



Product: [9914](#)

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid BC, Foil + 95% TC Braid, PVC Jkt, CMG

Product Description

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid Bare Copper Conductor , PE Insulation, Duobond® Foil + 95% Tinned Copper Braid Shield, PVC Jacket, CMG

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	0.103 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.285 in (7.24 mm)	White	Gas Injected Foam

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)		95%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.403 in (10.2 mm)

Overall Cable Diameter (Nominal):	0.403 in (10.2 mm)
-----------------------------------	--------------------

Electrical Characteristics

VSWR

Frequency	Max. VSWR
5-2250 MHz	1.43:1

Attenuation

Frequency	Nom. Attenuation
5 MHz	0.4 dB/100ft
10 MHz	0.5 dB/100ft
50 MHz	1.0 dB/100ft
100 MHz	1.4 dB/100ft
200 MHz	1.8 dB/100ft
400 MHz	2.6 dB/100ft
700 MHz	3.6 dB/100ft

900 MHz	4.1 dB/100ft
1000 MHz	4.4 dB/100ft
1500 MHz	5.5 dB/100ft
1800 MHz	6.1 dB/100ft
2000 MHz	6.5 dB/100ft
2500 MHz	7.5 dB/100ft
3000 MHz	8.3 dB/100ft
4000 MHz	9.9 dB/100ft

Power Rating

Frequency	Max. Power Rating
5 MHz	4,021 W
10 MHz	3,217 W
50 MHz	1,609 W
100 MHz	1,149 W
200 MHz	894 W
400 MHz	619 W
700 MHz	447 W
1,000 MHz	366 W
1,500 MHz	293 W
2,000 MHz	248 W
2,500 MHz	215 W
3,000 MHz	194 W
4,000 MHz	163 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
1.0 Ohm/1000ft	1.3 Ohm/1000ft (4.3 Ohm/km)	24.8 pF/ft (81.4 pF/m)	50 Ohm	82%

Voltage

UL Voltage Rating	Voltage Rating
300 V (CMG), 30 V (UL AWM 1354)	600 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +80°C

Bend Radius

Installation Min.
4.0 in (100 mm)

Max. Pull Tension:	247 lbs (112 kg)
Bulk Cable Weight:	105 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 FT4 Loading
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMG
AWM Compliance:	AWM 1354
CEC / C(UL) Compliance:	CMG
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)

History

Update and Revision:	Revision Number: 0.533 Revision Date: 04-29-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
9914 010500	Black	Reel	500 ft	612825268901	C
9914 0101000	Black	Reel	1,000 ft	612825261780	C

© 2024 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.