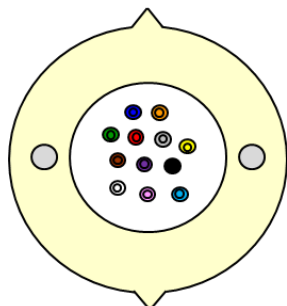


INDOOR RISER OPTICAL CABLE (VERTICASA)

Cable Design

IEC/EN 60794-2-20



-24F version illustrated not to scale -

- **Fibers:** G.657.A2
- **Buffers:** 0.9 mm easy stripping buffers with 2 fibers (2f ESFU).
- **Outer Sheath:** Flame retardant LSOH, 2 glass fibers reinforced plastic material (GRP) embedded, disposed at 180°.

This dielectric optical cable is designed for indoor installation technique.

Technical data

No. of Fibres		12(6x2f)	24(12x2f)	48(24x2f)
Buffer diameter - ϕ	mm		0.900	
GRP - ϕ	mm	0.7	1.0	1.0
Sheath thickness	mm	1.75	1.8	2.5
Cable diameter - ϕ	mm	8.5	10.0	12.0
Min. bending radius	mm	Under Tension: 20xCable- ϕ		Without Tension: 10xCable- ϕ
Temperature range	°C	Transport: -10 -> +60	Installation: -10 -> +40	Operation: -10 -> +60

Main characteristics

Test	Standard	Value	Requirement*
Tensile Strength (dynamic)	IEC 60794-1-2-E1	300N, 5 min.	$\Delta I/I$ fibre \leq 0.60%, $\Delta\alpha \leq$ 0.10 dB under test, reversible
Crush	IEC 60794-1-2-E3	500 N/100mm, max. 15 min	$\Delta\alpha \leq$ 0.10 dB under test, reversible, no damage
Impact	IEC 60794-1-2-E4	5 J, 3 impacts, R=300 mm	$\Delta\alpha \leq$ 0.10 dB after test, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20xOD, 100N, 100 cycles	No break of fibres or tensile performance elements
Bend	IEC 60794-1-2-E11A	R=10xOD, 5 cycles	$\Delta\alpha \leq$ 0.05 dB under test, reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-10 -> +60 °C, 2 cycles	$\Delta\alpha \leq$ 0.05 dB/Km, reversible
Fire performance	IEC 60332-1-2	-	IEC 60332-1-2
Euroclass	CEI EN 50575 + A1	-	Cca-s1, d1, a1

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

Optical Characteristics

See the attached cabled optical fiber BendBright™XS (G.657A2) data sheet.

Identification

Color Coding:

Element No.	1	2	3	4	5	6	7	8	9	10	11	12
Fibres	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green
Protection	Red I	White I	Yellow I	Blue I	Green I	Violet I	Brown I	Black I	Orange I	Turquoise I	Pink I	Grey I

Element No.	13	14	15	16	17	18	19	20	21	22	23	24
Fibres	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Blue & Green	Red & Blue	Red & Blue	Red & Blue	Red & Blue	Red & Blue	Red & Blue	Red & Blue
Protection	Red II	White II	Yellow II	Blue II	Green II	Violet II	Brown II	Black II	Orange II	Turquoise II	Pink II	Grey II

I – one black mark; **II** – two black marks;

Sheath Color:

The outer sheath color is ivory.

Sheath Marking:

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

wwyyyy **PRYSMIAN(S) VERTICASA INDOOR CABLE (n x 2) FO D1M LSOH CPR Cca-s1, d1, a1 zzzz M**

where: wwyyyy= week and year of manufacture, n=number of bundle, zzzzM = Sequential Length Mark

Logistic

Packing:

Wooden drums with protection.

Delivery Lengths: 1000 ±100 m or 2000 ± 100 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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