

UC400 Cat.6 U/UTP HD

U/UTP Installation Cable



2.1. Cable

Construction

| | |
|---------------------|--|
| Conductor | bare copper wire Ø 0.57 mm (AWG23) |
| Insulation | Polyethylene, Ø 1.0 mm |
| Twisting | 2 cores to the pair |
| Cable lay up | 4 pairs to the core; non metallic cross separator (spline) |
| Sheath | PVC or LSHF (FRNC, LSOH), blue RAL 5012 |

Mechanical properties

| | |
|--|--------------------|
| Minimum bending radius Installation | 8 x D |
| Minimum bending radius Installed | 4 x D |
| Temperature range during operation | -20°C up to + 60°C |
| Temperature range during installation | 0°C up to + 50°C |

Electrical properties at 20°C

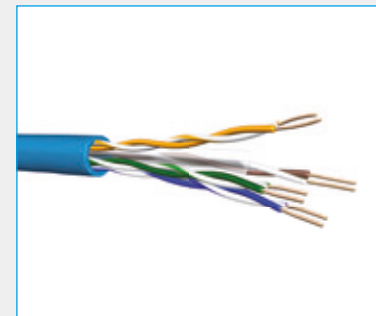
| | |
|---|---------------|
| DC loop resistance | ≤ 176 Ω /km |
| Resistance unbalance | ≤ 2% |
| Insulation resistance (500 V) | ≥ 5000 MΩ *km |
| Capacitance at 800 Hz | nom. 48 nF/km |
| Capacitance unbalance (pair to ground) | ≤ 1500 pF/km |
| Characteristic impedance (1-100 MHz) | (100±15) Ω |
| Characteristic impedance (100 - 250 MHz) | (100±22) Ω |
| Nominal velocity of propagation | approx. 67% |
| Propagation delay | ≤ 535 ns/100m |
| Delay skew | ≤ 20 ns/100m |
| Test voltage (DC, 1 min) Core/Core | 1000 V |
| Coupling attenuation | ≥ 40 dB |

Nominal transmission characteristics at 20°C

| f | Attenuation | NEXT | PS-NEXT | ACR | PS-ACR | ELFEXT | PS-ELFEXT | Return loss |
|-----|-------------|------|---------|---------|---------|---------|-----------|-------------|
| MHz | dB/100m | dB | dB | dB/100m | dB/100m | dB/100m | dB/100m | dB |
| 1 | 1.9 | 78 | 75 | 76.1 | 73.1 | 82 | 80 | 20 |
| 10 | 6.0 | 63 | 60 | 57.0 | 54.0 | 62 | 60 | 25 |
| 100 | 19.1 | 48 | 45 | 28.9 | 25.9 | 42 | 40 | 20.1 |
| 200 | 27.0 | 44 | 41 | 16.5 | 13.5 | 36 | 34 | 18.0 |
| 300 | 36.1 | 41 | 38 | 4.8 | 1.8 | 32 | 30 | |
| 400 | 41.7 | 39 | 36 | -2.7 | -5.7 | 30 | 28 | |

Technical data

| Product code | Product name | Outer diameter | Fire load | | Weight | Copper content | Max. tensile force during installation |
|-----------------|------------------------------|----------------|-----------|-------|--------|----------------|--|
| | | | MJ/km | kWh/m | | | |
| | | Mm | | | kg/km | kg/km | N |
| 60010360 | UC400 U/UTP HD Cat.6 4P | 5.3 | 316 | 87 | 36 | 8.1 | 100 |
| 60011705 | UC400 U/UTP HD Cat.6 4P LSHF | 5.3 | 300 | 80 | 36 | 8.1 | 100 |



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-B.2-1 6/2002.
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173-1, EN 50288-6-1

Flame resistance

PVC IEC 60332-1
LSHF IEC 60332-1; IEC 60754-2;
IEC 61034