# DK6000 data cable U/UTP Cat 6 Dca LSFH 23AWG

Category-6 and Dca Euroclass data cable, U/UTP type (Unfoiled), with copper conductor and LSFH sheath (Low Smoke Free of Halogen). It is recommended for installations where network certification is required.
It achieves a bandwidth up to 400 MHz (higher than the 250 MHz specified by the standard).

| Ref. | 212305 |
|---|---|
| Logical ref. | CAT6L500W |
| EAN13 | 8424450209714 |

## Other features

| Colour | White |
|---|---|
| Length | 500.00 m |

## Packaging info

| Reel | 500 m |
|---|---|
| Pallet | 9000 m |
| Pallet | 13500 m |

## Physical data

| Net weight | 37.00 g |
|---|---|
| Gross weight | 40.00 g |
| Width | 6.00 mm |
| Height | 1,000.00 mm |
| Depth | 6.00 mm |
| Main product weight | 37.00 g |

## Highlights

- U/UTP Unfoiled UTP Cable

- Solid copper inner conductor (23AWG)
- Compatible with PoE/PoE+ (Power over Ethernet) technology, allowing the cable to power network devices
- PE (Polyethylene) copper conductor insulation, 1.02mm diameter
- LSFH (Low Smoke Free of Halogen) outer sheath, 0.50mm thick and 6.2mm diameter
- 72% nominal speed

## Discover

**Category 6**

Data cable category Cat 6 complies with the standard for Gigabit Ethernet and it is backwards compatible, with the standards of the inferior categories (Cat 5/5e and Cat 3). Category 6 evolves over category 5E, allowing to achieve transmission frequencies of up to 250 MHz (in each pair) and 1 Gbps of throughput. It includes characteristics and specifications to avoid crosstalk and noise. This type of data cable can be used in 10BASE-T, 100BASE-T and 1000BASE-T (Gigabit Ethernet) compliant systems.

Our category 6 cables are characterized:

- Comply with TIA/EIA-568B.2-1
- Crucifix type padding
- Transfer rate up to 1Gbps
- Frequency range of up to 250 MHz and up to 400MHz in some references
- Includes rip cord to make it easier to strip the cable
- Nominal impedance of 100 ohms
- Maximum resistance per conductor below 9.38 ohms/100m

**Compatibility of RJ45 connectors with Televes data cables:**

| Reference | | 219602 | 219701 | 219901 | 219910 | 212201 | 2123 | 212302 | 212305 | 212310 | 212101 | 219302 | 219312 | 219322 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Female connectors | 209901/209907 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209905 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209921/209925 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | OK | X |
| | 209926 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | OK | X |
| | 209903 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | OK | X | X | X |
| | 209923 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | OK | OK | OK* | OK |
| | 209929/209501 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | OK | OK | OK* | OK |
| Male connectors | 209902 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209961/209962 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209904 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | OK | X | X | X |
| | 209906 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209965/209966 | OK | OK | OK | OK | OK | OK | OK | OK | OK | X | X | X | X |
| | 209922 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | X | X | OK | X |
| | 209924 | OK* | OK* | OK | OK* | OK* | OK* | OK* | OK* | OK* | OK* | OK | OK* | OK |

