


DESIGN

- 1) Conductor: solid annealed copper
- 2) Insulation: solid PE
- 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
- 5) Copper tinned contact wire \varnothing 0,4 mm
- 6) Core shield: aluminum polymer foil (metal outside)
- 7) Jacket: PE, color black

APPLICATION

PBX, V.11, X.21, ISDN, Ethernet (10Base-T), ATM-25/52/155 Mbit/s, 100VG-AnyLAN, Fast Ethernet (100BASE-TX), Token Ring 16/100 Mbit/s, Gigabit Ethernet (100BASE-T), Firewire 100 Mbit/s, ATM LAN 1,2 Gbit/s

COMPLIANCE WITH THE REQUIREMENTS

Cable: IEC 61156-5 (cat.5e)
Cabling: ISO/IEC 11801-1 & EN 50173-1 (class D), ANSI/TIA 568-C.2 (cat.5e)
Fire safety: -

MECHANICAL CHARACTERISTICS

Temperature range:

- During installation -10 °C ... +60 °C
- After installation -50 °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 for conductors with \varnothing :	Ohm/km	\leq 92
0,51 mm		\leq 103
0,48 mm		\leq 112
0,46 mm		\leq 123
Insulation resistance	GOhm*km	\geq 5
Resistance unbalance	%	2
Signal propagation velocity	s	0,69
Characteristic impedance in the frequency range of: 1-100 MHz	Ohm	100 \pm 15
Test voltage between cores, (DC, 2 s)	kV	2,5

Frequency, MHz	1	4	10	16	20	31,25	62,5	100
Attenuation, dB, max; for max. cable lengths with conductor \varnothing :	2,1	4,1	6,5	8,3	9,3	11,7	17,0	22,0
0,51 mm = 104 m								
0,48 mm = 92 m								
0,46 mm = 84 m								
0,44 mm = 77 m								
NEXT, dB, min	65,3	56,3	50,3	47,2	45,8	42,9	38,4	35,3
PS NEXT, dB, min	62,3	53,3	47,3	44,2	42,8	39,9	35,4	32,3
ELFEXT, dB, min	64	52	44	40	38	34	28	24
PS ELFEXT, dB, min	61	49	41	37	35	31	25	21
RL, dB, min	20,0	23,0	25,0	25,0	25,0	23,3	20,7	19,0

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

ORDER INFORMATION

P/N	Cable name	Conductor \varnothing , mm	Insulated conductor \varnothing , mm	Outer cable \varnothing , mm	Packing	Weight, kg/km
49330-9	KPPE-VP (100) 4x2x0,51 (F/UTP-cat.5E)	0,51	1,03	5,980	box, 305 m	34,219
49579-5	KPPE-VP (100) 4x2x0,48 (U/UTP-cat.5E-SL)	0,48	0,97	5,713	box, 305 m	31,586
49561-6	KPPE-VP (100) 4x2x0,46 (U/UTP-cat.5E-SL)	0,46	0,93	5,557	box, 305 m	29,781
49647-3	KPPE-VP (100) 4x2x0,44 (U/UTP-cat.5E-SL)	0,44	0,89	5,379	box, 305 m	28,006