



Product: [8451](#)

Audio & Instrumentation, 1 Pair 22 AWG, TC, O/A Foil, CM

Product Description

1 Pair 22 AWG stranded (7x30) TC conductors, polypropylene insulation, paper wrap, twisted pair, overall Beldfoil® shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket.

Technical Specifications

Product Overview

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

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Pairs |
|---------|-----|-----------|--------------------|--------------|
| Pair(s) | 22 | 7x30 | TC - Tinned Copper | 1 |

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

Insulation

| Material | Nominal Wall Thickness |
|--------------------|------------------------|
| PP - Polypropylene | 0.008 in |

Color Chart

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

Outer Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Alum / Poly | Beldfoil® (Z-Fold®) | 100 % | TC - Tinned Copper | 22 | 7x30 |

Outer Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.138 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 14.5 Ohm/1000ft | 14.1 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 34 pF/ft | 67 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.17 μ H/ft |

Impedance**Nominal Characteristic Impedance**

45 Ohm

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.5 ns/ft | 66 % |

Current**Max. Recommended Current [A]**

2.9 Amps per conductor @ 25°C

Voltage**UL Voltage Rating**

300 V RMS

Temperature Range

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

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 15 lbs/1000ft |
| Max Recommended Pulling Tension: | 27 lbs |
| Min Bend Radius/Minor Axis: | 1.5 in |

Standards

| | |
|--------------------------|-----|
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMG |
| CPR Euroclass: | Eca |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| Environmental Space: | Indoor - Riser |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Flammability, LS0H, Toxicity Testing

| | |
|-----------------------|-----------------------|
| UL Flammability: | UL1666 Vertical Shaft |
| CSA Flammability: | FT4 |
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

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

Part Number**Variants**

| Item # | Color | Putup Type | Length | UPC |
|--------------|-------|------------|--------|--------------|
| 8451 010100 | Black | Reel | 100 ft | 612825207726 |
| 8451 010500 | Black | Reel | 500 ft | 612825207764 |
| 8451 010U500 | Black | UnReel | 500 ft | 612825427414 |

| | | | | |
|---------------|-------|--------------|-----------|--------------|
| 8451 0101000 | Black | Reel | 1,000 ft | 612825207733 |
| 8451 010U1000 | Black | UnReel | 1,000 ft | 612825207702 |
| 8451 010Z1000 | Black | ReelTuff Box | 1,000 ft | 612825208129 |
| 8451 01015000 | Black | Reel | 5,000 ft | 612825207757 |
| 8451 0105000 | Black | Reel | 5,000 ft | 612825207696 |
| 8451 01010000 | Black | Reel | 10,000 ft | 612825207740 |
| 8451 008500 | Gray | Reel | 500 ft | 612825207658 |
| 8451 008U500 | Gray | UnReel | 500 ft | 612825427407 |
| 8451 0081000 | Gray | Reel | 1,000 ft | 612825207689 |
| 8451 008U1000 | Gray | UnReel | 1,000 ft | 612825207665 |
| 8451 008Z1000 | Gray | ReelTuff Box | 1,000 ft | 612825207719 |

Footnote:

C - CRATE REEL PUT-UP.

Product Notes

Notes: Unique paper separator facilitates jacket stripping.

History

Update and Revision: Revision Number: 0.285 Revision Date: 05-19-2020

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