



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

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

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	UPC	Length	Footnote
8451 010100	Black	612825207726	100 ft	
8451 0101000	Black	612825207733	1,000 ft	C
8451 01010000	Black	612825207740	1,000 ft	

8451 01015000	Black	612825207757	5,000 ft	
8451 010500	Black	612825207764	500 ft	
8451 0105000	Black	612825207696	5,000 ft	
8451 010U1000	Black	612825207702	1,000 ft	
8451 010U500	Black	612825427414	500 ft	
8451.01305	Black		305 m	
8451 010Z1000	Black	612825208129	1,000 ft	
8451 010Z1000	Black	612825208129	1,000 ft	
8451 0081000	Gray	612825207689	1,000 ft	C
8451 008500	Gray	612825207658	500 ft	
8451 008U1000	Gray	612825207665	1,000 ft	
8451 008U500	Gray	612825427407	500 ft	
8451 008Z1000	Gray	612825207719	1,000 ft	
8451 008Z1000	Gray	612825207719	1,000 ft	

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: 0.271 Revision Date: 08-22-2019
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