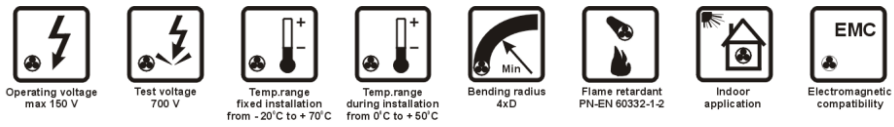
FTP (L) kat.5e 4x2x0,14 mm - 155 MHz

LOCAL AREA NETWORK CABLES



APPLICATIONS

FTP (L) kat.5e 4x2x0,14 mm are patch cables, applied in multimedia computer networks (data, sound and HDTV transmission) including structural wiring of buildings, in industrial and other dedicated networks sensitive to electromagnetic interferences.

The overall shield protects the cables against external electromagnetic interferences and prevents emission of interferences produced in the cables.

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

- flexible, multiwire conductors, stranded of bare annealed copper wires, cross-section 0.14 mm^2 (7x0.16 mm),
- 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,
- cable core wrapped in polyester tape,
- collective shields, incorporating aluminium-polyester tape and stranded of an annealed tinned copper drain wire, cross-section 0.14 mm^2,
- PVC cable sheath, grey RAL 7035, other colours also available.

AVAILABLE UPON REQUEST

FTP-H (L) kat.5e 4x2x0,14 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.

TECHNOKABEL®

CE RoHS

ISO 9001:2008

FTP (L) kat.5e 4x2x0,14 mm - 155 MHz

CHARACTERISTICS

Characteristic impedance	100 ± 15 Ω
Mutual capacitance of any pair at 1 kHz, approximate	50 nF/km
Capacitance unbalance of any pair to ground at 1 kHz, max.	1600 pF/km
Insulation resistance, minimum	5000 MΩ·km
Operating voltage	150 V
Voltage test	700 V rms
Velocity of propagation	65 %
Return loss, minimum at f=4÷10 MHz	20+5lg(f) dB
Return loss, minimum at f=10÷20 MHz	25 dB
Return loss, minimum at f=20÷155 MHz	25-8.6lg(f/20)dB

Minimum shielding attenuation at the frequency f=30 ÷ 1000 MHz - min.	50 dB
Shielding impedance at 10 MHz, maximum	100 mΩ/m
DC loop resistance at 20°C, maximum	290 Ω/km
Resistance unbalance of any pair of conductors, max.	2 %
Phase delay T	534+36/√f ns/100 m
Operating temperature range during operation during installation	from - 20 to + 70°C from 0 to + 50°C
Minimum bending radius	4 x cable diameter
Cable combustibility	flame retardant
Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
Reference standards	PN-EN 50288-2-2, IEC 61156-5 ISO/IEC 11801, TIA/EIA 568 A

Attenuation loss, maximum

f	[MHz]	1	4	10	16	20	31.25	62.5	100	125
A	[dB/100 m]	3.2	6.0	9.5	12.1	13.5	17.1	24.8	32	34.0

Near end cross-talk between pairs, minimum

f	[MHz]	1	4	8	10	16	20	25	31.25	62.5	100	125
NEXT	[dB]	65.0	56.0	50	50.3	47	46	44.3	43	38	35	34
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 cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm	mm	kg/km	kg/km
0013 020	4 x 2 x 0,14	5.0	12.1	26.0

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