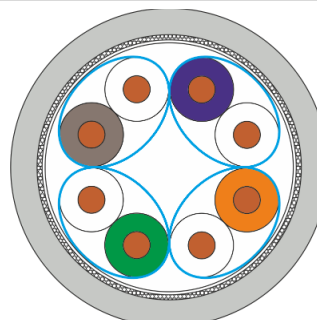

**DESIGN**

- 1) Conductor: soft copper wire AWG23 (Ø 0,565 mm)
- 2) Insulation: skin-foam-skin HDPE, Ø 1,35 mm
- 3) Pair: two conductors twisted together  
Color identification of pairs:  
pair 1: white / blue  
pair 2: white / orange  
pair 3: white / green  
pair 4: white / brown
- 4) Pair shielding: Individual Al/Pet foil (metal outside)
- 5) Core wrapping with PET-film
- 6) Core shield: tinned copper braid, density 31%
- 7) Jacket: LSZH, thickness 0,5 mm, nominal cable Ø 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), 10GBASE-T, HDBaseT
- PoE, PoE+, PoE++

**INSTALLATION AND OPERATION CONDITIONS**

For stationary installation inside buildings, stations, structures and equipment in conditions of heightened electromagnetic impacts.  
Operated on frequencies up to 500 MHz

**COMPLIANCE WITH THE REQUIREMENTS**

**Cabling:** ISO/IEC 11801-1, EN 50173-1

**Cable:** IEC 61156-5, EN 50288-4-1

**Fire safety:**

- Flame propagation – IEC 60332-1-2
- Zero halogen, no corrosive gases – IEC 60754-2
- Smoke density – IEC 61034-2

**CPR class:** Dca s1 d2 a1

**MECHANICAL CHARACTERISTICS**

Temperature range:

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

Bending radius:

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

Tensile strength: ≤ 85 N

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

Parameter	Unit	Value
Capacitance	pF/m	≤ 56
Direct current resistance	Ohm/km	≤ 74
Insulation resistance	GOhm*km	≥ 5
Resistance unbalance	%	2
Signal propagation velocity	s	0,79
Propagation delay	ns/100 m	≤ 534+36/vf
Characteristic impedance in the frequency range of:		
1-100 MHz	Ohm	100±15
100-250 MHz		100±22
250-500 MHz		100±25
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	125	200	250	300	400	500
Attenuation, dB, max	2,1	3,8	5,9	7,5	8,4	10,5	15	19,1	21,5	27,6	31	34	40	45
NEXT, dB, min	75	66	60	57	56	53	48	45	44	41	39	38	36	35
PS NEXT, dB, min	72	63	57	54	53	50	45	42	41	38	36	35	33	32
ELFEXT, dB, min	68	56	48	44	42	38	32	28	26	22	20	18	16	14
PS ELFEXT, dB, min	65	53	45	41	39	35	29	25	23	19	17	15	13	11
RL, dB, min	20	23	25	25	25	23,6	21,5	20,1	19,4	18	17	17	17	17

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

**ORDER INFORMATION**

P/N	Cable name	Standard packing	Weight, kg/km
7935111	KPpVng-HFO-VPE (500) 4*2*0,56 (S/FTP-cat.6A LSFROH)	Plywood reel 305/500/1000 m	51,4