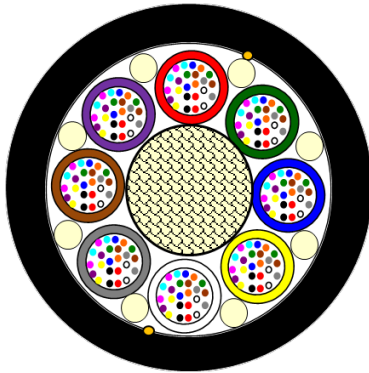


Duct dielectric optical cable

Cable Design

IEC/EN 60794-3-10



- **Central Strength Member (CSM):** glass fibers reinforced plastic material (GRP)
- **Tubes:** thermoplastic material containing Single Mode optical fibers.
- **Longitudinal Water Tightness:** water swellable elements (dry core).
- **Binding elements:** aramid yarns.
- **Outer Sheath:** HDPE, two ripcords underneath.

-192F version illustrated not to scale -

This duct dielectric optical cable is designed for outdoor installation in duct by blowing techniques.

Technical data

No. of Fibres			192
Design	-		8x24
Cable diameter max.- \varnothing	mm		6.3
Cable weight	Kg/Km		39
Min. bending radius	mm	Under Maximum Tension: 20xCable- \varnothing	Without Tension: 15xCable- \varnothing
Temperature range	°C	Transport & Storage: -25 -> +70	Installation: -5 -> +50 Operation: -20 -> +60

Main characteristics

Test	Standard	Value	Requirement*
Tensile strength - Installation	IEC 60794-1-2-E1	1000N	$\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	700N/100mm, max. 15min	$\Delta\alpha \leq 0.05$ dB after the test, no damage
Impact	IEC 60794-1-2-E4	1 J, 3 impacts, R=300 mm	$\Delta\alpha \leq 0.05$ dB after the test, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20 x OD, 100 N, 35 cycles	no damage
Torsion	IEC 60794-1-2-E7	100 N, +/- 180°, 10 cycles	$\Delta\alpha \leq 0.05$ dB, no damage
Cable Bend	IEC 60794-1-2-E11	R=20xOD, 3 cycles, 5 turns	$\Delta\alpha \leq 0.05$ dB, no damage
Temperature Cycling	IEC 60794-1-2-F1	-20 -> +60 °C	$\Delta\alpha \leq 0.10$ dB/Km, reversible
Water Penetration	IEC 60794-1-2-F5B	3 m sample, 24 h	No water penetration

* values for single-mode fibres, all optical measurements performed at 1550 nm, ** weight of 1 Km of cable

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
Colo	red	green	blue	yellow	white	grey	brown	violet	aqua	black	orange	pink

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

Tube colours

Fiber Count	Elements							
	1	2	3	4	5	6	7	8
8x24	RD24T	GR24T	BL24T	YE24T	WH24T	GY24T	BN24T	VI24T

Sheath color:

The outer sheath is black.

Sheath Marking:

The outer sheath is marked in 1 meter intervals by ink-jet method, as follows:

PRYSMIAN(SL) A-DQ(ZN)2Y 8x24 G.657.A1 200 ☎ ~ yyyy Batch-Nr. mmmm

where: yyyy = year of production, mmmm = Sequential Length Mark, t = number of tubes
 <batch number> = Production Order (6 digits) + 2 digits (representing the length produced from that PO)

Packing:

Wooden drums with protection.

Delivery Lengths: 4000m ± 200 m, 6000 ± 300 m

Other lengths available upon agreement.

Up to a maximum of 10% of the total number of cable lengths could be shorter than nominal values.

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