

# PRYSMIAN FTL1/D1E

## OVAL G-DROP OUTDOOR OPTICAL CABLE



- Tube: thermoplastic material containing optical fibers and filled with a suitable water tightness compound.
- Peripheral Strength Member: 2 FRP beside of tube.
- Longitudinal Water Tightness: W/S yarns
- Outer Sheath: HDPE (minim 0.941 g/cm<sup>3</sup>) with minimum carbon black content 2.0 % and good aging characteristics, 2 ripcords beneath.

In case of aerial installation between poles, the maximum permitted span is 50 meter with 1% installation sag.

The cables withstand the maximum additional loads generated by wind and ice in the following environment:

(a) temperature –5°C, wind speed 100 km/h

(b) temperature –20°C , wind speed 50 km/h , ice radial thickness 8 mm

The use of proper fittings is recommended, in order to achieve the mentioned performance.

## TECHNICAL DATA

NO. OF FIBRES		UP TO 12
Tube diameter – ø	mm	2.8
Minimum sheath thickness	mm	0.6
Cable dimensions	mm	4.8 x 8.3
Cable weight	Kg/Km	45

Min. bending radius	mm	Under Tension: 20xCable-ø	Without Tension: 15xCable-ø
Temperature range	°C	Transport & Storage: -40 -> +70	Installation: -10 -> +50 Operation: -40 -> +70

## MAIN CHARACTERISTICS

TEST	STANDARD	VALUE	REQUIREMENT*
Tensile Strength (static)	IEC 60794-1-2-E1	400N, 5 min.	$\Delta I/I$ fiber $\leq 0.05\%$ , $\Delta\alpha \leq 0.05$ dB under test, reversible
Tensile Strength (dynamic)	IEC 60794-1-2-E1	1000N, 5 min.	$\Delta I/I$ fiber $\leq 0.33\%$ , $\Delta\alpha$ reversible
Crush	IEC 60794-1-2-E3	1000 N/100mm, max. 5 min	$\Delta\alpha \leq 0.05$ dB, reversible, no damage
Impact	IEC 60794-1-2-E4	5 J, 3 impacts, R=300 mm	$\Delta\alpha \leq 0.05$ dB after test, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20xOD, 100N, 100 cycles	No break of fibers or cable's elements
Torsion	IEC 60794-1-2-E7	$\pm 90^\circ$ , 2 m, 400N, 5 cycles	$\Delta\alpha \leq 0.05$ dB after test, no damage
Bend	IEC 60794-1-2-E11A	D=15xOD, 5 cycles	$\Delta\alpha \leq 0.05$ dB after test, no damage
Temperature Cycling	IEC 60794-1-2-F1	-40 -> +70 °C, 2 cycles	$\Delta\alpha \leq 0.05$ dB/Km, reversible
Water Penetration	IEC 60794-1-2-F5B	3 m sample, 1 m water column	No water penetration in 24 h













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

## OPTICAL CHARACTERISTICS

See the attached cabled optical fiber data sheet.

## IDENTIFICATION

### Fibre Colors

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	blue	orange	green	brown	grey	white	red	black	yellow	violet	aqua	pink
												

### Sheath Color

The outer sheath color is black.

### Sheath Marking

The outer sheath is marked in 1 meter intervals by hot print foil method as follows:

**PRYSMIAN (S) wwyy FLAT DROP nn FO SM LOH OPTICAL CABLE zzzz**

wwyy = week & year; nn = number of fibres, zzzz = meter marking

Other text can be printed on the outer sheath, according to customer request.

## LOGISTICS

### Packing:

Wooden drums with protection.

### Delivery Lengths:

4000 ± 200 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.