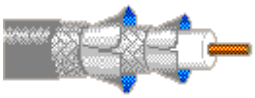
# Detailed Specifications & Technical Data

**ENGLISH MEASUREMENT VERSION**

## 3094A Coax - ControlBus™ Quad Shielded Coax



For more Information please call

1-800-Belden1

## Description

14 AWG solid bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® IV quad shield (100% coverage), PVC Jacket.

## Suitable Applications (Overall):

| | |
|---|---|
| Suitable Applications | RG-11/U Type |

## Physical Characteristics (Overall):

**Conductor:**

AWG

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|---|---|---|---|---|
| 1 | 14 | Solid | BCCS - Bare Copper Covered Steel | 0.064 |

**Insulation:**

Insulation Material

| Ins Material | Dia. (in.) |
|---|---|
| Gas-injected FPE - Foam Polyethylene | 0.280 |

**Outer Shield:**

Outer Shield Material

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | % Coverage (%) |
|---|---|---|---|---|
| 1 | Duofoil® | Tape | Bonded Aluminum Foil-Polyester Tape-Aluminum Foil | 100 |
| 2 | | Braid | AL - Aluminum | 60 |
| 3 | Duofoil® | Tape | Aluminum Foil-Polyester Tape-Aluminum Foil | 100 |
| 4 | | Braid | AL - Aluminum | 40 |

**Outer Jacket:**

Outer Jacket Material

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

**Overall Cabling:**

| | |
|---|---|
| Overall Nominal Diameter: | .407 in. |

## Mechanical Characteristics (Overall):

| | |
|---|---|
| Operating Temperature Range | -40°C To +80°C |
| Bulk Cable Weight: | 59 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 308 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 4.500 in. |

## Applicable Specifications and Agency Compliance (Overall):

**Applicable Standards:**

| | |
|---|---|
| NEC/(UL) Specification | CL2R, CMR |
| CEC/C(UL) Specification | CMG |
| EU RoHS Compliant (Y/N) | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy) | 01/01/2004 |
| RG Type | 11/U |

**Flame Test:**

| | |
|---|---|
| UL Flame Test | UL1666 Riser |
| CSA Flame Test | FT4 |

**Plenum/Non-Plenum:**

| | |
|---|---|
| Plenum (Y/N) | N |
| Plenum Number | 3095A |

## Electrical Characteristics (Overall):

Nom. Characteristic Impedance

| Impedance (Ohm) |
|---|
| 75 +/- 3 |

Nom. Inductance

| Inductance (µH/ft) |
|---|
| 0.097 |

Nom. Capacitance Conductor to Shield

| Capacitance (pF/ft) |
|---|
| 16.200 |

Nominal Velocity of Propagation

| VP (%) |
|---|
| 82 |

Nominal Delay

| Delay (ns/ft) |
|---|
| 1.200 |

Nom. Conductor DC Resistance

| DCR @ 20°C (Ohm/1000 ft) |
|---|
| 11.000 |

Nominal Outer Shield DC Resistance

| DCR @ 20°C (Ohm/1000 ft) |
|---|
| 1.500 |

Nom. Attenuation

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Attenuation (dB/100 ft.) |
|---|---|---|---|---|
| | 1.000 | | | 0.160 |
| | 2.000 | | | 0.180 |
| | 5.000 | | | 0.260 |
| | 10.000 | | | 0.380 |
| | 20.000 | | | 0.550 |
| | 50.000 | | | 0.830 |
| | 100.000 | | | 1.170 |
| | 200.000 | | | 1.600 |
| | 300.000 | | | 1.990 |
| | 400.000 | | | 2.300 |

Max. Attenuation

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Attenuation (dB/100 ft.) |
|---|---|---|---|---|
| | 1.000 | | | 0.330 |
| | 2.000 | | | 0.350 |
| | 5.000 | | | 0.440 |
| | 10.000 | | | 0.660 |
| | 20.000 | | | 0.780 |
| | 50.000 | | | 0.990 |
| | 100.000 | | | 1.320 |
| | 200.000 | | | 1.870 |
| | 300.000 | | | 2.290 |
| | 400.000 | | | 2.640 |

Max. Operating Voltage - UL

| Voltage |
|---|
| 600 V RMS |

Minimum Structural Return Loss

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Min. SRL (dB) |
|---|---|---|---|---|
| | | 5.000 | 400.000 | 20.000 |

## Notes (Overall):

Notes Sweep tested 5 to 400 MHz. Tap marks every 2.6 Meters to aid users in installation.

## PUT UPS AND COLORS:

| Item # | Putup | Ship Weight | Jacket Color | Notes | Item Desc |
|---|---|---|---|---|---|
| 3094A F2V1000 | 1,000 FT | 67.000 LB | GRAY, DEC | | #14 GIFHDLDPE DSH PVC GRYDEC |
| 3094A F2V2000 | 2,000 FT | 136.000 LB | GRAY, DEC | C | #14 GIFHDLDPE DSH PVC GRYDEC |
| 3094A F2V500 | 500 FT | 34.500 LB | GRAY, DEC | | #14 GIFHDLDPE DSH PVC GRYDEC |

**Notes:**
C = CRATE REEL PUT-UP.

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