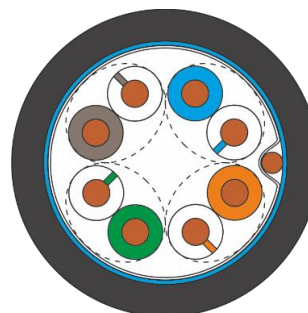


### DESIGN

- 1) Conductor: soft copper wire AWG24 (Ø 0,51 mm)
- 2) Insulation: HDPE, Ø 1,01 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) Drain wire: tinned copper wire Ø 0,4 mm
- 6) Core shield: aluminum polymer foil (metal outside)
- 7) Jacket: PE, thickness 0,6 mm, nominal cable Ø 6,0 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) and 5 Gbit/s (5GBASE-T)
- PoE, PoE+, PoE++

### INSTALLATION AND OPERATION CONDITIONS

For stationary outside installation in conditions of high electromagnetic impacts. 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 50288-2-1, 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 ≥ 10 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/103 m	≤ 9,5
Insulation resistance	GOhm/km	≥ 5
Resistance unbalance	%	2
NVP	%	68
Propagation delay	ns/100 m	≤ 534+36/√f
Delay skew on the frequency 100 MHz	ns/100 m	≤ 30
Characteristic impedance in the frequency range of: 1-100 MHz	Ohm	100±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
49330	KPPE-VP (100) 4x2x0,51 (F/UTP-cat.5E)	Relex Air™ cardboard box 305 m	33,8