



Product: [8281F](#)

75 Ohm Analog Video Coax, RG-59, 21 AWG Str BC, Double 95% TC Braid, PVC Jkt. Flexible

Product Description

75 Ohm Analog Video Coax, RG-59, 21 AWG (7x29) Bare Copper (Compacted) Conductor , PE Insulation, Double 95% Tinned Copper Braid Shield, PVC Jacket, Flexible

Technical Specifications

Product Overview

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

Construction Details

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

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|--------------------------------|
| 21 AWG | 7x29 | 0.032 in | BC-C - Bare Copper (Compacted) |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|------------|
| PE - Polyethylene | 0.193 in (4.90 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 |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.304 in (7.72 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.304 in (7.72 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Return Loss (RL)

| Frequency | Min. Return Loss |
|---------------|------------------|
| 2 - 216 MHz | 27 dB |
| 217 - 830 MHz | 23 dB |

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 0.3 dB/100ft |
| 3.6 MHz | 0.5 dB/100ft |
| 10 MHz | 0.9 dB/100ft |
| 71.5 MHz | 2.5 dB/100ft |
| 135 MHz | 3.6 dB/100ft |
| 270 MHz | 5.1 dB/100ft |
| 360 MHz | 6 dB/100ft |

| | |
|----------|---------------|
| 540 MHz | 7.4 dB/100ft |
| 720 MHz | 8.7 dB/100ft |
| 750 MHz | 8.9 dB/100ft |
| 1000 MHz | 10.5 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 11.6 Ohm/1000ft | 1.7 Ohm/1000ft (5.6 Ohm/km) | 20.5 pF/ft (67.3 pF/m) | 75 Ohm | 66% |

Voltage

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

Mechanical Characteristics

Temperature

| Operating |
|----------------|
| -20°C to +60°C |

Bend Radius

| Installation Min. |
|-------------------|
| 3.0 in (76 mm) |

| | |
|--------------------|-------------------|
| Max. Pull Tension: | 168 lbs (76.2 kg) |
| Bulk Cable Weight: | 61 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 |
| 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) |
| UK Regulation Compliance: | UKCA Mark |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Product Notes

| | |
|--------|--|
| Notes: | Compacted copper combines the Impedance uniformity of solid conductors and the ""nick-resistance"" of stranded conductors. |
|--------|--|

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.476 Revision Date: 04-13-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|--------------------|------------|----------|--------------|----------|
| 8281F J5C500 | Black, Vivid Matte | Reel | 500 ft | 612825355465 | |
| 8281F J5C1000 | Black, Vivid Matte | Reel | 1,000 ft | 612825355472 | C |
| 8281F G7X1000 | Blue, Matte | Reel | 1,000 ft | 612825357988 | C |
| 8281F U901000 | Gray, Matte | Reel | 1,000 ft | 612825203605 | C |
| 8281F G7W1000 | Green, Matte | Reel | 1,000 ft | 612825355533 | C |
| 8281F G7V1000 | Red, Matte | Reel | 1,000 ft | 612825355991 | C |

© 2024 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.