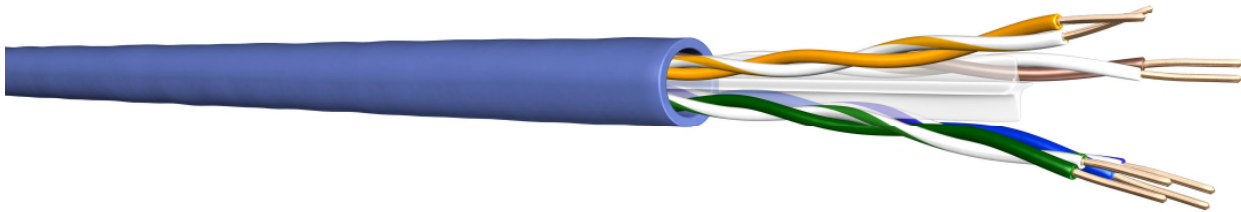


UC400 Cat.6 U/UTP HD

U/UTP Installation cable



Application

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

Standards

EIA/TIA-568-C.2
ISO/IEC 11801 2nd ed; IEC 61156-5;
EN 50173-1, EN 50288-6-1
IEEE 802.3at

Flame resistance

PVC: IEC 60332-1; Class Eca
LSHF(FRNC): IEC 60332-1; 60754-2; IEC 61034; Class Eca

Construction

| | |
|--------------|--|
| Conductor | Bare copper wire: Nom. 0,54 |
| Insulation | Polyethylene, Ø 0.95 mm nom |
| 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 |
| | Installed | 4 x D |
| Temperature range | during operation | -20°C up to + 60°C |
| | during installation | 0°C up to + 50°C |

UC400 Cat.6 U/UTP HD

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 |
| Mean impedance 100 MHz | 100 ± 5 Ω |
| Nominal velocity of propagation | Approx. 67 % |
| Propagation delay | Nominal 535 ns/100m |
| Delay skew | Nominal 20 ns/100m |
| Test voltage (DC, 1 min) | 1000 V |
| Core/Core | |

Electrical data (nominal)

acc. to Cat.6 (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) | |
| | max. | Nom. | min | nom. | min. | Nom. | Min. | Nom. | Min. | Nom. | min. | Nom. | min. | Nom. | min. | Nom. |
| 1 | 2.1 | 1.9 | 74 | 78 | 72 | 75 | 72.0 | 76.1 | 70.0 | 73.1 | 68 | 82 | 65 | 80 | 20 | 22 |
| 4 | 3.8 | 3.8 | 65 | 69 | 63 | 66 | 61.2 | 65.2 | 59.2 | 62.2 | 56 | 70 | 53 | 68 | 23 | 25 |
| 10 | 6.0 | 6.0 | 59 | 63 | 57 | 60 | 53.0 | 57.0 | 51.0 | 54.0 | 48 | 62 | 45 | 60 | 25 | 27 |
| 16 | 7.6 | 7.6 | 56 | 60 | 54 | 57 | 48.4 | 52.3 | 46.4 | 49.3 | 44 | 58 | 41 | 56 | 25 | 27 |
| 20 | 8.5 | 8.5 | 55 | 59 | 53 | 56 | 46.5 | 50.0 | 44.5 | 47.0 | 42 | 56 | 39 | 54 | 25 | 27 |
| 31.2 | 10.7 | 10.7 | 52 | 56 | 50 | 53 | 41.3 | 45.0 | 39.3 | 42.0 | 38 | 52 | 35 | 50 | 23.6 | 26 |
| 62.5 | 15.5 | 15.1 | 47 | 51 | 45 | 48 | 31.5 | 36.0 | 29.5 | 33.0 | 32 | 46 | 29 | 44 | 21.5 | 24 |
| 100 | 19.9 | 19.1 | 44 | 48 | 42 | 45 | 24.1 | 28.9 | 22.1 | 25.9 | 28 | 42 | 25 | 40 | 20.1 | 23 |
| 125 | 22.5 | 21.3 | 43 | 47 | 41 | 44 | 20.5 | 25.2 | 18.5 | 22.2 | 26 | 40 | 23 | 38 | 19.5 | 22 |
| 155.5 | 25.4 | 23.8 | 42 | 45 | 40 | 42 | 16.6 | 21.3 | 14.6 | 18.3 | 24 | 38 | 21 | 36 | 18.8 | 21 |
| 175 | 27.1 | 25.3 | 41 | 44 | 39 | 41 | 13.9 | 19.1 | 11.9 | 16.1 | 23 | 37 | 20 | 35 | 18.4 | 21 |
| 200 | 29.2 | 27.0 | 40 | 44 | 38 | 41 | 10.8 | 16.5 | 8.8 | 13.5 | 22 | 36 | 19 | 34 | 18.0 | 20 |
| 250 | 33.0 | 32.0 | 38 | 42 | 36 | 39 | 5.0 | 10.0 | 2.0 | 7.0 | 20 | 34 | 17 | 32 | 17.3 | 19 |
| 300 | | 36.1 | | 41 | | 38 | | 4.8 | | 1.8 | | 32 | | 30 | | 19 |
| 400 | | 41.7 | | 39 | | 36 | | -2.7 | | -5.7 | | 30 | | 28 | | 18 |

UC400 Cat.6 U/UTP HD

Technical data

| Product Reference Code | Produktname | Outer diameter mm | Euro Class | Fire load | | Weight kg/km | Copper index | Tensile force N |
|------------------------|---|----------------------|------------|-----------|-------|-----------------|--------------|--------------------|
| | | | | MJ/km | kWh/m | | | |
| 60010360 | UC400 Cat.6 U/UTP HD 4P LSHF (Bu) 305BR | 5.3 | Eca | 316 | 0.087 | 36 | 18,1 | 100 |
| 60011705 | UC400 Cat.6 U/UTP HD 4P PVC (Gy) 305BR | 5.3 | Eca | 316 | 0.087 | 36 | 18,1 | 100 |
| 60025990 | UC400 Cat.6 U/UTP HD 4P LSHF (Bu) 500m | 5.3 | Eca | 316 | 0.087 | 36 | 18,1 | 100 |
| 60026614 | UC400 Cat.6 U/UTP HD 4P PVC (Bu) 500m | 5.3 | Eca | 316 | 0.087 | 36 | 18,1 | 100 |