

Cat.5e F/UTP 4P AWG24 PVC+PE cable

P/N:

DESIGN

- 1) Conductor: soft copper wire \varnothing 0,50 mm
- 2) Insulation: HDPE, \varnothing 1,01 mm
- 3) Pair: two conductors twisted together
 Color identification of pairs:
 pair 1: white-blue / blue
 pair 2: white-orange / orange
 pair 3: white-green / green
 pair 4: white-brown / brown
- 4) Core wrapping: PET tape
- 5) Drain wire: aluminum contact wire \varnothing 0,5 mm
- 6) Core shield: aluminum polymer foil
- 7) Sheath #1: PVC, thickness 0,5 mm, nominal inside cable \varnothing 5,7 mm
- 8) Rip-cord
- 9) Sheath #2: PE, thickness 0,5 mm, nominal outside cable \varnothing 6,7 mm

APPLICATION

PBX, V.11, X.21, ISDN, Ethernet (10Base-T), ATM-25/52/155 Mbit/s, 100VG-AnyLAN, Token Ring 16/100 Mbit/s, Fast Ethernet (100BASE-TX), 1000BASE-T, 2.5GBASE-T, 5GBASE-T, PoE, PoE+

INSTALLATION AND OPERATION CONDITIONS

For stationary outside installation in conditions of high electromagnetic impacts. Operated on frequencies up to 100 MHz

COMPLIANCE WITH THE REQUIREMENTS

Cabling: ISO/IEC 11801-1, EN 50173-1
Cable: IEC 61156-5
CPR euro-class: Fca

MECHANICAL CHARACTERISTICS

Temperature range:
 • During installation -10 °C ... +60 °C
 • After installation -20 °C ... +60 °C
 Bending radius:
 • During installation \geq 10 cable diameters
 • After installation \geq 4 cable diameters
 Tensile stress: \leq 85 N

ELECTRICAL CHARACTERISTICS AT 20 °C

Parameter	Unit	Value
Capacitance	pF/m	\leq 56
Direct current resistance	Ohm/100 m	\leq 9,5
Insulation resistance	GOhm/km	\geq 5
Resistance unbalance	%	2
NVP	%	68
Propagation delay	ns/100 m	\leq 534+36/ \sqrt{f}
Delay skew on the frequency 100 MHz	ns/100 m	\leq 30
Characteristic impedance in the frequency range of: 1-100 MHz	Ohm	100 \pm 15
Test voltage between cores, (DC, 2 s)	kV	2,5

TRANSMISSION CHARACTERISTICS AT 20 °C (100 M)

Frequency, MHz	1	4	10	16	20	31,25	62,5	100
Attenuation, dB, max	2,1	4,1	6,5	8,3	9,3	11,7	17,0	22,0
NEXT, dB, min	65,3	56,2	50,3	47,2	45,7	42,8	38,3	35,3
PS NEXT, dB, min	62,3	53,2	47,3	44,2	42,7	39,8	35,3	32,3
ELFEXT, dB, min	64	51,9	44	39,9	37,9	34,1	28	24
PS ELFEXT, dB, min	61	48,9	41	36,9	34,9	31,1	25	21
RL, dB, min	20	23	25	25	25	23,6	21,5	20,1

IEC 61156-5, values lower than 4 MHz are given for information only

ORDER INFORMATION

P/N	Cable name	Standard packing	Weight, kg/km
	KPVEShp-VP (100) 4x2x0,50 (F/UTP-cat.5E)	Cardboard box 305 m	45,14