



**Product:** [3092T](#)

ControlBus™, Coax RG6, #18 Sol BCCS, PO Ins, QUAD AL Shld, LSZH Jkt, CMG

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### Product Description

ControlBus™, Coax RG6 18AWG (Solid) Bare Copper Covered Steel, PO Insulation, Overall Duofoil®+ Aluminum Braid(60%)+Overall Duofoil®+Aluminum Braid(40%) Shield, LSZH Outer Jacket, CMG

### 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 |
|------------------------|---|

#### Physical Characteristics (Overall)

##### Conductor

| AWG | Stranding | Material                         | Nominal Diameter | No. of Coax |
|-----|-----------|----------------------------------|------------------|-------------|
| 18  | Solid     | BCCS - Bare Copper Covered Steel | 0.040 in         | 1           |

Conductor Count: 1

##### Insulation

| Material                 | Nominal Diameter |
|--------------------------|------------------|
| PE - Polyethylene (Foam) | 0.180 in         |

##### Outer Shield

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

##### Outer Jacket

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - Polyethylene | 0.3 in           |

Table Notes: Flame Retardant

#### Electrical Characteristics

##### Conductor DCR

| Nominal Conductor DCR | Outer Conductor DCR |
|-----------------------|---------------------|
| 28 Ohm/1000ft         | 3.6 Ohm/1000ft      |

##### Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 16.2 pF/ft                           |

##### Inductance

| Nominal Inductance |
|--------------------|
| 0.097 µH/ft        |

## Impedance

### Nominal Characteristic Impedance

75 Ohm

## Return Loss (RL)

### Frequency [MHz] | Min. Structural Return Loss (SRL)

5-50 MHz | 23 dB

## High Frequency (Nominal/Typical)

### Frequency [MHz] | Nom. Insertion Loss

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

## Delay

### Nominal Delay | Nominal Velocity of Propagation (VP) [%]

1.25 ns/ft | 83%

## Voltage

### UL Voltage Rating

300 V RMS

## Temperature Range

UL Temp Rating: 75°C

Operating Temperature Range: -20°C To +75°C

## Mechanical Characteristics

Bulk Cable Weight: 35 lbs/1000ft

Max. Pull Tension: 162 lbs

Min. Bend Radius/Minor Axis: 3.0 in

## Standards

NEC/(UL) Compliance: CL2, CMG

CEC/C(UL) Compliance: CMG

RG Type: 6

Other Specification: ABS Type Approval Certificate 19-HS1852547

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2003/11/EC (BFR): Yes

EU Directive 2011/65/EU (RoHS 2): Yes

EU Directive 2012/19/EU (WEEE): Yes

EU Directive 2015/863/EU (RoHS 2 amendment): Yes

EU Directive Compliance: EU Directive 2003/11/EC (BFR)

EU CE Mark: Yes

## Flammability, LSOH, Toxicity Testing

IEC Flammability: IEC 60332-3-22

IEEE Flammability: 1202

UL voltage rating: 300 V RMS

## Related Part Numbers

## Variants

| Item #        | Color | UPC          |
|---------------|-------|--------------|
| 3092T 0105000 | Black | 612825141433 |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.327 Revision Date: 11-09-2022 |
|----------------------|--|

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