

# Product: 8259

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Str TC, 95% TC Braid, PVC Jkt

## Product Description

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG (19x33) Tinned Copper Conductor , PE Insulation, 95% Tinned Copper Braid Shield, PVC Jacket

## 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: | 58 |

**Conductor**

| Size | Stranding | Nom. Diameter | Material |
|---|---|---|---|
| 20 AWG | 19x33 | 0.035 in | TC - Tinned Copper |

**Insulation**

| Material | Nom. Insulation Diameter | Color Code |
|---|---|---|
| PE - Polyethylene | 0.117 in (2.97 mm) | White |

**Outer Shield**

| Outer Shield Type | Material | Coverage |
|---|---|---|
| Braid | Tinned Copper (TC) | 95% |

**Outer Jacket**

| Material | Nom. Diameter |
|---|---|
| PVC - Polyvinyl Chloride | 0.193 in (4.90 mm) |

| | |
|---|---|
| Overall Cable Diameter (Nominal): | 0.193 in (4.90 mm) |

### Electrical Characteristics

**Attenuation**

| Frequency | Nom. Attenuation |
|---|---|
| 1 MHz | 0.4 dB/100ft |
| 10 MHz | 1.5 dB/100ft |
| 50 MHz | 3.7 dB/100ft |
| 100 MHz | 5.4 dB/100ft |
| 200 MHz | 8.1 dB/100ft |
| 400 MHz | 12.4 dB/100ft |
| 700 MHz | 17.7 dB/100ft |
| 900 MHz | 21.1 dB/100ft |
| 1000 MHz | 22.8 dB/100ft |

**Electricals**

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|---|---|---|---|---|
| 9.7 Ohm/1000ft (32 Ohm/km) | 3.8 Ohm/1000ft (12 Ohm/km) | 30.8 pF/ft (101 pF/m) | 50 Ohm | 66% |

**Voltage**

| Voltage Rating |
| --- |
| 1900 V |

## Mechanical Characteristics

**Temperature**

| Operating |
| --- |
| -30°C to +75°C |

**Bend Radius**

| Installation Min. |
| --- |
| 1.9 in (48 mm) |

| | |
| --- | --- |
| Max. Pull Tension: | 42 lbs (19 kg) |
| Bulk Cable Weight: | 25 lbs/1000ft |

## Standards and Compliance

| | |
| --- | --- |
| Environmental Suitability: | Indoor (Not Riser or Plenum), Indoor, Aerial - Black only, When supported by messenger wire |
| Sustainability: | CA Prop 65 |
| CPR Compliance: | CPR Euroclass: Eca; CPR UKCA Class: Eca |
| 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: 0.531 Revision Date: 02-03-2025 |

## Part Numbers

**Variants**

| Item # | Color | Putup Type | Length | UPC | Footnote |
| --- | --- | --- | --- | --- | --- |
| 8259 010100 | Black | Reel | 100 ft | 612825197379 | |
| 8259 010500 | Black | Reel | 500 ft | 612825197393 | C |
| 8259 010U500 | Black | UnReel | 500 ft | 612825357636 | |
| 8259 0101000 | Black | Reel | 1,000 ft | 612825197386 | C |
| 8259 010U1000 | Black | UnReel | 1,000 ft | 612825197355 | |
| 8259 0105000 | Black | Reel | 5,000 ft | 612825197348 | C |

© 2025 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.