

**Product:** 9311 ☑



50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Str TC, 55% TC Braid, PVC Jkt, PVC Jkt

# **Product Description**

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG (19x32) Tinned Copper Conductor, PE Insulation, Duobond® Foil + 55% Tinned Copper Braid Shield, PVC Jacket, CM

# **Technical Specifications**

## **Product Overview**

| Suitable      | 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 |
|---------------|--|
| Applications: | Identification)  |

### **Construction Details**

RG Type: 58

### Conductor

| No. of Elements | Size   | Stranding | Nom. Diameter | Material           |
|-----------------|--------|-----------|---------------|--------------------|
| 1               | 20 AWG | 19x32     | 0.037 in      | TC - Tinned Copper |

### Insulation

| Material                 | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|------------|
| PE - Polyethylene (Foam) | 0.114 in (2.90 mm)       | White      |

## Outer Shield

| Layer | Outer Shield Type | Material                      | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1     | Таре              | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%     |
| 2     | Braid             | Tinned Copper (TC)            |                     | 55%      |

## Outer Jacket

| Material Nom                                   | m. Diameter    |
|--|----------------|
| PVC - Polyvinyl Chloride 0.193 i               | 3 in (4.90 mm) |
| Overall Cable Diameter (Nominal): 0.193 in (4. | (4.90 mm)      |

## **Electrical Characteristics**

## Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.5 dB/100ft     |
| 10 MHz    | 1.5 dB/100ft     |
| 50 MHz    | 2.9 dB/100ft     |
| 100 MHz   | 4 dB/100ft       |
| 200 MHz   | 5.7 dB/100ft     |
| 400 MHz   | 8.5 dB/100ft     |
| 700 MHz   | 12.2 dB/100ft    |
| 900 MHz   | 14.5 dB/100ft    |
| 1000 MHz  | 15.8 dB/100ft    |

#### Electricals

| Nom. Conductor DCR         | Nom. Outer Shield DCR     | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|----------------------------|---------------------------|---------------------------------|-------------------------------|------------------------|
| 8.8 Ohm/1000ft (29 Ohm/km) | 17 Ohm/1000ft (56 Ohm/km) | 26 pF/ft (85 pF/m)              | 52 Ohm                        | 75%                    |

### Voltage

|            | UL Voltage Ra | iting           |
|------------|---------------|-----------------|
| 300 V RMS, | 30 V RMS (UL  | AWM Style 1354) |

Electrical Characteristics Notes:

300 V RMS (CM) 30 V RMS (UL AWM Style 1354

### **Mechanical Characteristics**

#### Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 80°C           | -40°C To +80°C |

#### **Bend Radius**

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 2 in (51 mm)    | 2 in (51 mm)      |

Max. Pull Tension: 55 lbs (25 kg)
Bulk Cable Weight: 21 lbs/1000ft

### **Standards and Compliance**

| Environmental Suitability:          | Indoor (Not Riser or Plenum), Indoor  |
|-------------------------------------|---|
| Flammability /<br>Reaction to Fire: | UL1685 UL Loading   |
| CPR Compliance:                     | CPR Euroclass: Eca  |
| NEC / UL<br>Compliance:             | Article 800, CM   |
| AWM Compliance:                     | AWM 1354 (30 V 80°C)  |
| CEC / C(UL)<br>Compliance:          | СМ  |
| European Directive Compliance:      | 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)   |

#### **Product Notes**

| Notes: | //(1)# Elements@Conductor1:-In Stibo it was Blank and now changed to 1. (2)Size@Conductor1:-In Stibo it was 20 now changed to 20AWG (3)Insulation Diameter (Nominal)- In Stibo it was 0.114 in Now Changed to 0.116 in (4)Color@Color Chart1 01:- In stibo it was Blank now Changed to White (5)Material@OuterShield1 1 - In stibo it is Tri-Laminate (Alum+Poly+Alum) But in BPCS (EAA+ Alum+ Poly+Alum) (6)Nominal Diameter@ Outer Jacket 2- In Stibo it was 0.25 in Now Changed to Blank (7)Cable Diameter (Nominal)- In Stibo it was Blank Now Changed to 0.193 in |
|--------|--|
|--------|--|

## **History**

| Update and Revision: | Revision Number: 0.497 Revision Date: 04-29-2024 |
|----------------------|--|
|----------------------|--|

### **Part Numbers**

#### Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 9311 010500   | Black | Reel       | 500 ft   | 612825227847 | С        |
| 9311 0101000  | Black | Reel       | 1,000 ft | 612825227861 | С        |
| 9311 010U1000 | Black | UnReel     | 1,000 ft | 612825415213 |          |

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