

**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
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### 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
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## 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

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