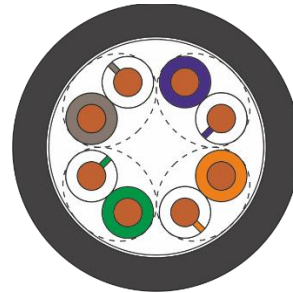

**DESIGN**

- 1) Conductor: soft copper wire AWG24 (Ø 0,48 mm)
- 2) Insulation: HDPE, Ø 0,86 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) Jacket: PE, thickness 0,6 mm, nominal cable Ø 5,1 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) and 5 Gbit/s (5GBASE-T) with a Channel length of 100 meters
- PoE, PoE+, PoE++

**INSTALLATION AND OPERATION CONDITIONS**

For stationary outside installation. Operated on frequencies up to 100 MHz

**COMPLIANCE WITH THE REQUIREMENTS**

Cabling: ISO/IEC 11801-1, EN 50173-1, ANSI/TIA-568.2-D  
Cable: IEC 61156-5, EN 50288-3-1, ANSI/TIA-568.2-D  
CPR euroclass: 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, 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
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
49573	KPP-VP (100) 4x2x0,48 (U/UTP-cat.5E-SL)	Reelex Air cardboard box 305 m	25,1