



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards

EIA/TIA 568-C.2;
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173-1; EN 50288-3-1

Construction

| | |
|--------------|--|
| Conductor | bare copper wire, \varnothing 0.5 mm (AWG24) |
| Insulation | Polyethylene, \varnothing 0.9 mm |
| Twisting | 2 cores to the pair |
| Cable lay up | 4 pairs to the core |
| Inner sheath | PVC |
| Outer sheath | PE, black |

Mechanical properties

Minimum bending radius

Temperature range

| | |
|---------------------|-------------------|
| Installation | 8 x D |
| Installed | 4 x D |
| during operation | -20°C upto + 75°C |
| during installation | 0°C upto + 50°C |

KELine[®]
Cable**U/UTP 4x2x0.5(AWG24) CAT.5E OUT**
100Ω Data Cable ISO/IEC 11801 CAT.5e**U/UTP****Electrical properties****at 20°C**

| | |
|--|------------------------|
| DC loop resistance | ≤ 190Ω/km |
| Resistance unbalance | ≤ 2% |
| Insulation resistance (500 V) | ≥ 2000 MΩxkm |
| Capacitance at 800 Hz | nom. 48 nF/km |
| Capacitance unbalance (pair to ground) | ≤ 1500 pF/km |
| Characteristic impedance (1-100 MHz) | (100 ± 15) Ω |
| Nominal velocity of propagation | approx. 67% |
| Propagation delay | Nominal ≤ 535 ns/100 m |
| Delay skew | Nominal ≤ 20 ns/100 m |
| Test voltage (DC, 1 min) Core/Core | 1000 V |

Nominal transmission characteristics**at 20°C**

| F (MHZ) | Attenuation (dB/100m) | NEXT (dB) | PS-NEXT (dB) | ACR (dB/100m) | PS-ACR (dB/100m) | ELFEXT (dB/100m) | PS-ELFEXT (dB/100m) | Return loss (dB) |
|------------|--------------------------|--------------|-----------------|------------------|---------------------|---------------------|------------------------|---------------------|
| 1.0 | 1.9 | 71 | 68 | 69.1 | 66.1 | 68 | 65 | 20 |
| 4.0 | 3.7 | 62 | 59 | 58.3 | 55.3 | 56 | 53 | 23 |
| 10.0 | 6.0 | 56 | 53 | 50.0 | 47.0 | 48 | 45 | 25 |
| 16.0 | 7.6 | 53 | 50 | 45.4 | 42.4 | 44 | 41 | 25 |
| 20.0 | 8.5 | 51 | 48 | 42.5 | 39.5 | 42 | 39 | 25 |
| 31.2 | 10.7 | 49 | 46 | 38.3 | 35.3 | 38 | 35 | 24 |
| 62.5 | 15.7 | 44 | 41 | 28.3 | 25.3 | 32 | 29 | 22 |
| 100.0 | 19.8 | 41 | 38 | 21.2 | 18.2 | 28 | 25 | 20 |
| 125.0 | 22.3 | 40 | 37 | 17.7 | 14.7 | 26 | 23 | 19 |
| 155.5 | 24.2 | 38 | 35 | 13.8 | 10.8 | 24 | 21 | |
| 175.0 | 25.7 | 37 | 34 | 11.3 | 8.3 | 23 | 20 | |
| 200.0 | 27.5 | 36 | 33 | 8.5 | 5.5 | 22 | 19 | |
| 250.0 | 29.2 | 35 | 32 | 5.8 | 2.8 | 20 | 17 | |
| 300.0 | 32.0 | 34 | 31 | 2.0 | -1.0 | 16 | 13 | |

Technical data

| Product code | Designation | Brand name | Colour | Outer diameter mm | Fire load | | Weight netto kg/km | Copper content | Tensile force |
|--------------|--------------------|------------|--------|----------------------|-----------|-------|-----------------------|----------------|---------------|
| | | | | | MJ/km | kWh/m | | | |
| KE300U24OUT | U/UTP 4x2xAWG24 | KELine | black | 7.5 | 447 | 0.124 | 47 | 17.5 | 103N |