

**UTP (L) kat.5e 4x2x0,5 mm - 155 MHz**

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**LOCAL AREA NETWORK CABLES**Operating voltage  
max 150 VTest voltage  
700 VTemp. range  
fixed installation  
from -20°C to +70°CTemp. range  
during installation  
from 0°C to +50°CBending radius  
4xDFlame retardant  
PN-EN 60332-1-2Indoor  
application**APPLICATIONS**

**UTP (L) kat.5e 4x2x0,5 mm** cables are intended for multimedia computer networks (data, sound and HDTV transmission), including structural wiring of buildings, applied in industrial and other dedicated networks not sensitive to electromagnetic interferences.

The cables are also applied in computer networks of increased binary transfer where simultaneous transmission in both directions in all 4 symmetrical circuits is used (full duplex, Gigabit Ethernet technique).

The cables are suitable for fixed indoor installations.

**CONSTRUCTION**

- annealed copper single wire conductors of diameter 0.48 mm, 24 AWG,
- polyethylene (PE) insulation coloured: white-blue and blue, white-orange and orange, white-green and green, white-brown and brown,
- insulated conductors twisted into pairs,
- pairs laid-up into a cable core,
- PVC cable sheath, grey RAL 7035, other colours also available.

**AVAILABLE UPON REQUEST**

**UTP-H (L) kat.5e 4x2x0,5 mm** - halogen free material sheathed cables applied in locations where, in case of fire, higher safety level is required. The cables are flame retardant and their smoke emission is low, emitted fumes are non toxic and non corrosive.

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## CHARACTERISTICS

Characteristic impedance	100 ± 15 Ω	Return loss, minimum at f=20÷155 MHz	25-7lg(f/20) dB
Mutual capacitance of any pair at 1 kHz, approximate	50 nF/km	DC loop resistance at 20°C, maximum	210 Ω/km
Capacitance unbalance of any pair to ground at 1 kHz, max.	1600 pF/km	Resistance unbalance of any pair of conductors, max.	2 %
Insulation resistance, minimum	5000 MΩ·km	Phase delay dispersion of symmetrical circuits	45 ns/100 m
Operating voltage	150 V	Phase delay T	534+36/√f ns/100 m
Voltage test	700 V rms	Operating temperature range during operation	from - 20 to + 70°C
Velocity of propagation	65 %	Operating temperature range during installation	from 0 to + 50°C
Return loss, minimum at f=4÷10 MHz	20+5lg(f) dB	Minimum bending radius	4 x cable diameter
Return loss, minimum at f=10÷20 MHz	25 dB	Cable combustibility	flame retardant
		Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
		Reference standards	PN-EN 50288-3-1, IEC 61156-5 ISO/IEC 11801, TIA/EIA 568 A

### Attenuation loss, maximum

f	[MHz]	1	4	8	10	16	20	25	31.25	62.5	100	155
A	[dB/100 m]	2.1	4.3	5.9	6.6	8.2	9.2	10.5	11.8	17.1	22.0	28.1

### Near end cross-talk between pairs, minimum

f	[MHz]	1	4	8	10	16	20	25	31.25	62.5	100	155
NEXT	[dB]	65.3	56.3	51.8	50.3	47.3	45.8	44.3	42.9	38.4	35.3	32.5
PSNEXT	[dB]	62.3	53.3	48.8	47.3	44.3	42.8	41.3	39.9	35.4	32.3	29.5
ACR	[dB]	68.3	57.2	51.0	48.8	44.0	41.5	38.9	36.2	26.4	18.3	4.4

### Far end cross-talk between pairs, minimum

f	[MHz]	1	4	8	10	16	20	25	31.25	62.5	100	155
ELFEXT	[dB]	63.8	51.7	45.7	43.8	39.7	37.7	35.8	33.9	27.8	23.8	19.9
PSELFEXT	[dB]	60.8	48.7	42.7	40.8	36.7	34.7	32.8	30.9	24.8	20.8	16.9

CE = the cable meets requirements of the low voltage directive 2014/35/EU

Product No.	Number of pairs (x 2) x conductor diameter	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm	mm	kg/km	kg/km
0251 026	4 x 2 x 0,5	4.7	13.8	24.0

TECHNOKABEL S.A. reserves the right to change specifications without prior notice.