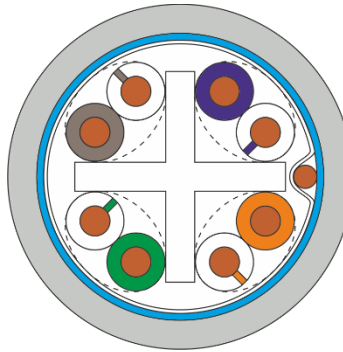

**DESIGN**

- 1) Conductor: soft copper wire 23AWG ( $\varnothing$  0,54 mm)
- 2) Insulation: HDPE,  $\varnothing$  1,08 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) Contact wire  $\varnothing$  0,4 mm
- 7) Core shield: aluminum polymer foil (metal outside)
- 8) Jacket: PVC, thickness 0,5 mm, nominal cable  $\varnothing$  7,0 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 stationary installation inside buildings, stations, structures and equipment. 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

Fire safety:

- Flame propagation: EN 60332-1-2

CPR euroclass: Eca

**MECHANICAL CHARACTERISTICS**

Temperature range:

- During installation -10 °C ... +60 °C
- After installation -20 °C ... +60 °C

Bending radius:

- During installation  $\geq$  8 cable diameters
- After installation  $\geq$  4 cable diameters

Tensile stress:  $\leq$  85 N

**ELECTRICAL CHARACTERISTICS AT 20 °C, 100 M**

Parameter	Unit	Value
Capacitance	pF/m	$\leq$ 56
Direct current resistance	Ohm/km	$\leq$ 95
Insulation resistance	GOhm/km	$\geq$ 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	$\leq$ 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
7932020	KPVE-VP (250) 4*2*0.54 (F/UTP-cat.6)	Cardboard box 305 m	47,2