

LOCAL AREA NETWORK CABLES**APPLICATIONS**

FTP-C-O 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 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).

Sheathing PVC of high oxygen index is UV radiation and weather resistant, is self-extinguishing and flame retardant. The cables pass combustibility test according to PN-EN 60332-3 standard.

The cables are oil-resistant and designed for frequent contact with petroleum products, as in petrol stations and stores, where engine fuels and lubricants are pumped or handled.

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: 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-polyester tape and a tinned copper wire braid,
- oil, petrol and UV radiation resistant and self-extinguishing (oxygen index bigger than 29%) PVC cable sheath, blue RAL 5015, other colours also available.

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CHARACTERISTICS

Characteristic impedance	100 ± 5 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 - 30 to + 70°C
Voltage test	700 V rms	during installation	from 0 to + 50°C
Current-carrying capacity, maximum	175 mA	Minimum bending radius	4 x cable diameter
Velocity of propagation	65 %	Cable combustibility	flame retardant
Return loss, minimum at f=4÷10 MHz	25+5lg(f) dB	Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
Return loss, minimum at f=10÷20 MHz	25 dB	Oil resistance	PN-EN 60811-404
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	10	16	20	31.25	62.5	100
A	dB/100 m	3.2	6.0	9.5	12.1	13.6	17.1	24.8	32

Near end cross-talk between pairs, minimum

f	MHz	1	4	8	10	16	20	25	31.25	62.5	100
NEXT	dB	65.3	56.3	51.8	50.3	47.2	45.8	44.3	42.9	38.4	35.3
PSNEXT	dB	62.3	53.3	48.8	47.3	44.2	42.8	41.3	39.9	35.4	32.3
ACR	dB	62.1	50.3	43.3	40.8	35.1	32.2	29.1	25.8	13.6	3.3

Far end cross-talk between pairs, minimum

f	MHz	1	4	8	10	16	20	25	31.25	62.5	100
ELFEXT	dB	63.8	51.8	45.7	43.8	39.7	37.8	35.8	33.9	27.9	23.8
PSELFEXT	dB	60.8	48.8	42.7	40.8	36.7	34.8	32.8	30.9	24.9	20.8

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
0014 005	4 x 2 x 0,14c	7.6	24.2	69

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