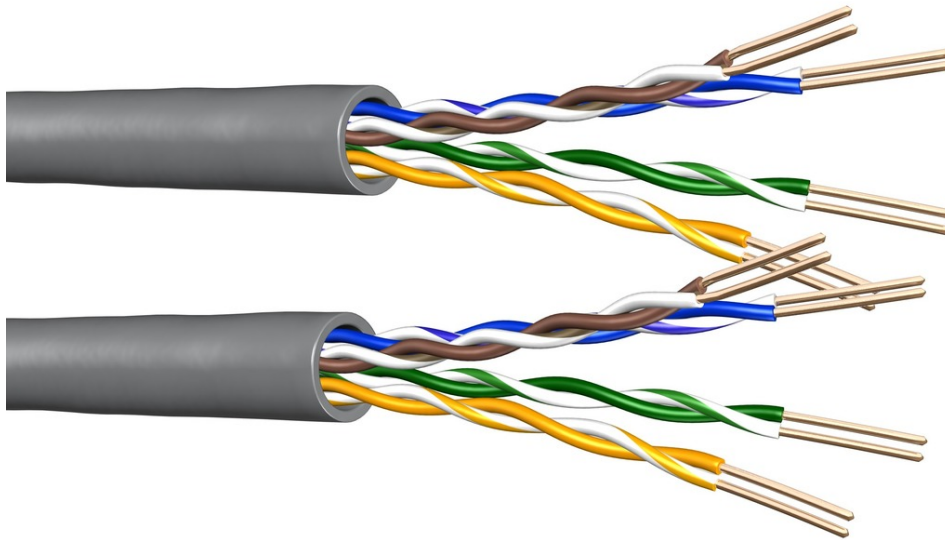


Draka - UC300 24 Cat.5e U/UTP 2x4P (LSHF)



## UC Data Cable - Draka Office Network Solution

Symmetrical 100  $\Omega$  data transmission cables from Universal Cable line UC.. acc. to ISO/IEC 11801, EN 50173 and EIA/TIA 568A are used for high speed data transmission, mainly in secondary and horizontal cabling in standardised, manufacturer-independent local networks (LAN), ranging from Token Ring, Ethernet, ISDN, TPDDI, Fast-Ethernet 100Base-TX to ATM and Gigabit-Ethernet 1000Base-T and CATV. All shielded cables of line UC400 and up are ready for 10 Gigabit Ethernet (IEEE802.3: 10GBase-T).

### 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 568A;  
ISO/IEC 11801 2<sup>nd</sup> ed.; IEC 61156-5  
EN 50173; EN 50288-3-1  
IEEE 802.3at



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## Draka - UC300 24 Cat.5e U/UTP 2x4P (LSHF)

### Flame resistance

LSHF IEC 60332-1; IEC 60754-2; IEC 61034; Class Eca

## Technical Data

### Construction

|              |   |
|--------------|---|
| Conductor    | bare copper wire Ø 0.5 mm (AWG24/1)   |
| Insulation   | Polyethylene, Ø 0.9 mm  |
| Twisting     | 2 cores to the pair   |
| Cable lay up | 4 pairs to the core   |
| Sheath       | LSHF (FRNC, LSOH), grey RAL 7035<br>Duplex sheath: two cables parallel, separable |

### Mechanical properties

|                        |                     |                   |
|------------------------|---------------------|-------------------|
| Minimum bending radius | Without load        | ≥ 20 mm           |
|                        | With load           | ≥ 40 mm           |
| Temperature range      | During operation    | -20°C up to +60°C |
|                        | During installation | 0°C up to +50°C   |

### Electrical properties at 20°C

|                                       |                  |                       |
|---------------------------------------|------------------|-----------------------|
| DC loop resistance                    |                  | ≤ 192 Ω/km            |
| Resistance unbalance                  |                  | ≤ 2%                  |
| Insulation resistance                 | 500 V            | ≥ 2000 MΩ*km          |
| Capacitance                           | 800 Hz           | Nom. 48 nF/km         |
| Capacitance unbalance                 | (pair to ground) | ≤ 1500 pF/km          |
| Mean characteristic 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)<br>Core/Core |                  | 1000 V                |
| Coupling attenuation                  |                  | ≥ 40 dB               |

### Electrical Data (nominal) acc. to Cat.7 (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          |
| 1.0  | 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           | 56   | 53      | 50      | 47.0    | 48      | 45        | 25          |
| 16.0 | 7.6         | 53   | 50      | 45.4    | 42.5    | 44      | 41        | 25          |
| 20.0 | 8.5         | 51   | 48      | 42.5    | 39.5    | 42      | 39        | 25          |

## Draka - UC300 24 Cat.5e U/UTP 2x4P (LSHF)

|       |      |    |    |      |      |    |    |    |
|-------|------|----|----|------|------|----|----|----|
| 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 | 29.5 | 35 | 32 | 5.8  | 2.8  | 20 | 17 |    |
| 300.0 | 32.0 | 34 | 31 | 2.0  | -1.0 | 16 | 13 |    |

|                |             |
|----------------|-------------|
| Outer diameter | 5.0/10.0 mm |
| Fire load      | 672 MJ/km   |
|                | 0.186 kWh/m |
| Weight         | 72 kg/km    |
| Copper content | 35          |
| Tensile force  | 160 N       |

## Product variants & accessories

| Art.-No.      | Description                               |
|---------------|---|
| UC300-24-2x4P | Draka - UC300 24 Cat.5e U/UTP 2x4P (LSHF) |