



## U/UTP CAT 6A LSZH 72V ( 4x2x23 Awg )

### 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)      | Token ring (IEEE 805.5)  |
| 100 Base-T (IEEE 802.3u)    | TP-PMD (ANSI X3T9.5)     |
| 1000Base-T (IEEE 802.3u)    | Power over HDBaseT (PoH) |
| 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                     |                          |

### Construction

|                    |  |
|--------------------|--|
| Conductor          | Electrolytic solid copper conductor (Awg 23) |
| Insulation         | Polyethylene compound                        |
| Stranding          | 4 pair common twist with central element     |
| Outer sheath       | LSZH compound                                |
| Outer sheath color | RAL 2003                                     |

| Flame propagation                                   | Smoke density                                | Corrosive gases                               | Halogen free                                  |
|---|--|---|---|
| IEC 60332-1-2;<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 | Ps-Next | Return Loss | ACR-N  | ACR-F (ELFEXT) | PS-ACR-F (PS-ELFEXT) |
|-----------|-------------|--------------------|---------|-------------|--------|----------------|----------------------|
| MHz       | dB/100      | dB                 | dB      | dB/100      | dB/100 | dB/100         | dB/100               |
| 4         | 3,6         | 90                 | 80      | 23          | 70     | 90             | 90                   |
| 10        | 5,6         | 95                 | 90      | 26          | 60     | 85             | 90                   |
| 16        | 7,1         | 95                 | 90      | 28          | 55     | 95             | 90                   |
| 31,25     | 10,5        | 90                 | 85      | 25          | 46     | 85             | 85                   |
| 62,5      | 14,6        | 90                 | 90      | 25          | 37     | 80             | 80                   |
| 100       | 18,3        | 90                 | 90      | 23          | 29     | 75             | 70                   |
| 250       | 29,5        | 90                 | 75      | 20          | 10     | 70             | 65                   |
| 400       | 36          | 75                 | 75      | 23          | -20    | 55             | 65                   |
| 500       | 42          | 75                 | 75      | 23          | -23    | 55             | 55                   |
| 600       | 46          | 85                 | 75      | 23          | -25    | 55             | 50                   |

| Conductor resistance | Resistance imbalance | Capacitance  | Capacity imbalance | Velocity of propagation | Signal delay   | Characteristic impedance | Test voltage |
|----------------------|----------------------|--------------|--------------------|-------------------------|----------------|--------------------------|--------------|
| max.75 Ω/km          | max %1               | nom. 43 pF/m | max. 1600 pF/km    | 78%                     | max.45 ns/100m | 100 ± 5 Ω @100MHz        | 1000V        |

| Transfer Impedance | TCL          | Coupling attenuation | Segregation class | Bending radius                         | Temperature range                            | Insulation resistance | Operating voltage |
|--------------------|--------------|----------------------|-------------------|--|--|-----------------------|-------------------|
| Grade 1            | min. level 2 | Type 1b              | C                 | fixed min. 4 x D<br>flexing min. 8 x D | fixed -20°C ...+60°C<br>flexing 0°C ...+50°C | min 5000 MΩ x m       | 72V               |
| at 1/10/30/100 Mhz | 50 dB ≥      | 30 to 100 Mhz        |                   |  |  |                       |                   |
| 10<10<30<100 mΩ/m  | 55 dB        | ≥ 70                 |                   |  |  |                       |                   |