



**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
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### 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 µH/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, LSOH, 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.
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## Product Notes

Notes:	Unique paper separator facilitates jacket stripping.
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## History

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