

**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

Shielding:	Foil(s) or Copper Tape(s)
------------	---------------------------

#### 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 0105000	Black	
8451 010U1000	Black	
8451 010U500	Black	
8451.01305	Black	
8451 0081000	Gray	C
8451 008500	Gray	
8451 008U1000	Gray	
8451 008U500	Gray	

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

© 2018 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.