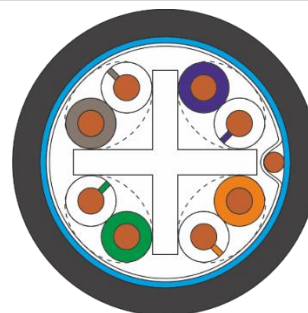


DESIGN

- 1) Conductor: soft copper wire 23AWG ($\varnothing$ 0,565 mm)
- 2) Insulation: HDPE, $\varnothing$ 1,14 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) Cross-web: HDPE
- 5) Core wrapping: PET-film
- 6) Drain wire: tinned copper wire $\varnothing$ 0,4 mm
- 7) Core shield: aluminum polymer foil (metal outside)
- 8) Jacket: PE, thickness 0,6 mm, nominal cable $\varnothing$ 7,4 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), Gigabit Ethernet (1000BASE-T), 2,5 Gbit/s Ethernet (2.5GBASE-T), 5 Gbit/s (5GBASE-T)
- PoE, PoE+, PoE++

INSTALLATION AND OPERATION CONDITIONS

For outdoor installation in telephone ducts, collectors, mines, on the walls of buildings in conditions of heightened electro-magnetic impacts. Operated on frequencies up to 250 MHz

COMPLIANCE WITH THE REQUIREMENTS

Cabling: ISO/IEC 11801-1, EN 50173-1, ANSI/TIA-568.2-D
Cable: IEC 61156-5, EN 50288-5-1, ANSI/TIA-568.2-D
CPR euroclass: Fca

MECHANICAL CHARACTERISTICS

Temperature range:

- During installation -10 °C ... +60 °C
- After installation -50 °C ... +60 °C

Bending radius:

- During installation ≥ 8 cable diameters
- After installation ≥ 4 cable diameters

Tensile stress: ≤ 85 N

ELECTRICAL CHARACTERISTICS AT 20 °C, 100 M

Parameter	Unit	Value
Capacitance	pF/m	≤ 56
Direct current resistance	Ohm/km	≤ 95
Insulation resistance	GOhm/km	≥ 5
Resistance unbalance	%	2
Signal propagation velocity	s	0,68
Propagation delay	ns/100 m	$\leq 534+36/\sqrt{f}$
Delay shift on the frequency 100 MHz	ns/100 m	≤ 30
Characteristic impedance in the frequency range of: 1-250 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	250
Attenuation, dB, max	2,1	3,8	6	7,6	8,5	10,8	15,5	19,9	33
NEXT, dB, min	75,3	66,3	60,3	57,3	55,8	52,8	48,3	45,3	39,3
PS NEXT, dB, min	72,3	63,3	57,3	54,3	52,8	49,8	45,3	42,3	36,3
ELFEXT, dB, min	68	56	48	44	42	38	32	28	20
PS ELFEXT, dB, min	65	53	45	41	39	35	29	25	17
RL, dB, min	20,0	23,0	25,0	25,0	25,0	23,6	21,5	20,1	17,3

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

ORDER INFORMATION

P/N	Cable name	Standard packing	Weight, kg/km
7934017	KPPE-VP (250) 4*2*0,57 (F/UTP-cat.6)	Plywood reel 305/500/1000 m	46,3