

Fiber optic cable - TFVT

Deployment and installation type: designed to be used both in underground ducts, galleries, as well as inside buildings where optimal fire performance is required, providing as well moderate rodent protection.

Cable type: fully dielectric cable, with fiberglass yarns as tensile reinforcement element, and two flame retardant, low smoke and halogen free thermoplastic sheaths (LSZH).

Fully dielectric: Cables are completely dielectric, eliminating the possibility of interferences with existing power lines or coaxial cables.

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 Flame retardant, low smoke and halogen free thermoplastic sheath (LSZH)
3. Fiber glass yarns as tensile reinforcement element and moderate protection against rodents
4. External Flame retardant, low smoke and halogen free thermoplastic sheath (LSZH)

Mechanical and physical features

	Test Method	Acceptance criteria
Max. Tensile load	IEC 60794-1-E1	3000 N
Crush resistance	IEC 60794-1-E3	20 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	
Flame propagation	IEC 60332-2-2	
Halogen emission	IEC 60754-1	
Smoke density	IEC 61034-2	



Outer jacket marking (4)

TELNET-RI	Year	Num fibers	Fiber type	Cable type	Production order	Length
TELNET-RI	XXXX	XXX OF	XXX	TFVT	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	13,4	190
24	2	4	12	13,4	190
36	3	3	12	13,4	190
48	4	2	12	13,4	190
60	5	1	12	13,4	190
72	6	0	12	13,4	190
96	8	0	12	14,9	235
144	12	0	12	17,6	335

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.