



Product: 8241 ☑

Analog Video, RG59, 23 AWG Solid BCCS, 95% BC Braid, PVC Jacket, CM

Product Description

23 AWG Solid .023" bare copper-covered steel conductor, polyethylene insulation, bare copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

| Condu | ctor | | | |
|--------------------------------------|--------------|----------------------------------|------------------------|---------|
| AWG | Stranding | Material | Nominal Diameter No. o | of Coax |
| 23 | Solid | BCCS - Bare Copper Covered Steel | 0.023 in 1 | |
| Condu | ctor Count: | 1 | | |
| nsulat | ion | | | |
| IV | aterial | Nominal Diameter | | |
| PE - F | olyethylene | 0.146 in | | |
| Outer : | Shield Mater | ial | | |
| Туре | Materia | al Coverage [%] | | |
| Braid | BC - Bare C | Copper 95 % | | |
| Outer . | Jacket Mater | rial | | |
| | Material | Nominal Diameter | | |
| PVC - | Polyvinyl Ch | loride 0.24 in | | |
| | ctor DCR | | | |
| | | or DCR Nominal Outer Shield DCR | | |
| 49 Oh | m/1000ft | 2.6 Ohm/1000ft | 2.6 Ohm/1000ft | |
| Capaci | tance | | | |
| Nom. Capacitance Conductor to Shield | | | | |
| 20.5 pF/ft | | | | |
| Inductance | | | | |
| Nomi | nal Inductan | се | | |
| 0.131 µH/ft | | | | |
| Impedance | | | | |
| Nominal Characteristic Impedance | | | | |
| 75 Oh | | | | |
| 70 011 | m | | | |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.6 dB/100ft |
| 10 MHz | 1.1 dB/100ft |
| 50 MHz | 2.4 dB/100ft |

| 100 MHz | 3.4 dB/100ft |
|----------|---------------|
| 200 MHz | 4.9 dB/100ft |
| 400 MHz | 7 dB/100ft |
| 700 MHz | 9.7 dB/100ft |
| 900 MHz | 11.1 dB/100ft |
| 1000 MHz | 12 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.54 ns/ft | 66 % |

Power Rating

| Frequency [MHz] | Max. Power Rating [W] | Nominal Power Rating [W] |
|-----------------|-----------------------|--------------------------|
| 50 MHz | 470 W | 470 W |
| 100 MHz | 310 W | 310 W |
| 300 MHz | 160 W | 160 W |
| 500 MHz | 115 W | 115 W |
| 1,000 MHz | 76 W | 76 W |

Voltage

| Non-UL Voltage Rating | UL Voltage Rating |
|-----------------------|-------------------------------------|
| 1700 V RMS | 30 V RMS (AWM 1354), 300 V RMS (CM) |
| | 30 V RMS |

Temperature Range

| UL Temp Rating: | 75°C |
|-----------------------|----------------|
| Operating Temp Range: | -40°C To +75°C |

Mechanical Characteristics

| Bulk Cable Weight: | 37 lbs/1000ft |
|----------------------------------|---------------|
| Max Recommended Pulling Tension: | 62 lbs |
| Min Bend Radius/Minor Axis: | 2.5 in |

Standards

| NEC/(UL) Specification: | CM |
|--------------------------|---------------|
| CEC/C(UL) Specification: | СМ |
| UL AWM Style: | UL Style 1354 |
| CPR Euroclass: | Eca |
| RG Type: | 59/U Type |

Applicable Environmental and Other Programs

| Environmental Space: | Outdoor - Aerial |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| Suitability - Aerial: | Yes - Black only, when supported by messenger wire |
|------------------------------------|--|
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes - Black only |

Flammability, LS0H, Toxicity Testing

| UL Flammability: | UL1685 UL Loading |
|------------------|-------------------|
|------------------|-------------------|

| ISO/IEC Flammability: | IEC 60332-1-2 |
|-----------------------|---|
| UL voltage rating: | 30 V RMS (UL AWM Style 1354), 300 V RMS (UL CM) |

Plenum/Non-Plenum

| Plenum (Y/N): | No |
|----------------|--------------|
| Plenum Number: | 88241, 82241 |

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------------|------------|----------|--------------|
| 8241 010100 | Black | Reel | 100 ft | 612825358695 |
| 8241 010500 | Black | Reel | 500 ft | 612825355717 |
| 8241 010U500 | Black | UnReel | 500 ft | 612825355977 |
| 8241 0101000 | Black | Reel | 1,000 ft | 612825356011 |
| 8241 010U1000 | Black | UnReel | 1,000 ft | 612825358060 |
| 8241 0102000 | Black | Reel | 2,000 ft | 612825358701 |
| 8241 0105000 | Black | Reel | 5,000 ft | 612825358640 |
| 8241 006U1000 | Blue, Light | UnReel | 1,000 ft | 612825357629 |
| 8241 005U1000 | Green, Dark | UnReel | 1,000 ft | 612825358039 |
| 8241 003U1000 | Orange | UnReel | 1,000 ft | 612825355601 |
| 8241 002U1000 | Red | UnReel | 1,000 ft | 612825358046 |
| 8241 009U1000 | White | UnReel | 1,000 ft | 612825358688 |
| 8241 004U1000 | Yellow | UnReel | 1,000 ft | 612825355595 |

Footnote: C - CRATE REEL PUT-UP.

History

Update and Revision: Revision Number: 0.268 Revision Date: 04-28-2020

© 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.