

Product: [8450](#) 

Audio & Instrumentation, #22-1pr, TC, O/A Foil, CM



Product Description

22 AWG solid tinned copper conductors, polypropylene insulation, twisted pair, overall Beldfoil® shield (100% coverage), 22 AWG solid TC drain wire, PVC jacket.

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 | Nominal Diameter | No. of Pairs |
|-----|-----------|--------------------|------------------|--------------|
| 22 | Solid | TC - Tinned Copper | 0.02635 in | 1 |

| | |
|------------------------|---|
| Conductor Count: | 2 |
| Total Number of Pairs: | 1 |

Insulation

| Material | Nominal Wall Thickness |
|--------------------|------------------------|
| PP - Polypropylene | 0.007 in |

Color Chart

| Number | Color |
|--------|-------------|
| 1 | Black & Red |

Outer Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire Diameter | Drainwire AWG | Drainwire Construction n x D |
|------|-------------------------|---------------------|--------------|--------------------|--------------------|---------------|------------------------------|
| Tape | Bi-Laminate (Alum+Poly) | Beldfoil® (Z-Fold®) | 100% | TC - Tinned Copper | 0.02635 mm | 22 | Solid |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.118 in | 0.018 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR | Conductor Resistance | Nominal Outer Shield DCR |
|-----------------------|-----------------------|----------------------|--------------------------|
| 16.1 Ohm/1000ft | 16.1 Ohm/1000ft | | 12.65 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 40 pF/ft | 76 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.08 µH/ft |

Impedance

Nominal Characteristic Impedance

40 Ohm

Delay

Nominal Delay Nominal Velocity of Propagation (VP) [%]

1.5 ns/ft 66%

Current

Max. Recommended Current [A]

2.9 Amps per Conductor at 25°C

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

| | |
|-----------------------|-----------------|
| UL Temp Rating: | 75°C |
| Operating Temp Range: | -20°C To +105°C |

Mechanical Characteristics

| | |
|------------------------------|---------------|
| Bulk Cable Weight: | 12 lbs/1000ft |
| Max. Pull Tension: | 37 lbs |
| Min. Bend Radius/Minor Axis: | 1.25 in |

Standards

| | |
|-----------------------|-----|
| NEC/(UL) Compliance: | CM |
| CEC/C(UL) Compliance: | CM |
| CPR Euroclass: | Eca |

Applicable Environmental and Other Programs

| | |
|--|-------------------------------|
| Environmental Space: | Indoor (Not Riser or Plenum) |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|-------|-------------|----------|--------------|
| 8450 010U500 | Black | UnReel | 500 ft | 612825207672 |
| 8450 0101000 | Black | Reel | 1,000 ft | 612825207627 |
| 8450 010U1000 | Black | UnReel | 1,000 ft | 612825207634 |
| 8450 0081000 | Gray | Reel | 1,000 ft | 612825207641 |

History

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| Update and Revision: | Revision Number: 0.342 Revision Date: 08-27-2021 |
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