

PRYSMIAN FPTM/K1M

INDOOR OPTICAL CABLE

- Fibers: G.657A1 or G.657A2
- Buffers: 0.9 mm easy stripping buffers (ESFU).
- Peripheral Strength Member: aramid yarns.
- Outer Sheath: Flame retardant LSOH.



TECHNICAL DATA

NO. OF FIBRES		1	2	4
Buffer diameter – Ø	mm	0.900		
Sheath thickness	mm	0.70		
Cable diameter – Ø	mm	3.8±0.1		4.4±0.2
Cable weight, max.	Kg/Km	15		20

Min. bending radius	mm	Under Tension: 15xCable-Ø		Without Tension: 10xCable-Ø
Temperature range	°C	Transport : -10 -> +60	Installation: -10 -> +40	Operation: -10 -> +60

MAIN CHARACTERISTICS

TEST	STANDARD	VALUE	REQUIREMENT*
Tensile Strength (static)	IEC 60794-1-2-E1	90 N, 5 min.	$\Delta I/I$ fibre $\leq 0.20\%$, $\Delta\alpha \leq 0.05$ dB under test, reversible
Tensile Strength (dynamic)	IEC 60794-1-2-E1	270N, 5 min.	$\Delta I/I$ fibre $\leq 0.60\%$, $\Delta\alpha \leq 0.10$ dB under test, reversible
Crush	IEC 60794-1-2-E3	150 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=15xOD, 50N, 100 cycles	No break of fibres or tensile performance elements
Torsion	IEC 60794-1-2-E7	$\pm 180^\circ$, 1 m, 20N, 20 cycles	$\Delta\alpha \leq 0.10$ dB under test, reversible, no damage
Bend (at low temperature)	IEC 60794-1-2-E11A	Test diameter=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, time of cycle = 18h	$\Delta\alpha \leq 0.05$ dB/Km, reversible
Kink	IEC 60794-1-2-E10	Test temperature: 23 °C±3 °C, Test diameter=5xOD	No kink after test
Abrasion Resistance of Cable Marking	IEC 60794-1-2-E2B-1	3 cycles, load = 450 g	After the test the marking shall be legible
Flame Propagation	IEC 60332-1	-	As in IEC 60332-1
Halogen content	IEC 60754-1	-	Halogen content <0.5%
Corrosivity of Smoke Gases	IEC 60754-1	-	pH value ≥ 4.3
Conductivity of Smoke Gases	IEC 60754-1	-	Conductivity > 10 µS/mm

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

OPTICAL CHARACTERISTICS

See cabled optical fibre G.657A1 or G.657A2 data sheet.

IDENTIFICATION

Fibre & buffers Colors

No.	1	2	3	4
Colour	red	blue	green	yellow
				

Sheath Color:

The outer sheath color is white.

Sheath Marking:

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

wwyy	PRYSMIAN (S)	VERTICASA DROP CABLE	nFO ft K1M	LSOH	zzzz
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wwyy = manufacturing year; n = number of optical fibre; ft = fibre type;
zzzz = sequential length mark

LOGISTICS

Packing:

Wooden drums with protection.

Delivery Lengths: 2100 ± 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