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

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, LS0H, 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 0105000	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.

Product Notes

Notes:	Unique paper separator facilitates jacket stripping.