



**Product:** [8777NH](#) 

Audio, Control & Instrument, #22-3pr, PO, Individ. Foil, LSZH Jkt, CMG-LS

## Product Description

Audio, Control & Instrument Cable, 22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, 3 twisted pairs each individually Beldfoil® shielded (100% coverage), 22 AWG stranded tinned copper drain wire each pair, LSZH jacket.

## Technical Specifications

### Product Overview

|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| Environmental Space:   | Indoor - Euroclass B2ca                                                |
| Suitable Applications: | Instrumentation and computer cable; For data transmission applications |

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material           | Nominal Diameter | No. of Pairs |
|-----|-----------|--------------------|------------------|--------------|
| 22  | 7x30      | TC - Tinned Copper | 0.03 mm          | 3            |

|                  |   |
|------------------|---|
| Conductor Count: | 6 |
|------------------|---|

#### Insulation

| Material           | Nominal Diameter | Diameter +/- Tolerance | Nominal Wall Thickness |
|--------------------|------------------|------------------------|------------------------|
| PP - Polypropylene | 1.27 mm          | 0.05 mm                | 0.01 in                |

#### Color Chart

| Number | Color         |
|--------|---------------|
| Pair 1 | Black & Red   |
| Pair 2 | Black & White |
| Pair 3 | Black & Green |

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

#### Color Chart 2

| Number | Color |
|--------|-------|
| Pair 1 | Red   |
| Pair 2 | Green |
| Pair 3 | Blue  |

#### Inner Shield Material

| Type | Layer | Material             | Material Trade Name | Coverage [%] | Thickness of Foil | Drainwire Material | Drainwire AWG |
|------|-------|----------------------|---------------------|--------------|-------------------|--------------------|---------------|
| Tape | 1     | Aluminum / Polyester | Z-fold®             | 100 %        | 9 / 12 µm         | Tinned copper      | AWG22/7       |
|      |       | Polyester tape       |                     |              |                   |                    |               |

#### Outer Jacket Material

| Material                    | Nominal Diameter | Nominal Wall Thickness |
|-----------------------------|------------------|------------------------|
| LSZH / FRNC (UV stabilised) | 7.00 mm          | 0.89 mm                |

### Construction and Dimensions

#### Stranding

| Twists        |
|---------------|
| 6.86 twist/ft |

Cabling

| Description                   |
|-------------------------------|
| 3 wires twisted to cable core |

Electrical Characteristics

Conductor DCR

| Individual Pair Nominal Shield DCR | Nominal Conductor DCR | Nominal Inner Shield DCR |
|------------------------------------|-----------------------|--------------------------|
| 10.6 Ohm/1000ft                    | 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 Inductance | Nominal Pair Inductance |
|--------------------|-------------------------|
| 0.18 µH/ft         | 0.59 µH/m               |

Impedance

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

Delay

| Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|------------------------------------------|
| 66 ns/100m      | 66 %                                     |

Current

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

Voltage

| UL Voltage Rating | Voltage Rating [V] |
|-------------------|--------------------|
| 300 V RMS (CMG)   | 300 V              |

Temperature Range

|                                          |                |
|------------------------------------------|----------------|
| Installation Temp Range:                 | -15°C To +80°C |
| UL Temp Rating:                          | 80°C           |
| Storage Temp Range:                      | -45°C To +80°C |
| Operating Temp Range:                    | -20°C To +80°C |
| Operating Temp Range (Flexible Install): | -15°C To +80°C |
| Operating Temp Range (Fixed Install):    | -45°C To +80°C |

Mechanical Characteristics

|                                      |               |
|--------------------------------------|---------------|
| Oil Resistance:                      | IEC 60811-404 |
| Bulk Cable Weight:                   | 42 lbs/1000ft |
| Max. Pull Tension:                   | 358 N         |
| Min Bend Radius During Installation: | 70 mm         |
| Min Bend Radius/Minor Axis:          | 2.75 in       |

Standards

|                       |               |
|-----------------------|---------------|
| NEC/(UL) Compliance:  | CMG           |
| CEC/C(UL) Compliance: | CMG           |
| CPR Euroclass:        | B2ca-s1,d1,a1 |
| CENELEC Compliance:   | EN 50290-2-27 |
| Other Compliance:     | UL AWM 21088  |

Applicable Environmental and Other Programs

|                          |                               |
|--------------------------|-------------------------------|
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:              | Yes                           |

|                                       |            |
|---------------------------------------|------------|
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-08-01 |
| CA Prop 65 (CJ for Wire & Cable):     | Yes        |
| MIL Order #39 (China RoHS):           | Yes        |

Suitability

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

Flammability, LSOH, Toxicity Testing

|                                          |                                  |
|------------------------------------------|----------------------------------|
| C(UL) Flammability:                      | FT4                              |
| UL Flammability:                         | UL1685 FT4 Loading               |
| IEC Flammability:                        | IEC 60332-1-2 and IEC 60332-3-24 |
| IEC 60754-1 (EN50267-1)- Halogen Amount: | Zero                             |
| UL voltage rating:                       | 300 V RMS (CMG)                  |

Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item #        | Color  | Length  |
|---------------|--------|---------|
| 8777NH.001000 | Chrome | 1,000 m |
| 8777NH.00152  | Chrome | 152 m   |
| 8777NH.00305  | Chrome | 305 m   |
| 8777NH.00500  | Chrome | 500 m   |
| 8777NH.K0305  | Chrome | 305 m   |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.241 Revision Date: 09-02-2019 |
|----------------------|--------------------------------------------------|

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