

## 3092F Coax - ControlNet™ and ControlBus™ Quad Shielded Coax

For more Information  
please call

1-800-Belden1



### General Description:

20 AWG stranded (105x40) bare copper conductor, foam polyethylene insulation, Duobond IV® quad shield (100% coverage), PVC Jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (mm) |
|--------|-----|-----------|--------------------|-----------|
| 1      | 20  | 105x40    | BC - Bare Copper   | 1.016     |

Total Number of Conductors: 1

#### Insulation

Insulation Material:

| Insulation Material     | Dia. (mm) |
|-------------------------|-----------|
| FPE - Foam Polyethylene | 4.6482    |

#### Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type  | Outer Shield Material                             | Coverage (%) |
|---------|-------------------------|-------|---|--------------|
| 1       | Bonded Duofoil®         | Tape  | Bonded Aluminum Foil-Polyester Tape-Aluminum Foil | 100.000      |
| 2       |                         | Braid | AL - Aluminum                                     | 60.000       |
| 3       | Duofoil®                | Tape  | Aluminum Foil-Polyester Tape-Aluminum Foil        | 100.000      |
| 4       |                         | Braid | AL - Aluminum                                     | 40.000       |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

#### Overall Cable

Overall Nominal Diameter: 7.696 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

Bulk Cable Weight: 59.528 Kg/Km

Max. Recommended Pulling Tension: 155.687 N

Min. Bend Radius/Minor Axis: 76.200 mm

Min. Flexing Radius: 15.240 cm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CL2R, CMR

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

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

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

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

CA Prop 65 (CJ for Wire & Cable): Yes

MIL Order #39 (China RoHS): Yes

## METRIC MEASUREMENT VERSION

### 3092F Coax - ControlNet™ and ControlBus™ Quad Shielded Coax

RG Type: 6/U

#### Flame Test

UL Flame Test: UL1666 Riser

CSA Flame Test: FT4

#### Surface Printing (Overall)

#### Electrical Characteristics (Overall)

##### Nom. Characteristic Impedance:

Impedance (Ohm)

75

##### Nom. Inductance:

Inductance (µH/m)

0.354348

##### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

55.777

##### Nominal Velocity of Propagation:

VP (%)

79

##### Nominal Delay:

Delay (ns/m)

4.23249

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

34.4505

##### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

11.8116

##### Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 1           | 1.18116               |
| 2           | 1.54207               |
| 5           | 2.6248                |
| 10          | 3.9372                |
| 20          | 6.562                 |
| 50          | 10.4992               |
| 100         | 15.0926               |
| 200         | 21.3265               |
| 300         | 26.248                |
| 400         | 30.5133               |

##### Other Electrical Characteristic 1:

IEEE 802.4 MAP/IEEE 802.7 Mini-Map

##### Shield Effectiveness:

| Description              | Freq. (MHz) | Effectiveness (dB) |
|--------------------------|-------------|--------------------|
| Unflexed                 | 30          | 92                 |
| After 1.5 million flexes | 30          | 60                 |

##### Minimum Structural Return Loss:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Min. SRL (dB) |
|-------------|-------------|-------------------|------------------|---------------|
|             |             | 5                 | 400              | 23            |

#### Notes (Overall)

Notes: CPE Jacket optional. Flex Life: 1.5 Million cycles @ 6.0" minimum bend radius. For Rockwell authorized Flexible ControlNet order YR28890 (Tinned Copper Braid Version).

#### Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc             |
|---------------|----------|-------------|-------|-------|-----------------------|
| 3092F 0101000 | 1,000 FT | 33.000 LB   | BLACK |       | #20 GIFHDLPE DBSH PVC |
| 3092F 0105000 | 5,000 FT | 170.000 LB  | BLACK | C     | #20 GIFHDLPE DBSH PVC |

##### Notes:

C = CRATE REEL PUT-UP.

### 3092F Coax - ControlNet™ and ControlBus™ Quad Shielded Coax

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