Belden



Product: 89913

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid BC, Foil + 90% TC Braid, PVDF Jkt, CMP

Product Description

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid Bare Copper Conductor , FEP Insulation, Foil + 90% Tinned Copper Braid Shield, PVDF Jacket, CMP

Technical Specifications

Product Overview

Suitable Applications:	Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification)

Construction Details

RG Type:	8

Conductor

Size	Stranding	Nom. Diameter	Material
10 AWG	Solid	0.108 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
FEP - Fluorinated Ethylene Propylene	0.292 in (7.42 mm)	Clear	Solid FEP monofilament spiral around conductor. Solid FEP tube over monofilament

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		90%

Outer Jacket

Material	Nom. Diameter
PVDF - Polyvinylidene Fluoride	0.360 in (9.14 mm)

Overall Cable Diameter (Nominal):	0.360 in (9.14 mm)

Electrical Characteristics

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.1 dB/100ft
10 MHz	0.4 dB/100ft
50 MHz	1.0 dB/100ft
100 MHz	1.6 dB/100ft
200 MHz	2.3 dB/100ft
400 MHz	3.4 dB/100ft
700 MHz	5.0 dB/100ft
900 MHz	6.0 dB/100ft
1000 MHz	6.9 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.

0.9 Ohm/1000ft	3.3 Ohm/1000ft (11 Ohm/km)	25 pF/ft (82 pF/m)	50 Ohm	83%

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating
150°C	-15°C to +150°C

Bend Radius

Installation Min.
3.6 in (91 mm)

Max. Pull Tension:	174 lbs (78.9 kg)
Bulk Cable Weight:	119 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor, Outdoor, UV Resistance, Aerial - When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, 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)
Non-Plenum Number:	9913

Product Notes

Notes:	Recommend use of 7733A for applications above 1 GHz.

History

Update and Revision:	Revision Number: 0.496 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
89913 010500	Black	Reel	500 ft	612825223870	C
89913 0101000	Black	Reel	1,000 ft	612825221463	C

Footnote:	C - CRATE REEL PUT-UP.

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