Belden



Product: 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

Suitable Applications:	for use with automatic stripping equipments; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, …); line level audio; computer communication; panel wiring

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	1	22 AWG	7x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PP - Polypropylene	0.009 in (0.23 mm)	0.046 in (1.2 mm)	Black & Red

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.138 in (3.51 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Inductance Cond-Grnd	Nom. Delay	Nom. Inductance	Nom. Velocity of Prop.	Max. Current
Pair(s)	17.8 Ohm/1000ft (58.4 Ohm/km)	34 pF/ft (110 pF/m)	67 pF/ft (220 pF/m)	45 Ohm	0.1725 µH/ft	1.5 ns/ft	0.17 µH/ft (0.56 µH/m)	66%	2.9 Amps per Conductor at 25ºC

Nom Outer Shield DCR:	14.1 Ohm/1000ft (46.3 Ohm/km)

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating
-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.4 in (36 mm)	1.4 in (36 mm)

Max. Pull Tension:	27 lbs (12 kg)
Bulk Cable Weight:	13 lbs/1000ft (19 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMR
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Unique paper separator facilitates jacket stripping.

History

Update and Revision:	Revision Number: 0.667 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
8451 010100	Black	Reel	100 ft	612825207726	
8451 010500	Black	Reel	500 ft	612825207764	
8451 010U500	Black	UnReel	500 ft	612825427414	
8451 0101000	Black	Reel	1,000 ft	612825207733	C
8451 010U1000	Black	UnReel	1,000 ft	612825207702	
8451 010Z1000	Black	ReelTuff Box	1,000 ft	612825208129	
8451 0105000	Black	Reel	5,000 ft	612825207696	
8451 01010000	Black	Reel	10,000 ft	612825207740	
8451 008500	Gray	Reel	500 ft	612825207658	
8451 008U500	Gray	UnReel	500 ft	612825427407	
8451 0081000	Gray	Reel	1,000 ft	612825207689	C
8451 008U1000	Gray	UnReel	1,000 ft	612825207665	
8451 008Z1000	Gray	ReelTuff Box	1,000 ft	612825207719	

Footnote:	C - CRATE REEL PUT-UP.

© 2026 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.