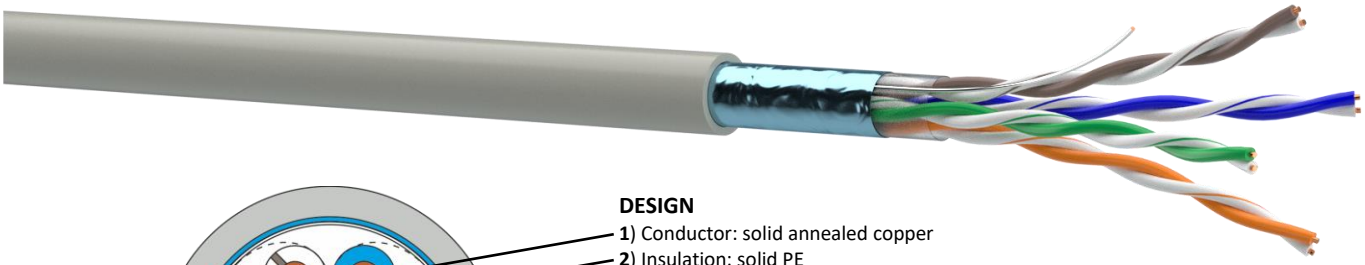
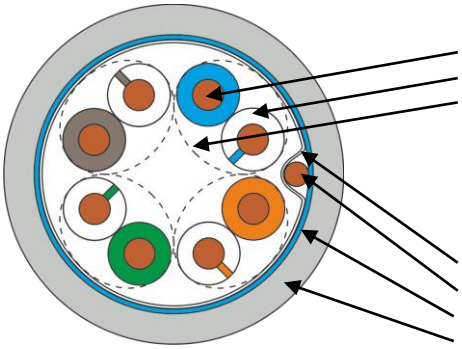
ODESKABEL JOINT STOCK COMPANY

# Category 5e F/UTP 4-pairs PVC Eca





**DESIGN**

**1**) Conductor: solid annealed copper
**2**) Insulation: solid PE
**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
**5)** Copper tinned contact wire Ø 0,4 mm
**6)** Core shield: aluminum polymer foil (metal outside)
**7**) Jacket: PVC, color RAL 7035

**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, Gigabit Ethernet (1000BASE-T), Firewire 100 Mbit/s, ATM LAN 1,2 Gbit/s

**COMPLIANCE WITH THE REQUIREMENTS**

Cable: IEC 61156-5 (cat.5e)
Cabling: ISO/IEC 11801-1 & EN 50173-1 (class D), ANSI/TIA 568-C.2 (cat.5e)
CPR Fire safety: Eca
- Non-flame propagation: EN 60332-1-2

**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 stress ≤ 85 N

**ELECTRICAL CHARACTERISTICS AT 20 °C**

| Parameter | Unit | Value |
|---|---|---|
| Capacitance | pF/m | ≤ 56 |
| Direct current resistance for conductors with Ø:<br>0,51 mm<br>0,48 mm<br>0,46 mm<br>0,44 mm | Ohm/km | <br>≤ 92<br>≤ 103<br>≤ 112<br>≤ 123 |
| Insulation resistance | GOhm*km | ≥ 5 |
| Resistance unbalance | % | 2 |
| Signal propagation velocity | s | 0,69 |
| Characteristic impedance in the frequency range of: 1-100 MHz | Ohm | 100±15 |
| Test voltage between cores, (DC, 2 s) | kV | 2,5 |

| Frequency, MHz | 1 | 4 | 10 | 16 | 20 | 31,25 | 62,5 | 100 |
|---|---|---|---|---|---|---|---|---|
| Attenuation, dB, max; for max. cable lengths with conductor Ø:<br>0,51 mm = 104 m<br>0,48 mm = 92 m<br>0,46 mm = 84 m<br>0,44 mm = 77 m | 2,1 | 4,1 | 6,5 | 8,3 | 9,3 | 11,7 | 17,0 | 22,0 |
| NEXT, dB, min | 65,3 | 56,3 | 50,3 | 47,2 | 45,8 | 42,9 | 38,4 | 35,3 |
| PS NEXT, dB, min | 62,3 | 53,3 | 47,3 | 44,2 | 42,8 | 39,9 | 35,4 | 32,3 |
| ELFEXT, dB, min | 64 | 52 | 44 | 40 | 38 | 34 | 28 | 24 |
| PS ELFEXT, dB, min | 61 | 49 | 41 | 37 | 35 | 31 | 25 | 21 |
| RL, dB, min | 20,0 | 23,0 | 25,0 | 25,0 | 25,0 | 23,3 | 20,7 | 19,0 |

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

**ORDER INFORMATION**

| P/N | Cable name | Conductor Ø, mm | Insulated conductor Ø, mm | Outer cable Ø, mm | Packing | Weight, kg/km |
|---|---|---|---|---|---|---|
| 49352-15 | KPVE-VP (200) 4x2x0,51 (F/UTP-cat.5E) | 0,51 | 1,03 | 5,780 | box, 305 m | 37,135 |
| 49577-11 | KPVE-VP (100) 4x2x0,48 (U/UTP-cat.5E-SL) | 0,48 | 0,97 | 5,513 | box, 305 m | 34,074 |
| 49559-9 | KPVE-VP (100) 4x2x0,46 (U/UTP-cat.5E-SL) | 0,46 | 0,93 | 5,357 | box, 305 m | 32,186 |
| 49641-3 | KPVE-VP (100) 4x2x0,44 (U/UTP-cat.5E-SL) | 0,44 | 0,89 | 5,179 | box, 305 m | 30,316 |