

**Product:** [9209](#) 

Precision Video Coax, Miniature, #23 Solid BC, Foil + 95% TC Braid



## Product Description

23 AWG solid .022" bare copper conductor, polyethylene insulation, Duofoil® + tinned copper braid shield (95% coverage), polyethylene jacket.

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material         | Nominal Diameter | No. of Coax |
|-----|-----------|------------------|------------------|-------------|
| 23  | Solid     | BC - Bare Copper | 0.022 in         | 1           |

Conductor Count: 1

#### Insulation

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - Polyethylene | 0.146 in         |

#### Outer Shield

| Type  | Layer | Material                      | Material Trade Name | Coverage [%] |
|-------|-------|-------------------------------|---------------------|--------------|
| Tape  | 1     | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%         |
| Braid | 2     | Tinned Copper (TC)            |                     | 95%          |

#### Outer Jacket

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - Polyethylene | 0.22 in          |

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR Conductor Resistance | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------------------------|--------------------------|---------------------|
| 20.4 Ohm/1000ft       | 20.4 Ohm/1000ft                            | 4.5 Ohm/1000ft           | 4.5 Ohm/1000ft      |

#### Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 21 pF/ft                             |

#### Inductance

| Nominal Inductance |
|--------------------|
| 0.118 µH/ft        |

#### Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 75 Ohm                           |

#### Return Loss (RL)

| Frequency [MHz] | Minimum Return (RL) |
|-----------------|---------------------|
| 5-216 MHz       | 27 dB               |

|             |       |
|-------------|-------|
| 217-850 MHz | 23 dB |
|-------------|-------|

#### High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.4 dB/100ft        |
| 3.58 MHz        | 0.5 dB/100ft        |
| 5 MHz           | 0.84 dB/100ft       |
| 7 MHz           | 0.98 dB/100ft       |
| 10 MHz          | 1.17 dB/100ft       |
| 67.5 MHz        | 2.85 dB/100ft       |
| 71.5 MHz        | 2.9 dB/100ft        |
| 100 MHz         | 3.35 dB/100ft       |
| 135 MHz         | 3.95 dB/100ft       |
| 143 MHz         | 4.05 dB/100ft       |
| 180 MHz         | 4.55 dB/100ft       |
| 270 MHz         | 5.6 dB/100ft        |
| 360 MHz         | 6.55 dB/100ft       |
| 540 MHz         | 8.3 dB/100ft        |
| 720 MHz         | 9.65 dB/100ft       |
| 750 MHz         | 9.9 dB/100ft        |
| 1000 MHz        | 11.6 dB/100ft       |

#### Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|------------------------------------------|
| 1.56 ns/ft    | 66%                                      |

#### Voltage

| Non-UL Voltage Rating |
|-----------------------|
| 2300 V RMS            |

### Temperature Range

|                       |                |
|-----------------------|----------------|
| Non-UL Temp Rating:   | 80°C           |
| Operating Temp Range: | -55°C To +80°C |

### Mechanical Characteristics

|                              |               |
|------------------------------|---------------|
| Bulk Cable Weight:           | 27 lbs/1000ft |
| Max. Pull Tension:           | 43 lbs        |
| Min. Bend Radius/Minor Axis: | 2.5 in        |

### Standards

|              |    |
|--------------|----|
| RG Type:     | 59 |
| Series Type: | 59 |

### Applicable Environmental and Other Programs

|                                              |                               |
|----------------------------------------------|-------------------------------|
| Environmental Space:                         | Indoor/Outdoor                |
| EU Directive 2000/53/EC (ELV):               | Yes                           |
| EU Directive 2003/11/EC (BFR):               | Yes                           |
| EU Directive 2011/65/EU (RoHS 2):            | Yes                           |
| EU Directive 2012/19/EU (WEEE):              | Yes                           |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes                           |
| EU Directive Compliance:                     | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                                  | No                            |
| MII Order #39 (China RoHS):                  | Yes                           |

### Suitability

|                        |                                        |
|------------------------|----------------------------------------|
| Suitability - Aerial:  | Yes - When supported by messenger wire |
| Suitability - Burial:  | Yes                                    |
| Suitability - Indoor:  | Yes                                    |
| Suitability - Outdoor: | Yes                                    |

Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item #        | Color | Put-Up Type | Length   | UPC          |
|---------------|-------|-------------|----------|--------------|
| 9209 010U500  | Black | UnReel      | 500 ft   | 612825357827 |
| 9209 010U1000 | Black | UnReel      | 1,000 ft | 612825357766 |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.317 Revision Date: 09-10-2021 |
|----------------------|--------------------------------------------------|

© 2021 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.