

LAN FTP cat.5e 4 x 2 x 0.5 mm - 155 MHz

LOCAL AREA NETWORK CABLE



APPLICATIONS

LAN FTP cat.5e 4 x 2 x 0.5 mm cable is intended for multimedia computer networks (data, sound and HDTV transmission) including structural wiring of buildings, in industrial and other dedicated networks sensitive to electromagnetic interferences.

The cable is protected against interferences from external electromagnetic fields and emission of interferences out of the cable by means of an overall shield.

The cable is 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 cable is suitable for 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,
- collective shield, incorporating an aluminium tape and an annealed tinned copper drain wire of diameter 0.5 mm,
- PVC cable sheath, grey RAL 7035, other colours also available.

AVAILABLE UPON REQUEST

LAN FTP-H cat.5e 4 x 2 x 0.5 mm – halogen free material sheathed cable applied in locations where, in case of fire, higher safety level is required. The cable is flame retardant and its smoke emission is low, emitted fumes are non toxic and non corrosive.



PN-EN 60332-1-2



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CHARACTERISTICS

at 20 ÷ 125 MHz

Shielding impedance

at 10 MHz, maximum

Characteristic impedance $100 \pm 15 \,\Omega$ DC loop resistance at 20° C, maximum $188 \,\Omega/\text{km}$

at 1 kHz, approximate 50 nF/km Resistance unbalance of any pair of conductors, maximum 2%

25-8.6·lg(f/20) dB

 $100 \ m\Omega/m$

pair to ground at 1 kHz, max. 1600 pF/km Phase delay T 534+36/√f ns/100 m

Insulation resistance, minimum 5000 M Ω ·km Phase delay dispersion of symmetrical circuits 45 ns/100 m

Voltage test 700 V rms Operating temperature range during operation from -20 to +70°C

Shielding attenuation Reference standards PN-EN 50288-2-2, IEC 61156-5,

Combustibility tests

at 30 ÷ 1000 MHz, minimum 50 dB ISO/IEC 11801, TIA/EIA 568 A

Attenuation loss Near end cross-talk between pairs, Far end cross-talk between pairs, Frequency between pairs, minimum, dB minimum, dB maximum. MHz **PSNEXT ACR PSELFEXT NEXT ELFEXT** dB/100m 2.1 62.3 68.3 1 65.3 63.8 60.8 4 4.3 56.3 53.3 57.2 51.7 48.7 45.7 42.7 8 5.9 51.8 48.8 51.0 50.3 47.3 48.8 43.8 40.8 10 6.6 16 8.2 47.3 44.3 44.0 39.7 36.7 20 9.2 45.8 42.8 41.5 37.7 34.7 25 10.5 44.3 41.3 38.9 35.8 32.8 31.25 42.9 39.9 36.2 33.9 30.9 11.8 62.50 17.1 38.4 35.4 26.4 27.8 24.8 100 22.0 35.3 32.3 18.3 23.8 20.8 155 28.1 32.5 29.5 4.4 19.9 16.9

C € = the cable meets requirements of the low voltage directive 73/23/EEC and 93/68/EEC

Cable type	Number of pairs (x 2) x conductor diameter	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	number x mm	mm	kg/km	kg/km
LAN FTP cat.5e	2x2x0.5	5.6	9.8	29.9
LAN FTP-H cat.5e	4 x 2 x 0.5	6.0	17.6	37.1