Belden



Product: 8214

50 Ohm Wireless Transmission Coax, RG-8, 11 AWG Str BC, 95% BC Braid, PVC Jkt, CM

Product Description

50 Ohm Wireless Transmission Coax, RG-8, 11 AWG (7x19) Bare Copper Conductor , PE Insulation, 95% Bare Copper Braid Shield, PVC Jacket, CM

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
11 AWG	7x19	0.108 in	BC - Bare Copper

Insulation

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

Outer Shield

Outer Shield Type	Material	Coverage
Braid	Bare Copper (BC)	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

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.14 dB/100ft
10 MHz	0.5 dB/100ft
50 MHz	1.2 dB/100ft
100 MHz	1.7 dB/100ft
200 MHz	2.6 dB/100ft
400 MHz	3.9 dB/100ft
700 MHz	5.6 dB/100ft
900 MHz	6.5 dB/100ft
1000 MHz	7.0 dB/100ft
4000 MHz	21.5 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
1.2 Ohm/1000ft	1.1 Ohm/1000ft (3.6 Ohm/km)	26 pF/ft (85 pF/m)	50 Ohm	78%

Voltage

UL Voltage Rating
300 V (CM), 30 V (UL AWM 1354)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C (UL AWM 1354)	-40°C to +80°C

Bend Radius

Installation Min.
4.0 in (100 mm)

Max. Pull Tension:	230 lbs (100 kg)
Bulk Cable Weight:	107 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CM
AWM Compliance:	AWM 1354
CEC / C(UL) Compliance:	CM
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)

History

Update and Revision:	Revision Number: 0.381 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
8214 010100	Black	Reel	100 ft	612825196228	C
8214 010500	Black	Reel	500 ft	612825358015	C
8214 0101000	Black	Reel	1,000 ft	612825196235	C

Footnote:	C - CRATE REEL PUT-UP.

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