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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