



**Product:** [8778ELW](#)

Audio, Control & Instrument, #22-6pr, LSZH, Indiv. Foil, LSZH Jkt, Cca

Product Description

6-Pair, 22 AWG stranded (7x30) tinned copper conductor, LSZH insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall LSZH jacket and 22 AWG stranded tinned copper drain wire, Flame resistance IEC 60332-1-2, Cca

Technical Specifications

Product Overview

|                        |                                                                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable Applications: | low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; computer communication; panel wiring |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|

Physical Characteristics (Overall)

| Conductor        |           |                    |              |
|------------------|-----------|--------------------|--------------|
| AWG              | Stranding | Material           | No. of Pairs |
| 22               | 7x30      | TC - Tinned Copper | 6            |
| Conductor Count: |           |                    | 12           |

| Insulation                                      |                  |                        |
|-------------------------------------------------|------------------|------------------------|
| Material                                        | Nominal Diameter | Diameter +/- Tolerance |
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 1.27 mm          | 0.05 mm                |

| Color Chart |                |
|-------------|----------------|
| Number      | Color          |
| Pair 1      | Black & Red    |
| Pair 2      | Black & White  |
| Pair 3      | Black & Green  |
| Pair 4      | Black & Blue   |
| Pair 5      | Black & Yellow |
| Pair 6      | Black & Brown  |

|              |                |
|--------------|----------------|
| Table Notes: | Shielded pairs |
|--------------|----------------|

| Color Chart 2 |       |
|---------------|-------|
| Number        | Color |
| Pair 1        | Red   |
| Pair 2        | Green |
| Pair 3        | Blue  |
| Pair 4        | Blue  |
| Pair 5        | Blue  |
| Pair 6        | Blue  |

| Inner Shield |       |                         |                     |                   |                    |               |
|--------------|-------|-------------------------|---------------------|-------------------|--------------------|---------------|
| Type         | Layer | Material                | Material Trade Name | Thickness of Foil | Drainwire Material | Drainwire AWG |
| Tape         | 1     | Bi-Laminate (Alum+Poly) | Beldfoil® (Z-Fold®) | 9 / 12 µm         | TC - Tinned Copper | AWG22/7       |
| Tape         | 2     | Polyester               |                     | 12 µm             |                    |               |

| Outer Shield |  |
|--------------|--|
| Material     |  |

Bi-Laminate (Alum+Poly)

Outer Jacket

| Material                                        | Nominal Diameter | Nominal Wall Thickness |
|-------------------------------------------------|------------------|------------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 10.1 mm          | 1.3 mm                 |

Construction and Dimensions

Cabling

| Description                                                                         | Filler |
|-------------------------------------------------------------------------------------|--------|
| 1 center filler and 6 pairs twisted to cable core covered with a polypropylene foil | FRNC   |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Inner Shield DCR |
|-----------------------|--------------------------|
| 49.2 Ohm/km           | 34.8 Ohm/km              |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|-----------------------------------------|---------------------------------------------------------|
| 98.4 pF/m                               | 180.4 pF/m                                              |

Inductance

| Nominal Pair Inductance |
|-------------------------|
| 0.59 µH/m               |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 50 Ohm                           |

Current

| Element      | Max. Recommended Current [A] |
|--------------|------------------------------|
| Conductor(s) | 2 A                          |

Voltage

| Voltage Rating [V] |
|--------------------|
| 300 V              |

Temperature Range

|                                          |                |
|------------------------------------------|----------------|
| Installation Temperature Range:          | -15°C To +70°C |
| Storage Temperature Range:               | -30°C To +70°C |
| Operating Temp Range (Flexible Install): | -20°C To +70°C |
| Operating Temp Range (Fixed Install):    | -30°C To +70°C |

Mechanical Characteristics

|                                       |        |
|---------------------------------------|--------|
| Min. Bend Radius During Installation: | 101 mm |
|---------------------------------------|--------|

Standards

|                     |               |
|---------------------|---------------|
| CPR Euroclass:      | Cca-s1,d1,a1  |
| CENELEC Compliance: | EN 50290-2-20 |

Applicable Environmental and Other Programs

|                      |                        |
|----------------------|------------------------|
| Environmental Space: | Indoor - Euroclass Cca |
|----------------------|------------------------|

Suitability

|                                    |     |
|------------------------------------|-----|
| Suitability - Indoor:              | Yes |
| Suitability - Non-Halogenated:     | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, 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:            | 60%       |

Related Part Numbers

Variants

| Item #        |
|---------------|
| 8778ELW.00500 |

History

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Update and Revision: | Revision Number: 0.22 Revision Date: 02-03-2025 |
|----------------------|-------------------------------------------------|

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