

TELECABLES S.A. is a company that operates within the telecommunications and cabling industry. It produces state of the art copper conductor cables with plastic insulation, fiber optic cables as well as signaling, remote control and data transmission cables available worldwide under the trademark CABLEL®.

The company manufactures high quality standard products and thus exceeds the requirements set by the fast development pace in the telecommunication industry.

The company has all the necessary requirements to design and produce cables according to the individual needs of each customer:

- State of the art mechanical equipment and facilities.
- Skilled and experienced personnel, continuously trained in the up-to-date developments of the industry.
- Quality assurance system certified according to ISO 9001.
- Continuous investment in equipment, research, technology and know-how.

TELECABLES S.A. is capable of producing telecommunication cables according to national and international standards such as: BRITICH TELECOM-CW, IEC, ELOT, VDE, CEI, NF, DIN, EN,

BS, REA, ASTM, ETSI.

A large share of the production is exported and the company's products have been selected and used by telecommunication organizations worldwide.

TELECABLES S.A. being at the forefront of technology is dedicated in manufacturing and continuously developing cables, which exceed industry specifications.



DATA AND VOICE TRANSMISSION CABLES

UTP FTP STP SFTP

APPLICATIONS

These cables are used for data and voice transfer, as well as applications such as ISDN lines and LANs. In addition, these cables may be used in systems operating at high frequencies such as: TPDDI Twisted Pair Distributed Data Interface) and ATM (Asynchronous Transfer Mode). These applications are included in categories 5, 5e and 6 of ISO / IEC specifications and TIA / EIA mentioned in cable specifications for Transmission Systems (ISO / IEC 11801 and TIA/EIA 568A).

DESCRIPTION

0,51 mm diameter copper conductor.
PE - conductor insulation jacket
Twisted cable pairs comprising the core of the cable.
Earthing galvanized copper cable 0.50 mm (FTP only).
Aluminum tape (FTP only).
PVC layer (polyvinylchloride), gray - colored.

MECHANICAL PROPERTIES

Cable Type	Outer Diameter (approx.) (mm)	Net Weight (approx.) (kg/km)
UTP 4 pair	5,0	30
UTP 25 pair	15,0	210
FTP 4 pair	6,5	40

CERTIFICATION

UTP and FTP cables, UL certified.



ELECTRICAL CHARACTERISTICS (20°C) CATEGORY 5/5E

(4 pair cables)

Frequency (MHz)	Attenuation (dB/100m)		Crosstalk (Next) (dB)			SRL: Structural Return Loss (dB)		
	CAT. 5 / 5e	TELECABLES*	CAT. 5	CAT. 5e	TELECABLES**	CAT. 5	CAT. 5e	TELECABLES**
0,772	1,8	1,8	64,0	67,0	74,0	-	-	-
1	2,0	2,0	62,3	65,3	73,0	23	20	28
4	4,1	3,7	53,3	56,3	65,0	23	23	30
8	5,8	5,3	48,3	51,3	62,0	23	24,5	30
10	6,5	5,9	47,3	50,3	60,0	23	25	30
16	8,2	7,6	44,3	47,3	58,0	23	25	30
20	9,2	8,7	42,8	45,8	55,0	23	25	30
25	10,4	9,8	41,3	44,3	53,0	22	24,3	30
31,25	11,7	10,9	39,9	42,9	52,0	21,1	23,6	30
62,5	17,0	15,7	35,4	38,4	49,0	18,1	21,5	28
100	22,0	19,8	32,3	35,3	44,0	16,0	20,1	25
155	-	25,0	-	-	40,0	-	-	28
200	-	28,9	-	-	38,0	-	-	28
250	-	32,5	-	-	37,0	-	-	25

(25 pair cables)

Frequency (MHz)	Attenuation (dB/100m)		Crosstalk (Next) (dB)		SRL: Structural Return Loss (dB)	
	CAT. 5 / 5e	TELECABLES*	CAT. 5	TELECABLES**	CAT. 5	TELECABLES**
0.772	1,8	1,8	64,0	74,0	-	-
1	2,0	2,0	62,3	73,0	23	28
4	4,1	3,9	53,3	65,0	23	30
8	5,8	5,4	48,3	62,0	23	30
10	6,5	6,2	47,3	60,0	23	30
16	8,2	7,9	44,3	58,0	23	30
20	9,2	8,8	42,8	55,0	23	28
25	10,4	9,9	41,3	53,0	22	28
31.25	11,7	11,0	39,9	50,0	21,1	28
62.5	17,0	15,9	35,4	47,0	18,1	26
100	22,0	21,0	32,3	42,0	16	24

