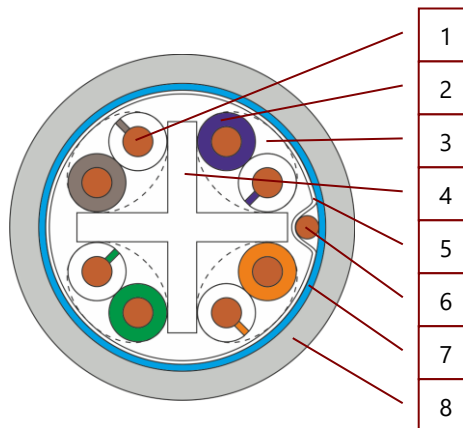


## DESIGN

- 1) Conductor: soft copper wire  $\varnothing$  0,57 mm
- 2) Insulation: HDPE,  $\varnothing$  1,11 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
- 5) Core wrapping
- 6) Copper tinned contact wire  $\varnothing$  0,4 mm
- 7) Core shield: aluminum polymer foil (metal outside)
- 8) Jacket: PVC or LSZH, thickness 0,5 mm, nominal cable  $\varnothing$  6,9 mm



## APPLICATION

PBX, V.11, X.21, ISDN, Ethernet (10Base-T), ATM-25/52/155 Mbit/s, 100VG-AnyLAN, Fast Ethernet (100BASE-TX), Token Ring 16/100 Mbit/s, 1000BASE-T, PoE, PoE+, PoE++

## COMPLIANCE WITH THE REQUIREMENTS

Cabling: ISO/IEC 11801-1, EN 50173-1, ANSI/TIA-568-C.2

Cable: IEC 61156-5, EN 50288-6-1

Fire safety:

- Flame propagation (PVC and LSZH) – IEC 60332-1-2
- Zero halogen, no corrosive gases (LSZH) – IEC 60754-2
- Smoke density (LSZH) – IEC 61034-2

## INSTALLATION AND OPERATION CONDITIONS

For stationary installation inside buildings, stations, structures and equipment in conditions of heightened electromagnetic impacts. Operated on frequencies up to 250 MHz

## 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

| Parameter                                                                       | Unit     | Value                        |
|---------------------------------------------------------------------------------|----------|------------------------------|
| Capacitance                                                                     | pF/m     | $\leq$ 56                    |
| Direct current resistance                                                       | Ohm/km   | $\leq$ 85                    |
| Insulation resistance                                                           | GOhm/km  | $\geq$ 5                     |
| Resistance unbalance                                                            | %        | 2                            |
| Signal propagation velocity                                                     | s        | 0,68                         |
| Propagation delay                                                               | ns/100 m | $\leq$ 534+36/vf             |
| Delay shift on the frequency 100 MHz                                            | ns/100 m | $\leq$ 30                    |
| Characteristic impedance in the frequency range of:<br>1-100 MHz<br>100-250 MHz | Ohm      | 100 $\pm$ 15<br>100 $\pm$ 22 |
| Test voltage between cores, (DC, 2 s)                                           | kV       | 2,5                          |

|                      |      |      |      |      |      |       |      |      |      |
|----------------------|------|------|------|------|------|-------|------|------|------|
| 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                                      | Jacket | Standard packing           | Weight, kg/km |
|---------|-------------------------------------------------|--------|----------------------------|---------------|
| 49342   | KPVE-VP (250) 4*2*0,57 (F/UTP-cat.6)            | PVC    | Plywood reel, 305 or 500 m | 49,5          |
| 7932024 | KPVong-HFE-VP (250) 4*2*0,57 (F/UTP-cat.6 LSOH) | LSZH   | Plywood reel, 305 or 500 m | 49,9          |