



Product: [4502ULW](#) 

Life Cycle Status: Capability

Security & Sound, 4 Conductor 22 AWG BC, BC, LSZH, Cca

Product Description

Security & Commercial Audio Cable, 4-22 AWG stranded bare copper conductors with Low Smoke Zero Halogen insulation, and LSZH jacket with ripcord, CPR Cca

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Security System, Intercom/PA, Audio/Speaker, Power-Limited Controls |
|------------------------|---|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Conductors |
|-----|-----------|------------------|------------------|-------------------|
| 22 | 7x30 | BC - Bare Copper | 0.75 mm | 4 |

| | |
|------------------|---|
| Conductor Count: | 4 |
|------------------|---|

Insulation

| Type | Material | Nominal Diameter | Nominal Wall Thickness |
|------------|---|------------------|------------------------|
| Insulation | LSZH - Low Smoke Zero Halogen (Flame Retardant) | 1.45 mm | 0.35 mm |

Color Chart

| Number | Color |
|--------|-------|
| Wire 1 | Black |
| Wire 2 | Red |
| Wire 3 | White |
| Wire 4 | Green |

Outer Shield

| Coverage [%] | Drainwire Material | Drainwire AWG |
|--------------|--------------------|---------------|
| 100% | TC - Tinned Copper | AWG24/7 |

Outer Jacket

| Material | Nominal Diameter | Nominal Wall Thickness |
|---|------------------|------------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 5.7 mm | 1.1 mm |

Construction and Dimensions

Cabling

| Description |
|-----------------|
| 4 wires twisted |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 54 Ohm/km |

Capacitance

Nom. Capacitance Conductor to Conductor

70 pF/m

Current

Max. Recommended Current [A]

2.2 Amps per Conductor

Voltage

Voltage Rating [V]

300 V

Temperature Range

| | |
|---------------------------------|----------------|
| Installation Temperature Range: | -20°C To +70°C |
| Storage Temperature Range: | -30°C To +70°C |
| Operating Temperature Range: | -20°C To +70°C |

Mechanical Characteristics

| | |
|---------------------------------------|-------|
| Max. Pull Tension: | 80 N |
| Min. Bend Radius During Installation: | 57 mm |
| Min Setting Radius: | 34 mm |

Standards

| | |
|----------------|---------------|
| CPR Euroclass: | Cca-s1a,d1,a1 |
|----------------|---------------|

Applicable Environmental and Other Programs

| | |
|----------------------|------------------------|
| Environmental Space: | Indoor - Euroclass Cca |
| EU CE Mark: | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--|---------------|
| IEC Flammability: | IEC 60332-1-2 |
| IEC 60754-1 - Halogen Amount: | Zero |
| IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity: | 2.5 µS/mm |
| IEC 60754-2 - Halogen Acid Gas Amount - Min. pH: | 4.3 |
| IEC 61034-2 - Smoke Density Min. Transmittance: | 80% |

Product Notes

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| Notes: | This is a preliminary Technical Design Specification (TDS) which is subject to modification throughout the prototyping phase. The minimum business quantity to offer is 12km for the first order. This product will have Grey as standard color and 305mt or 500mt as standard put-ups. Additional options for colors and put-ups are available on special request. The estimated production lead time for the first order will be similar to the production lead time of 4502FE plus extra 6-7 weeks. Please liaise with your Belden representative for confirmation. |
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History

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| Update and Revision: | Revision Number: 0.6 Revision Date: 04-07-2025 |
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