

Cat 5e U/UTP 4Pair AWG 24

Data cables



Datacomm®

Technical information

- Temperature range; flexible 0°C up to +50°C, fixed -20°C up to +60°C
- Minimum bending radius; flexible 8x cable Ø, fixed 4x cable Ø
- Operating voltage; max. 125 V
- Test voltage; 1,0 kV DC for 1 minute
- Conductor resistance @20°C; max. 93,8 Ohm/km
- Conductor resistance unbalance @20°C; max. 2%
- Velocity of propagation @100MHz; max. 534 nsec/100m and NVP 69%
- Skew @100MHz; max. 40 nsec/100 mt
- Mutual capacitance; nom. 50 nF/km
- Characteristic impedance @100MHz; nom. 100±15 Ohm
- Insulation resistance; min. 5 G.Ohm x km

Cable according to ANSI/TIA 568-C.2

Cable construction

- Annealed solid copper conductor; Ø0,51mm (AWG 24)
- Core insulation solid HDPE; acc. to EN 50290 2-23
- Core and pair identification acc. to IEC 189 and IEC 708
- Cores twisted in pairs and pairs stranded together in layers with optimal lay-length
- Outer sheath, flame resistant PVC or LSZH compound;
 - PVC sheath: Grey RAL 7035, type YM1 acc. to DIN VDE 0207 part 5, type TM51 acc. to EN 50290 2-22
 - LSZH sheath: Yellow RAL 1021, Orange RAL 2003, Blue RAL 5015, type HM2 acc. to DIN VDE 0207 part 24, type 70°C acc. to EN 50290 2-27

Features

- Vertical flame propagation for PVC and LSZH acc. to DIN VDE 0482-332-1-2, EN 60332 1-2, IEC 60332 1-2
- Corrosive gas measurement only for LSZH acc. to DIN VDE 0482-267-2-2, EN 50267-2-2, IEC 60754
- Smoke density only for LSZH acc. to DIN VDE 0482-1034-2, EN 61034-2, IEC 61034-2

| | |
|------|----------------------------------|
| TSE | TSE K 116 |
| ANSI | TIA 568-C.2 |
| C€ | Low Voltage Directive 2006/95/EC |
| | RoHS compliant |

Application

Datacomm® Cat 5e U/UTP 100 Ω 4x2xAWG 24 premium grade Class D cable for building structured premises cabling, to support Ethernet protocol for installation in horizontal and backbone areas. They are characterized by large performance reserves and outstanding performance. Transmission of digital and analogue signals, voice, video and data applications. Especially suitable for services such as Ethernet 10 Base-T, Fast Ethernet 100 Base-T, ATM155, FDDI, token ring 4/16 Mbit/s, or ISDN.

Category

| Frekans [MHz] | 5e | | | | | | | | | | | | | |
|---------------------|-----------|----------|-----------|----------|-----------|----------|------------|-----------|------------|-----------|------------|-----------|-----------|-----------|
| | 1 | | 4 | | 16 | | 31,25 | | 62,50 | | 100 | | 155 | |
| Ins. Loss [dB/100m] | Spec. 2,0 | Typ. 1,9 | Spec. 4,1 | Typ. 3,8 | Spec. 8,2 | Typ. 7,8 | Spec. 11,7 | Typ. 11,0 | Spec. 17,0 | Typ. 15,8 | Spec. 22,0 | Typ. 20,3 | Spec. N/A | Typ. 25,6 |
| NEXT [dB] | 65 | 81 | 56 | 72 | 47 | 71 | 43 | 54 | 38 | 53 | 35 | 50 | N/A | 46 |
| PS NEXT [dB] | 62 | 79 | 53 | 69 | 44 | 63 | 40 | 53 | 35 | 50 | 32 | 45 | N/A | 44 |
| ACRF [dB/100m] | 64 | 82 | 52 | 70 | 40 | 57 | 34 | 52 | 28 | 47 | 24 | 43 | N/A | 36 |
| PS ACRF [dB/100m] | 61 | 79 | 49 | 68 | 37 | 55 | 31 | 50 | 25 | 44 | 21 | 40 | N/A | 34 |
| Pro. Del. [dB] | 570 | 476 | 552 | 480 | 543 | 479 | 540 | 477 | 539 | 477 | 538 | 476 | N/A | 475 |
| Ret. Loss [dB] | 20,0 | 23 | 23,0 | 33,6 | 25,0 | 31,4 | 23,6 | 32 | 21,5 | 29,1 | 20,1 | 27,5 | N/A | 25,5 |

| Part No. | Dim. | Sheath | Colour | Outer | Cu | Cable | Fire load | | Packing |
|----------|-----------|-----------|--------|--------|---------|---------|-----------|---------|------------|
| | | | | Ø app. | weight | weight | [MJ/m] | [kWh/m] | |
| | | | | [mm] | [kg/km] | [kg/km] | | | [m] |
| 505411 | 4x2xAWG24 | FR-PVC | | 5,0 | 15 | 31 | 0,43 | 0,12 | 305 |
| 505421 | 4x2xAWG24 | LSZH/LSOH | | 5,0 | 15 | 32 | 0,38 | 0,11 | 305 / 1000 |
| 505421-1 | 4x2xAWG24 | LSZH/LSOH | | 5,0 | 15 | 32 | 0,38 | 0,11 | 305 / 1000 |
| 505421-2 | 4x2xAWG24 | LSZH/LSOH | | 5,0 | 15 | 32 | 0,38 | 0,11 | 305 / 1000 |