CATEGORY 6

(UTP cables)

Frequency (MHz)	Attenuation (dB/100m)		Crosstalk (dB)				Return loss (dB)		ACR (dB)			
			Next (pp)		Next (ps)				ACR (pp)		ACR (ps)	
	TIA/EIA-568 B	TELECABLES*	TIA/EIA-568 B	TELECABLES**	TIA/EIA-568 B	TELECABLES**	TIA/EIA-568 B	TELECABLES**	TIA/EIA-568 B	TELECABLES**	TIA/EIA-568 B	TELECABLES**
1	2,0	1,8	74,3	84,4	72,3	80,6	20,0	23,3	72,3	82,6	70,3	79,0
4	3,8	3,6	65,3	77,3	63,3	71,4	23,0	27,5	61,5	70,7	59,5	68,3
8	5,3	5,1	60,8	71,7	58,8	69,4	24,5	29,5	55,4	67,2	53,4	65,0
10	6,0	5,8	59,3	70,7	57,3	67,9	25,0	28,7	53,3	65,6	51,3	62,8
16	7,6	7,3	56,2	65,3	54,2	62,6	25,0	29,8	48,7	58,8	46,7	56,1
20	8,5	8,2	54,8	63,5	52,8	61,4	25,0	28,3	46,3	56,1	44,3	54,0
25	9,5	9,2	53,3	64,6	51,3	60,5	24,3	29,3	43,8	56,2	41,8	52,2
31,25	10,7	10,3	51,9	59,6	49,9	58,8	23,6	27,7	41,2	50,2	39,2	49,4
62,5	15,4	14,9	47,4	55,2	45,4	54,0	21,5	26,3	32,0	41,7	30,0	40,4
100	19,8	19,1	44,3	50,8	42,3	47,7	20,1	28,1	24,5	33,4	22,5	30,3
155	25,3	24,3	41,4	47,8	39,4	46,6	18,8	24,2	16,1	31,4	14,1	24,5
200	29,0	28,0	39,8	46,3	37,8	45,4	18,0	28,3	10,8	20,5	8,8	19,7
250	32,8	31,9	38,3	41,5	36,3	40,8	17,3	27,1	5,5	18,3	3,5	11,6

Detail inspection protocols with the measured values are available to customers upon request.

* Customary actual max. values.
** Customary actual min. values.

CATEGORY 5/5E

Electrical resistance	88 Ω / km max.
Resistance imbalance	1,0% max.
Characteristic resistance	100 15% Ω at 1 - 250 MHz frequency 125 20% Ω at 0,064 - 1 MHz frequency
Mutual capacity	50 3 nF/Km max. at 1.0 KHz frequency
Capacitance imbalance to earth	500 pF/Km max. at 1.0 KHz frequency
LCL**	80 dB min. at 64 KHz frequency (min. specified for cat. 5: 43 dB)
Operating voltage	100 V max.
Dielectric Strength	2000 V/ 1 min. DC
Propagation Speed	68% nom.
Insulation resistance	10,000 MΩ . km at 500 V DC 20 °C
Shielding ability (TI) mΩ/μ (for FTP only)	1 MHz: 40, 10 MHz: 30

CATEGORY 6

DC resistance	TELECABLES: 8,6 Ω/100m max. TIA/EIA-568 B: 9,38 Ω/100m max.
Characteristic impedance	at frequency 1-100 MHz TELECABLES: 85-115 Ω / TIA/EIA-568 B: 85-115 Ω at frequency 100-200 MHz TELECABLES: 85-115 Ω / TIA/EIA-568 B: 78-122 Ω at frequency 200-250 MHz TELECABLES: 85-115 Ω / TIA/EIA-568 B: 68-132 Ω
Mutual capacitance	TELECABLES: 5,2 nF/100m max. at frequency 1,0 MHz TIA/EIA-568 B: 5,6 nF/100m max. at frequency 1,0 MHz
Capacitance imbalance pair to ground	TELECABLES: 30 pF/100m max. at frequency 1,0 MHz TIA/EIA-568 B: 330 pF/100m max. at frequency 1,0 MHz