



REPRESENTATIVE IMAGE

Product: [3092A](#)

ControlBus™, Coax RG-6, #18 Sol BCCS, FPE Ins, QUAD AL Shld, PVC Jkt, CMR

[Request Sample](#)

Product Description

Coax RG-6 18 AWG (Solid) Bare Copper Covered Steel, Foam PE Insulation, Overall Duobond® II+Aluminum Braid(60%)+Duofoil®+Aluminum Braid(40%) Shield, PVC Outer Jacket, CMR

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | harsh environment, factory automation, ControlNet™, Modbus II, Industrial Coax, Belden ControlNet cables provide maximum signal integrity and run length exceeding the high-speed, time-critical requirements necessary for ControlNet factory floor applications |
|------------------------|---|

Construction Details

| | |
|----------|---|
| RG Type: | 6 |
|----------|---|

Conductor

| AWG | Stranding | Nom. Diameter | Material |
|-----|-----------|---------------|----------------------------------|
| 18 | Solid | 0.040 in | BCCS - Bare Copper Covered Steel |

Insulation

| Material | Nom. Diameter |
|--------------------------|---------------|
| PE - Polyethylene (Foam) | 0.180 in |

Outer Shield Material

| Layer | Outer Shield Type | Material | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1 | Tape | Tri-Laminate (Alum+Poly+Alum) | Duobond® II | 100% |
| 2 | Braid | Aluminum | | 60% |
| 3 | Tape | Tri-Laminate (Alum+Poly+Alum) | Duofoil® | 100% |
| 4 | Braid | Aluminum | | 40% |

Outer Jacket Material

| Material | Nom. Diameter |
|--------------------------|---------------|
| PVC - Polyvinyl Chloride | 0.298 in |

Electrical Characteristics

Return Loss (RL)

| Frequency [MHz] | Min. Structural Return Loss [dB] |
|-----------------|----------------------------------|
| 5 - 50 MHz | 23 dB |

Attenuation

| Frequency | Nom. Attenuation [dB/100ft] |
|-----------|-----------------------------|
| 1 MHz | 0.35 dB/100ft |
| 2 MHz | 0.38 dB/100ft |
| 5 MHz | 0.45 dB/100ft |
| 10 MHz | 0.59 dB/100ft |
| 20 MHz | 0.86 dB/100ft |
| 50 MHz | 1.37 dB/100ft |
| 100 MHz | 1.97 dB/100ft |

| | |
|---------|---------------|
| 200 MHz | 2.82 dB/100ft |
| 300 MHz | 3.48 dB/100ft |
| 400 MHz | 4.04 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Impedance | Nom. Velocity |
|--------------------|-----------------------|---------------------------------|----------------|---------------|
| 28 Ohm/1000ft | 2.6 Ohm/1000ft | 16.2 pF/ft | 75 Ohm | 83% |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V (CMR, CMG) |

Mechanical Characteristics

Temperature

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

Bend Radius

| Installation Min. |
|-------------------|
| 3 in |

| | |
|--------------------|---------------|
| Bulk Cable Weight: | 35 lbs/1000ft |
| Max. Pull Tension: | 118 lbs |

Standards and Compliance

| | |
|---------------------------------|---|
| Environmental Suitability: | Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance |
| Sustainability: | CA Prop 65 |
| Flammability / Fire Resistance: | UL 1666 Vertical Shaft |
| NEC / UL Compliance: | CMR, CL2R, CMG |
| CEC / C(UL) Compliance: | CMG |
| European Directive 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) |
| Plenum Number: | 3093A |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.372 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.