

UTP kat.5e 4x2x0,5 mm - 155 MHz

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LOCAL AREA NETWORK CABLESOperating 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 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 0.51 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 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	188 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 %	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	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 004	4 x 2 x 0,5	5.0	15.7	27

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