



Product: [87777](#)

Audio, Control & Instrument, #22-3pr, FEP, Individ. Foil, PVDF Jkt, CMP

Product Description

Audio, Control & Instrument Cable, 22 AWG stranded (7x30) tinned copper conductor, FEP insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall jacket per table below, 22 AWG stranded tinned copper drain wire.

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | extreme high temperature environments; chemical resistant; outdoor and burial applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; voice communications; panel wiring |
|------------------------|---|

Physical Characteristics (Overall)

| Conductor | | | | |
|--------------------|-----------|--------------------|------------------|--------------|
| AWG | Stranding | Material | Nominal Diameter | No. of Pairs |
| 22 | 7x30 | TC - Tinned Copper | 0.03 in | 3 |
| Conductor Count: 6 | | | | |

| Insulation | |
|--------------------------------------|------------------------|
| Material | Nominal Wall Thickness |
| FEP - Fluorinated Ethylene Propylene | 0.01 in |

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

| Inner Shield | | | | | | |
|---------------------|-------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
| Tape | Bi-Laminate (Alum+Poly) | Beldfoil® (Z-Fold®) | 100% | TC - Tinned Copper | 22 | Stranded |

| Outer Shield | |
|---------------------|---------------|
| Material | Drainwire AWG |
| No Shield | 22 |

| Outer Jacket | | |
|--------------------------------|------------------|------------------------|
| Material | Nominal Diameter | Nominal Wall Thickness |
| PVDF - Polyvinylidene Fluoride | 0.234 in | 0.014 in |

Electrical Characteristics

| Conductor DCR | |
|------------------------------------|--------------------|
| Individual Pair Nominal Shield DCR | Max. Conductor DCR |
| 11.3 Ohm/1000ft | 160 Ohm/km |

| Capacitance | |
|---|---|
| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |

| | |
|----------|----------|
| 31 pF/ft | 67 pF/ft |
|----------|----------|

Inductance

| Nominal Inductance |
|--------------------|
| 0.18 µH/ft |

Impedance

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

Delay

| Max. Delay Skew | Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|-----------------|---------------|--|
| 69 ns/100m | 1.47 ns/ft | 69% |

Current

| Max. Recommended Current [A] |
|--------------------------------|
| 3.5 Amps per Conductor at 25°C |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V RMS |

Temperature Range

| | |
|------------------------------|-----------------|
| Operating Temperature Range: | -20°C To +150°C |
|------------------------------|-----------------|

Mechanical Characteristics

| | |
|------------------------------|---------------|
| Bulk Cable Weight: | 36 lbs/1000ft |
| Max. Pull Tension: | 82 lbs |
| Min. Bend Radius/Minor Axis: | 2.5 in |

Standards

| | |
|-----------------------|-----|
| NEC/(UL) Compliance: | CMP |
| CEC/C(UL) Compliance: | CMP |

Applicable Environmental and Other Programs

| | |
|-----------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LS0H, Toxicity Testing

| | |
|--------------------|------------------------------------|
| UL Flammability: | NFPA 262 Plenum Flame Test (UL910) |
| CSA Flammability: | FT6 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

Related Part Numbers

| | |
|--------------------|------|
| Non-Plenum Number: | 8777 |
|--------------------|------|

Variants

| Item # | Color | UPC |
|---------------|-------|--------------|
| 87777 0021000 | Red | 612825216209 |
| 87777 002500 | Red | 612825216216 |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.347 Revision Date: 05-05-2023 |
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