



## EC200 Cat 5e U/UTP LSZH E<sub>ca</sub>

### Application

10Base-T, 100Base-T, 1000Base-T systems. Applicable for Power over Ethernet (PoE) / PoE+

### Cable Construction

- 24 AWG Bare Copper
- PE Insulation
- Pair Separator
- Ø 5.10 ± 0.20 mm LSZH

### Technical Properties

|   |                 |
|---|-----------------|
| Cable Weight                              | 39 kg/km        |
| Copper Weight                             | 16.3 kg/km      |
| Min. Bending radius during draw in        | 50 mm           |
| Min. Bending radius permanently installed | 25 mm           |
| Max. Tensile Strength                     | 90 N            |
| Min. Crush Resistance                     | 1000 N/10 cm    |
| Min. Impact                               | 10 Impacts      |
| Installation Temperature                  | 0°C ... +50°C   |
| Operating Temperature                     | -20°C ... +70°C |
| Packing                                   | 305 / 500 m     |

### Electrical Properties

|                            |                 |
|----------------------------|-----------------|
| Max. Conductor Resistance  | < 9.5 Ω / km    |
| Max. Resistance Unbalance  | < 2%            |
| Min. Insulation Resistance | 5000 MΩ x m     |
| Mutual Capacitance         | < 60 pF / m     |
| Capacitance Unbalance      | 1600 pF / km    |
| Impedance at 100 MHz       | 100 ± 5 Ω       |
| Velocity of Propagation    | 66 %            |
| Delay Skew                 | < 45 ns / 100 m |
| Test Voltage               | 1000 V          |
| Operating Voltage          | 125 V           |

### at 20 °C

### Standards

EIA/TIA-568  
 ISO/IEC 11801 Class D  
 IEC 61156-5, EN 50173-1  
 EN 50288-3-1  
 Euro Class  
 E<sub>ca</sub>  
 Flame Retardancy  
 EN 60332-1-2  
 Corrosive Gases Test  
 EN 50267-2-3  
 Smoke Density  
 EN 61034-2

### Electrical Data (Nominal)

@ 20 °C

| Frequency (MHz) | Attenuation (dB/100 m) | NEXT (dB) | PS - NEXT (dB) | ACR (dB/100 m) | PS-ACR (dB/100 m) | ACRF (dB/100 m) | PS-ACRF (dB/100 m) | Return Loss (dB) |
|-----------------|------------------------|-----------|----------------|----------------|-------------------|-----------------|--------------------|------------------|
| 1               | 2.0                    | 70        | 67             | 68             | 65                | 78              | 75                 | 21               |
| 4               | 3.6                    | 62        | 59             | 58             | 55                | 70              | 67                 | 29               |
| 10              | 5.7                    | 55        | 52             | 50             | 47                | 52              | 49                 | 30               |
| 16              | 7.7                    | 55        | 52             | 45             | 42                | 50              | 47                 | 30               |
| 31.2            | 11.2                   | 48        | 45             | 40             | 37                | 35              | 32                 | 29               |
| 62.5            | 16.4                   | 48        | 45             | 30             | 27                | 35              | 32                 | 27               |
| 100             | 20.9                   | 40        | 37             | 20             | 17                | 30              | 27                 | 27               |
| 200             | 27.3                   | 35        | 32             | 10             | 7                 | 20              | 17                 | 20               |