

**Part Number: 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**

Environmental Space:	Indoor - Riser
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**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	No. of Pairs
22	7x30	TC - Tinned Copper	1

Conductor Count:	2
Total Number of Pairs:	1
Conductor Size:	22 AWG

**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	Aluminum/Polyester	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	22	7x30 mm

**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

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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Indoor: Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability: UL1666 Vertical Shaft

CSA Flammability: FT4

UL voltage rating: 300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N): No

## Part Number

### Variants

Item #	Color	Footnote
8451 010100	Black	
8451 0101000	Black	C
8451 01010000	Black	
8451 01015000	Black	

8451 010500	Black	
8451 010500	Black	
8451 010U1000	Black	
8451 010U500	Black	
8451.01305	Black	
8451 010Z1000	Black	
8451 010Z1000	Black	
8451 0081000	Gray	C
8451 008500	Gray	
8451 008U1000	Gray	
8451 008U500	Gray	
8451 008Z1000	Gray	
8451 008Z1000	Gray	

Footnote:	C - CRATE REEL PUT-UP.
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