



**Product:** <u>8219</u> ☑

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

# **Product Description**

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG (19x32) Tinned Copper Conductor, PE Insulation, 95% Tinned 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 |
|-------------------------|--|
| Culture 7 (pp. culture) | Frequency Identification)  |

# **Construction Details**

RG Type: 58

#### Conductor

| AWG | Stranding | Nom. Diameter | Material           |
|-----|-----------|---------------|--------------------|
| 20  | 19x32     | 0.037 in      | TC - Tinned Copper |

### Insulation

| Material                 | Nom. Diameter |
|--------------------------|---------------|
| PE - Polyethylene (Foam) | 0.116 in      |

#### **Outer Shield Material**

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

# Outer Jacket Material

| Material                 | Nom. Diameter |
|--------------------------|---------------|
| PVC - Polyvinyl Chloride | 0.193 in      |

### **Electrical Characteristics**

#### Attenuation

| Frequency | Nom. Attenuation [dB/100ft] |
|-----------|-----------------------------|
| 1 MHz     | 0.4 dB/100ft                |
| 10 MHz    | 1.3 dB/100ft                |
| 50 MHz    | 3.1 dB/100ft                |
| 100 MHz   | 4.5 dB/100ft                |
| 200 MHz   | 6.6 dB/100ft                |
| 400 MHz   | 10.0 dB/100ft               |
| 700 MHz   | 14.2 dB/100ft               |
| 900 MHz   | 16.6 dB/100ft               |
| 1000 MHz  | 18.1 dB/100ft               |

# Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Impedence | Nom. Velocity |
|--------------------|-----------------------|---------------------------------|----------------|---------------|
| 8.8 Ohm/1000ft     | 4.1 Ohm/1000ft        | 26.0 pF/ft                      | 54 Ohm         | 76%           |

# Voltage

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

#### **Mechanical Characteristics**

#### Temperature

| UL Rating | Operating      |
|-----------|----------------|
| 80°C      | -30°C to +75°C |

#### **Bend Radius**

# Installation Min.

1.9 in

| Bulk Cable Weight: | 26 lbs/1000ft |
|--------------------|---------------|
| Max. Pull Tension: | 50 lbs        |

#### **Standards and Compliance**

| Environmental Suitability:         | Outdoor - Aerial, Indoor  |
|------------------------------------|---|
| Sustainability:                    | CA Prop 65  |
| Flammability / Fire<br>Resistance: | UL1685 UL Loading, UN ECE R118.02   |
| NEC / UL Compliance:               | CM  |
| AWM Compliance:                    | 1354  |
| CEC / C(UL) Compliance:            | CM  |
| European Directive<br>Compliance:  | EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                   | China RoHS II (GB/T 26572-2011)   |
| Other Standard<br>Compliance(s):   | P-MSHA-SC-182/5   |

#### History

| Update and Revision: | Revision Number: 0.351 Revision Date: 09-30-2020 |
|----------------------|--|

# © 2020 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.