

Fiber optic Microcable - PDR

Deployment and installation type: designed for underground ducts with small diameter, and microtrenches in urban environments, where a very reduced diameter is required, and blowing installation techniques are used.

Cable type: fully dielectric cable, with reduced diameter to facilitate handling it, and high density polyethylene sheathing. This type of sheath provides optimal protection against environmental factors, and a low friction coefficient to facilitate the installation using blowing methods.

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. High density polyethylene sheathing

Mechanical and physical features

	Test Method	Acceptance criteria
Max. Tensile load	IEC 60794-1-E1	400N - 1000N
Crush resistance	IEC 60794-1-E3	10 N/mm
Impact resistance	IEC 60794-1-E4	3 J
Temperature cycle	IEC 60794-1-F1	-25°C / +70°C
Bending radius	IEC 60794-1-E11, proc. 1	10 x cable diameter
Water propagation	IEC 60794-1-F5	

Outer jacket marking (*)

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



Color coding of fibers (1)												
	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
	13	14	15	16	17	18	19	20	21	22	23	24
Optical fiber	A*	Nj*	V*	M*	Gr*	B*	R*	Nt	Am*	Vi*	Rs*	At*

Optical fibers with "*" have a black ringmark

Color coding of tubes (1)												
Number of fibers	1	2	3	4	5	6	7	8	9	10	11	12
24	A	N	N	Nj	N	N						
36	A	N	Nj	N	V	N						
48	A	Nj	N	V	M	N						
72, 144 (b)	A	Nj	V	M	Gr	B						
96, 192	A	Nj	V	M	Gr	B	R	N*				
144 (a), 288	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 (1)					
OF per cable	Number of tubes/fillers		Number of fibers per tube	Nominal diameter (mm)	Nominal weight (Kg/Km)
24	2	4	12	5,9	40
36	3	3	12	5,9	40
48	4	2	12	5,9	40
72	6	0	12	5,9	40
96	8	0	12	7,0	50
144 (a)	12	0	12	8,7	80
144 (b)	6	0	24	8,1	70
192	8	0	24	8,9	85
288	12	0	24	11,8	100

Contact Information

TELNET Redes Inteligentes

Headquarters

Polígono Industrial Centrovía
c/ Buenos Aires, 18
50198 La Muela, Zaragoza
Spain
Phone: (+34) 976 14 18 00
Fax: (+34) 976 14 18 10
telnet@telnet-ri.es

Commercial office in Madrid

Avda. Menéndez Pelayo, 85 - 1º A
28007 Madrid
Spain
Phone: (+34) 91 434 39 92
Fax: (+34) 91 434 40 84

Subsidiary in Portugal

NETIBERTEL
Av. Fontes Pereira de Melo, 35 - 14ºD
1050-118 Lisbon
Portugal
comercial.pt@telnet-ri.es

www.telnet-ri.es

(1) 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.