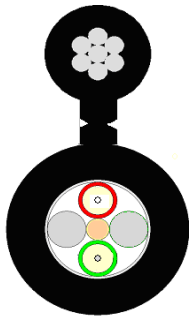


Optical fibre cables for drop aerial installation

Cable Design

Acc. to IEC 60794



- Figure : 2 fibres cable (not to scale) -

- **Messenger** : galvanized steel strand
- **Loose Tube**: thermoplastic material, containing optical fibers and filled with a suitable water tightness compound.
- **Filler Elements**: thermoplastic rods, where needed.
- **Longitudinal Water Tightness**: water-swellaable elements (dry core). A white-red identification thread is laid over core.
- **Outer Sheath**: Black polyethylene. Two ripcords are laid beneath.

Technical data

No. of Fibres		2	4	12
Design		2 x 1	4 x 1	3 x 4
Loose Tube / Filler – Ø	mm		1.5	
Messenger Dimensions	mm		7 x 0.7	
Web Dimensions (W x H)	mm		2.0 ± 0.5 x 2.0 ± 0.5	
Sheathed Messenger Diameter	mm		4.3 ± 0.2	
Cable Diameter	mm		6.5	
Cable Height	mm		12.8	
Cable Weight	kg / km		65	
Minimum Bending Radius	mm	Without Tension 10 x Cable-Ø		Under Maximum Tension 15 x Cable-Ø
Temperature Range	°C	Installation - 15 to + 60	Transport & Storage - 40 to + 70	Operation - 40 to + 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	≥ 3.0 kN	$\Delta\alpha \leq 0.05$ dB/100m fibre strain ≤ 0.33 %
Max. Operation Tension	IEC 60794-1-2-E1	≥ 2.5 kN	$\Delta\alpha \leq 0.05$ dB/100m fibre strain ≤ 0.20 %
Crush	IEC 60794-1-2-E3	350 N	$\Delta\alpha \leq 0.05$ dB
Impact	IEC 60794-1-2-E4	5 Nm, 3 impacts, R= 300 mm	$\Delta\alpha \leq 0.05$ dB after the test
Cable Bend	IEC 60794-1-2-E11	R ≤ 150 mm (with messenger) R=10 x D (optical core) 4 turns, 3 cycles	$\Delta\alpha \leq 0.05$ dB
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=3 m, water column=1 m	no water leakage in 24 h (optical core only)

All optical measurements at 1550 nm.

Optical Characteristics

See the attached cabled optical fibre data sheet.

Identification

Fibre Colours

No.	1	2	3	4
Colour	white	red	yellow	green

Tube Colour

Tube	1	2	3	4
Colour	red	green	white	white

Sheath Colour

The outer sheath colour is black.

Sheath Marking

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

<Manufacturer> <part numbers> <cable code> PE Optical Cable <fiber type> <batch no.>
<year and week of manufacture> <length marking in meters>

Logistic

Packing

Wooden drums with protection.

Delivery Lengths

Standard delivery lengths are 2 km or 4 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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