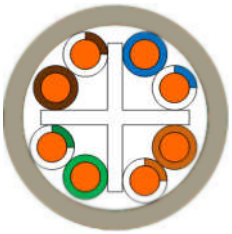
# CAT6A U/UTP 23 AWG LSLTx

**72V**

Ref. Std. ISO/IEC 11801 2nd ed., IEC 61156-5 EN 50173-1,
EN 50288-5-1 ANSI /TIA 568.2-D/P 54429



## *Application*

*They are used in cabling in offices, management, R&D buildings with high terminal density, signal communication in information communication systems.*

10 Base-T (IEEE 802.3)
100 Base-T (IEEE 802.3u)
1000Base-T (IEEE 802.3u)
10G Base-T Gigabit Ethernet
IEEE 802.3af (Type 1 PoE)
IEEE 802.3at (Type 2 PoE)
IEEE 802.3bt (Type 3 PoE)
IEEE 802.3bt (Type 4 PoE)
ATM 155
Token ring (IEEE 805.5)
TP-PMD (ANSI X3T9.5)
Power over HDBaseT (PoH)

## *Construction*

| | |
|---|---|
| *Conductor* | *Electrolytic solid copper conductor (Awg 23)* |
| *Insulation* | *Solid polyethylene (0,98 ±0,05 mm)* |
| *Stranding* | *Cores are twisted in pairs, and all the pairs are twisted together* |
| *Outer sheath* | *LSLTx compound* |
| *Outer sheath color* | *RAL 7032 Grey (other colors on request)* |
| *Outer sheath diameter* | *6,00±0,30 mm* |

| ***Conductor resistance*** | ***Resistance imbalance*** | ***Capacitance*** | **Capacity imbalance** | **Velocity of propagation** | **Signal delay** | **Characteristic impedance** | ***Test voltage*** |
|---|---|---|---|---|---|---|---|
| max.85 Ω/km | max %1 | nom. 50 pF/m | max. 1500 pF/km | 67% | max.45 ns/100m | 100 ± 5 Ω @100MHz | 1000V |

| **TCL** | ***Segregation class*** | ***Bending radius*** | **Temperature range** | **Insulation resistance** | **Operating voltage** |
|---|---|---|---|---|---|
| min. level 2 | b | fixed min. 4 x D<br>flexing min. 8 x D | fixed -30°C ...+60°C<br>flexing 0°C ...+50°C | min 5000 MΩ x m | 72V |
| 50 dB ≥ | | | | | |
| 55 dB | | | | | |

| *Flame propagation* | *Smoke density* | *Corrosive gases* | *Halogen free* |
|---|---|---|---|
| IEC 60332-1-2;<br>IEC 60332-3-24;<br>VDE 0482-332-1-2;<br>EN 60332-1-1 | IEC 61034-2<br>VDE 0482-1034-2<br>EN 61034-2 | IEC 60754-2<br>VDE 0482-267-2-3<br>EN 60754-2 | IEC 60754-1<br>VDE 0482-267-2-1<br>EN 60754-1 |

| ***Frequency*** | ***Attenuation*** | ***Near end crosstalk (Next)*** | ***Ps-Next*** | ***Return Loss*** | ***ACR-N*** | ***ACR-F (ELFEXT)*** | ***PS-ACR-F (PS-ELFEXT)*** | ***PSANEXT (Ailen CrossTalk )*** | ***PSAAACRF (Ailen CrossTalk )*** |
|---|---|---|---|---|---|---|---|---|---|
| ***MHz*** | ***dB/100*** | ***dB*** | ***dB*** | ***dB/100*** | ***dB/100*** | ***dB/100*** | ***dB/100*** | ***dB/100*** | ***dB/100*** |
| 4 | 3,6 | 90 | 80 | 23 | 70 | 90 | 90 | 95 | 95 |
| 10 | 5,6 | 95 | 90 | 26 | 60 | 85 | 90 | 95 | 95 |
| 16 | 7,1 | 95 | 90 | 28 | 55 | 95 | 90 | 95 | 95 |
| 31,25 | 10,5 | 90 | 85 | 25 | 46 | 85 | 85 | 95 | 85 |
| 62,5 | 14,6 | 90 | 90 | 25 | 37 | 80 | 80 | 95 | 80 |
| 100 | 18,3 | 90 | 90 | 23 | 29 | 75 | 70 | 95 | 75 |
| 250 | 29,5 | 90 | 75 | 20 | 10 | 70 | 65 | 95 | 75 |
| 400 | 36 | 75 | 75 | 23 | -20 | 55 | 65 | 95 | 65 |
| 500 | 42 | 75 | 75 | 23 | -23 | 55 | 55 | 95 | 60 |
| 600 | 46 | 85 | 75 | 23 | -25 | 55 | 50 | 95 | 60 |