripcord is laid beneath.

Technical data

No. of Fibres		6		12
Design		6 x 1		6 x 2
Loose Tube – Ø	mm	1.5		1.7
CSM – Ø	mm	1.6		1.8
Outer Sheath Thickness	mm	1.2		1.2
Cable diameter	mm	7.4		8.1
Cable weight	kg / km	40		50
Modulus of elasticity	kN / mm ²	70.6		78.8
Effective area	mm ²	3.4		5.6
Thermal expansion coefficient	·10 ⁻⁶ °C ⁻¹	10.0		5.6
MOT (maximum tension in operation , no fibre strain)	kN	1.0		1.9
MRCL(maximum allowable tension, MAT)	kN	1.7		2.7
Breaking strength	kN	4.4		9.1
Minimum Bending Radius	mm	Without Tension 15 x Cable-Ø		Under Maximum Tension 20 x Cable-Ø
Temperature Range	°C	Installation - 5 to + 70	Transport & Storage - 30 to + 70	Operation -20 to + 70

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

Main characteristics

Test	Test Standard	Specified Value	Acceptance Criteria
Maximum Tension	IEC 60794-1-2-E1	MOT : see table above MRCL : see table above	$\Delta I/I$ fibre $\leq 0.05\%$, $\Delta\alpha \leq 0.1$ dB $\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	700 N / 100 mm, max. 15 min	$\Delta\alpha \leq 0.05$ dB, no damage
Impact	IEC 60794-1-2-E4	1 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	-20°C to +70°C	$\Delta\alpha \leq 0.1$ dB/km
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water column=1m,24h	no water leakage

All optical measurements at 1550 nm.

Optical Characteristics

See the attached cabled optical fibre data sheet.

Identification

Fibre Colours

1	2
blue	orange

Buffer Tube Colours

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

Sheath Colour:

The outer sheath colour is black.

Sheath Marking:

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

**<Manufacturer> DROP UFINET TELECOM <year of manufacture> <no. and type of fibre>
<length marking in meter>**

Logistic

Packing:

Wooden drums with protection.

Delivery Lengths:

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

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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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