OK Compatible

OK* Compatible, but there are better choices

X Incompatible

** Mechanical compatibility

## Mounting details

**DETAIL VIEW OF THE DATA CABLE SECTION**

A. 〔Inner conductor〕

B. 〔Inner conductor isolation〕

C. 〔Crucifix Filler〕

D. 〔Outer sheath〕

E. 〔Rip cord〕

# Televes®

## Technical specifications : Ref. 212305

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | | U/UTP | | | | | | | | | | | | | |
| **Euroclass** | | Dca | | | | | | | | | | | | | |
| **Euroclass: Smoke Production** | | s2 | | | | | | | | | | | | | |
| **Euroclass: Flaming droplets** | | d2 | | | | | | | | | | | | | |
| **Euroclass: Acidity** | | a1 | | | | | | | | | | | | | |
| **Categorie** | | Cat 6 | | | | | | | | | | | | | |
| **Transmission bandwidth** | | 400MHz | | | | | | | | | | | | | |
| **Transfer rate** | | 1Gbps | | | | | | | | | | | | | |
| **Conductor Diameter** | mm | 0.55 | | | | | | | | | | | | | |
| **Conductor Material** | | Solid copper | | | | | | | | | | | | | |
| **Conductor type AWG** | | 23 | | | | | | | | | | | | | |
| **Conductor isolation Diameter** | mm | 1.02 | | | | | | | | | | | | | |
| **Conductor isolation Material** | | Polyethylene | | | | | | | | | | | | | |
| **Crucifix filler** | | Yes | | | | | | | | | | | | | |
| **Outer sheath Diameter** | mm | 6.2 | | | | | | | | | | | | | |
| **Outer sheath Material** | | LSFH | | | | | | | | | | | | | |
| **Outer sheath Thickness** | mm | 0.5 | | | | | | | | | | | | | |
| **Rip cord** | | Yes | | | | | | | | | | | | | |
| **Spark Test** | Vac | 3000 | | | | | | | | | | | | | |
| **Nominal impedance** | Ω | 100 | | | | | | | | | | | | | |
| **Conductor resistance** | Ω/100m | < 9.38 | | | | | | | | | | | | | |
| **Nominal speed** | % | 72 | | | | | | | | | | | | | |
| **Operating temperature** | °C | -25 ... 70 | | | | | | | | | | | | | |
| **Frequencies** | | 1 MHz | 4 MHz | 8 MHz | 10 MHz | 16 MHz | 20 MHz | 25 MHz | 31.25 MHz | 62.5 MHz | 100 MHz | 200 MHz | 250 MHz | 300 MHz | 400 MHz |
| **Attenuation (max.)** | dB/100m | 2 | 3.8 | 5.3 | 6 | 7.6 | 8.5 | 9.5 | 10.7 | 15.4 | 19.8 | 29 | 32.8 | -- | -- |
| **Attenuation (typ.)** | dB/100m | 1.7 | 3.5 | 5 | 5.6 | 7.1 | 8 | 8.9 | 10 | 14.4 | 18.3 | 26.2 | 29.4 | 32.8 | 37.7 |
| **NEXT (min.)** | dB/100m | 74.3 | 65.3 | 60.8 | 59.3 | 56.2 | 54.8 | 53.3 | 51.9 | 47.4 | 44.3 | 39.8 | 38.3 | -- | -- |
| **NEXT (typ.)** | dB/100m | 87.3 | 78.1 | 74.1 | 70.1 | 67.3 | 65.9 | 64.1 | 62.2 | 57.3 | 57 | 50.5 | 49.5 | 44 | 36.5 |
| **PS NEXT (min.)** | dB/100m | 72.3 | 63.3 | 58.8 | 57.3 | 54.2 | 52.8 | 51.3 | 49.9 | 45.4 | 42.3 | 37.8 | 36.3 | -- | -- |
| **PS NEXT (typ.)** | dB/100m | 84.9 | 76.2 | 71.2 | 67.7 | 64.8 | 64.1 | 62.9 | 60.5 | 56.1 | 52.1 | 46.5 | 45.3 | 41.2 | 35.6 |
| **ACR-N (min.)** | dB/100m | 72.3 | 61.5 | 55.5 | 53.3 | 48.6 | 46.3 | 43.8 | 41.2 | 32 | 24.5 | 10.8 | 5.5 | -- | -- |
| **ACR-N (typ.)** | dB/100m | 85.5 | 74.4 | 69.1 | 64 | 59.9 | 57.9 | 55.3 | 52.2 | 43 | 36.1 | 22.7 | 19.2 | 11.2 | -1.2 |
| **PS ACR-N (min.)** | dB/100m | 70.3 | 59.5 | 53.5 | 51.3 | 46.6 | 44.3 | 41.8 | 39.2 | 30 | 22.5 | 8.8 | 3.5 | -- | -- |
| **PS ACR-N (typ.)** | dB/100m | 83.2 | 71.8 | 66.2 | 62 | 57.6 | 56.2 | 54.1 | 50.5 | 41.5 | 34.4 | 20.3 | 16 | 9 | -1.7 |
| **ACR-F (min.)** | dB/100m | 67.8 | 55.8 | 49.7 | 47.8 | 43.7 | 41.8 | 39.8 | 37.9 | 31.9 | 27.8 | 21.8 | 19.8 | -- | -- |
| **ACR-F (typ.)** | dB/100m | 78.1 | 66 | 60.9 | 58.7 | 54.3 | 52.5 | 50.4 | 49 | 41.6 | 38.6 | 30.5 | 28.6 | 23.9 | 22.3 |
| **PS ACR-F (min.)** | dB/100m | 64.8 | 52.8 | 46.7 | 44.8 | 40.7 | 38.8 | 36.8 | 34.9 | 28.9 | 24.8 | 18.8 | 16.8 | -- | -- |
| **PS ACR-F (typ.)** | dB/100m | 74.7 | 63.2 | 58.1 | 56.2 | 52.9 | 50.4 | 48.4 | 46.5 | 40.3 | 35.8 | 28.6 | 26.8 | 20.5 | 16.5 |
| **Return losses (min.)** | dB | 20 | 23 | 24.5 | 25 | 25 | 25 | 24.3 | 23.6 | 21.5 | 20.1 | 18 | 17.3 | -- | -- |
| **Return losses** | dB | 25.6 | 26.6 | 29.3 | 29.8 | 31.9 | 32.3 | 32.1 | 32.5 | 31.6 | 27.7 | 24.8 | 23.1 | 21.8 | 19.3 |