

# Fiber optic cable - PESP

**Deployment and installation type:** designed for underground ducts, galleries or directly buried, where maximum rodent protection is required.

**Cable type:** armed cable with corrugated steel tape, and polyethylene sheath, which brings an optimal protection against environmental factors.

**Optical Fiber:** different types based on customer requirements.

**Dry core:** the use of waterblocking materials avoids water propagation through the cable.

**Integrability:** this solution can be complemented with the rest of TELNET FTTH portfolio: loose tube cables for trunk and access network, microcables, optical splitters, splice closures, drop cables, termination boxes and patchcords.

## Construction detail

1. Dielectric Fiberglass Reinforced Plastic (FRP) as central strength member
2. PBT loose tubes containing optical fibers, and fillers (if required), stranded in SZ around the FRP and coated with water-blocking material
3. Inner polyethylene sheathing
4. Corrugated steel tape (CST) as optimal protection against rodents
5. External polyethylene sheathing

## Mechanical and physical features

	Test method	Acceptance criteria
Max. Tensile load	IEC 60794-1-E1	2000 N
Crush resistance	IEC 60794-1-E3	30 N/mm
Impact resistance	IEC 60794-1-E4	5 J
Temperature cycle	IEC 60794-1-F1	-30°C / +70°C
Bending radius	IEC 60794-1-E11, proc. 1	15 x cable diameter
Water propagation	IEC 60794-1-F5	



## Outer jacket marking (1)

TELNET-RI	Year	Num fibers	Fiber type	Cable type	Production order	Length
TELNET-RI	XXXX	XXX OF	XXX	PESP	OF-XXXXXXXX-E	XXXX

## Color coding of fibers (\*)

	1	2	3	4	5	6	7	8	9	10	11	12
Optical fiber	A	Nj	V	M	Gr	B	R	N	Am	Vi	Rs	At

## Color coding of tubes (\*)

Number of fibers	1	2	3	4	5	6	7	8	9	10	11	12
12	A	N	N	N	N	N						
24	A	N	N	Nj	N	N						
36	A	N	Nj	N	V	N						
48	A	Nj	N	V	M	N						
60	A	Nj	V	M	Gr	N						
72	A	Nj	V	M	Gr	B						
96	A	Nj	V	M	Gr	B	R	N*				
144	A	Nj	V	M	Gr	B	R	N*	Am	Vi	Rs	At

A: Blue, Nj: Orange, V: Green, M: Brown, Gr: Grey, B: White, R: Red, N: Black, Am: Yellow, Vi: Violet, Rs: Pink, At: Turquoise

The tubes marked as "N" are fillers (without optical fiber)

The tubes marked as "N\*" are tubes with optical fibers

## Dimension, structure and weight (\*)

OF per cable	Number of tubes/fillers		Number of fibers per tube	Nominal diameter (mm)	Nominal weight (Kg/Km)
12	1	5	12	14,0	195
24	2	4	12	14,0	195
36	3	3	12	14,0	195
48	4	2	12	14,0	195
60	5	1	12	14,0	195
72	6	0	12	14,0	195
96	8	0	12	15,0	230
144	12	0	12	18,0	315

## Contact Information

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(\*) TELNET, as manufacturer, designs and manufactures cables according to customer requirements, offering additional configurations to the ones shown in datasheet. For further information, please contact TELNET.