



**Product:** [8281](#)

75 Ohm Analog Video Coax, RG-59, 20 AWG Solid BC, Double 95% TC Braid, PE Jkt

### Product Description

75 Ohm Analog Video Coax, RG-59, 20 AWG Solid Bare Copper Conductor , PE Insulation, Double 95% Tinned Copper Braid Shield, PE Jacket

### Technical Specifications

#### Product Overview

|                        |                       |
|------------------------|-----------------------|
| Suitable Applications: | Standard analog video |
|------------------------|-----------------------|

#### Construction Details

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

#### Conductor

| Size   | Stranding | Nom. Diameter | Material         |
|--------|-----------|---------------|------------------|
| 20 AWG | Solid     | 0.031 in      | BC - Bare Copper |

#### Insulation

| Material          | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|------------|
| PE - Polyethylene | 0.198 in (5.03 mm)       | White      |

#### Outer Shield

| Layer | Outer Shield Type | Material           | Coverage |
|-------|-------------------|--------------------|----------|
| 1     | Braid             | Tinned Copper (TC) | 95%      |
| 2     | Braid             | Tinned Copper (TC) | 95%      |

#### Outer Jacket

| Material          | Nom. Diameter      |
|-------------------|--------------------|
| PE - Polyethylene | 0.305 in (7.75 mm) |

Overall Cable Diameter (Nominal): 0.305 in (7.75 mm)

#### Electrical Characteristics

#### Return Loss (RL)

| Frequency     | Min. Return Loss |
|---------------|------------------|
| 5 - 216 MHz   | 27 dB            |
| 216 - 850 MHz | 23 dB            |

#### Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.3 dB/100ft     |
| 3.6 MHz   | 0.5 dB/100ft     |
| 10 MHz    | 0.8 dB/100ft     |
| 71.5 MHz  | 2.1 dB/100ft     |
| 135 MHz   | 3.0 dB/100ft     |
| 270 MHz   | 4.3 dB/100ft     |
| 360 MHz   | 5.1 dB/100ft     |
| 540 MHz   | 6.3 dB/100ft     |

|          |              |
|----------|--------------|
| 720 MHz  | 7.4 dB/100ft |
| 750 MHz  | 7.6 dB/100ft |
| 1000 MHz | 9.2 dB/100ft |

## Electricals

| Nom. Conductor DCR            | Nom. Outer Shield DCR       | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|-------------------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 10.8 Ohm/1000ft (35.4 Ohm/km) | 1.1 Ohm/1000ft (3.6 Ohm/km) | 21 pF/ft (69 pF/m)              | 75 Ohm                        | 66%                    |

## Voltage

| Voltage Rating |
|----------------|
| 2900 V         |

## Mechanical Characteristics

### Temperature

| Operating      |
|----------------|
| -55°C to +80°C |

### Bend Radius

| Installation Min. |
|-------------------|
| 3.1 in (79 mm)    |

|                    |                   |
|--------------------|-------------------|
| Max. Pull Tension: | 134 lbs (60.8 kg) |
| Bulk Cable Weight: | 69 lbs/1000ft     |

## Standards and Compliance

|                                |  |
|--------------------------------|--|
| Environmental Suitability:     | Outdoor - Aerial, Indoor, Aerial - Black only, When supported by messenger wire                                      |
| Sustainability:                | CA Prop 65   |
| European Directive Compliance: | EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)  |
| Plenum Number:                 | 88281  |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.504 Revision Date: 04-26-2023 |
|----------------------|--|

## Part Numbers

### Variants

| Item #       | Color       | Putup Type | Length   | UPC          |
|--------------|-------------|------------|----------|--------------|
| 8281 010500  | Black       | Reel       | 500 ft   | 612825358626 |
| 8281 0101000 | Black       | Reel       | 1,000 ft | 612825358091 |
| 8281 0105000 | Black       | Reel       | 5,000 ft | 612825355809 |
| 8281 006500  | Blue, Light | Reel       | 500 ft   | 612825355816 |
| 8281 0061000 | Blue, Light | Reel       | 1,000 ft | 612825355724 |
| 8281 005500  | Green, Dark | Reel       | 500 ft   | 612825355823 |
| 8281 0051000 | Green, Dark | Reel       | 1,000 ft | 612825355830 |
| 8281 0031000 | Orange      | Reel       | 1,000 ft | 612825355861 |
| 8281 002500  | Red         | Reel       | 500 ft   | 612825355878 |
| 8281 0021000 | Red         | Reel       | 1,000 ft | 612825355885 |
| 8281 0091000 | White       | Reel       | 1,000 ft | 612825358725 |
| 8281 004500  | Yellow      | Reel       | 500 ft   | 612825355847 |
| 8281 0041000 | Yellow      | Reel       | 1,000 ft | 612825355854 |

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