

LOCAL AREA NETWORK CABLESOperating voltage
max 150 VTest voltage
700 VTemp. range
fixed installation
from -40°C to +70°CTemp. range
during installation
from -10°C to +50°CBending radius
4xDFlame retardant
PN-EN 60332-1-2Indoor
applicationOutdoor
application

UV resistance

EMC
Electromagnetic
compatibilityMechanical
resistance**APPLICATIONS**

FTP-C-11Y kat.5e 4x2x0,14c mm² 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 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 cable sheath is then made of soft polyurethane (11Y) of enhanced protection against mechanical damage, particularly to abrasion and tear, also resistant to oils, petrol, bacteria and ultraviolet radiation.

The cables are suitable for fixed indoor and outdoor installations.

CONSTRUCTION

- flexible, multiwire conductors, stranded of annealed tin-plated copper wires, cross-section 0.14 mm² (7x0.16 mm), 26 AWG,
- polyethylene (PE) insulation coloured: red-black, green-yellow, blue-brown and orange-grey,
- insulated conductors twisted into pairs,
- pairs laid-up into a cable core,
- collective shield, incorporating an aluminium-polyester tape and a tinned copper wire braid,
- soft polyurethane (11Y) cable sheath, black, other colours also available.

FTP-C-11Y kat.5e 4x2x0,14c mm²

page 2 of 2

CHARACTERISTICS

Characteristic impedance	100 ± 15 Ω	Minimum shielding attenuation at the frequency f= 30 ÷ 1000 MHz - min.	50 dB
Mutual capacitance of any pair at 1 kHz, approximate	50 nF/km	Shielding impedance at 10 MHz, maximum	100 mΩ/m
Capacitance unbalance of any pair to ground at 1 kHz, max.	1600 pF/km	DC loop resistance at 20°C, maximum	290 Ω/km
Insulation resistance, minimum	5000 MΩ·km	Resistance unbalance of any pair of conductors, max.	2 %
Operating voltage	150 V	Operating temperature range during operation	from - 40 to + 70°C
Voltage test	700 V rms	during installation	from - 10 to + 50°C
Velocity of propagation	65 %	Minimum bending radius	4 x cable diameter
Return loss, minimum at f=4÷10 MHz	25+5lg(f) dB	Cable combustibility	flame retardant
Return loss, minimum at f=10÷20 MHz	25 dB	Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
Return loss, minimum at f=20÷125 MHz	25-8.6lg(f/20)dB	Reference standards	PN-EN 50288-2-2, IEC 61156-6 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]	3.2	6.5	8.9	9.9	12.3	13.8	15.8	17.7	25.7	33	42

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 ²	mm	kg/km	kg/km
0506 001	4 x 2 x 0,14c	6.2	22.7	46.5

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