Detailed Specifications & Technical Data



3093A Coax - ControlNet™ Quad Shielded Coax

For more Information please call

1-800-Belden1



Description:

18 AWG solid bare copper-covered steel conductor, foam FEP insulation, Duobond® IV Quad Shield (100% coverage), fluorocopolymer Jacket.

| (| (100% coverage), nuorocopolymer sacket. | | | | | | | |
|---|---|-----------------------|-------------------------|------------|---------------------------------|--------------------------------------|--------------|--|
| Phys | sical C | Characteristi | ics (Over | rall) | | | | |
| | n <mark>ducto</mark> WG: | r | | | | | | |
| | # Coax | AWG Stranding | Conductor I | Mate | rial | Dia. (mm) | | |
| | 1 | 18 Solid | BCCS - Bare | e Cop | oper Covered S | teel 1.016 | | |
| _ | Total N | umber of Cond | luctors: | | | 1 | | |
| | ulation sulation | n Material: | | | | | | |
| | Insulati | on Material | | | Dia. (mm) | | | |
| | FFEP - | Foam Fluorinated | Ethylene Pro | pyler | ne 4.318 | | | |
| | er Shie uter Sh | eld ield Material: | | | | | | |
| | Layer # | Outer Shield Tra | ade Name Ty | уре | Outer Shield M | laterial | Coverage (%) | |
| | 1 | Bonded Duofoil® | | | | um Foil-Polyester Tape-Aluminum Foil | 100 | |
| | 2 | | | | AL - Aluminum | | 60 | |
| | 3 4 | Duofoil® | | | Aluminum Foil- AL - Aluminum | Polyester Tape-Aluminum Foil | 100 40 | |
| | 4 | | | | AL - Aluminum | | 40 | |
| | Outer Jacket Outer Jacket Material: Outer Jacket Material PVDF - Fluorocopolymer | | | | | | | |
| | | Nominal Diam | eter: | | | 6.960 mm | | |
| Mec | hanica | al Character | ristics (O ^v | vera | all) | | | |
| | | ng Temperatur | | | , | -20°C To +150°C | | |
| | Non-UL | . Temperature I | Rating: | | | 150°C | | |
| _ | Bulk Ca | able Weight: | | | | 63.993 Kg/Km | | |
| _ | Max. Recommended Pulling Tension: | | | 462.613 N | | | | |
| _ | Min. Bend Radius/Minor Axis: | | | | | 69.850 mm | | |
| Applicable Specifications and Agency Compliance (Overall) | | | | | | | | |
| Applicable Standards & Environmental Programs | | | | | | | | |
| _ | NEC/(UL) Specification: CEC/C(UL) Specification: EU Directive 2000/53/EC (ELV): | | | CMP | | | | |
| _ | | | | CMP FT6 | | | | |
| _ | | | | Yes | | | | |
| _ | EU Directive 2002/95/EC (RoHS): | | | Yes | | | | |
| | EU RoHS Compliance Date (mm/dd/yyyy): | | | 04/01/2005 | | | | |

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METRIC MEASUREMENT VERSION

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| | EU Directive 2002/96/EC (WEEE): | Yes |
|-----|-----------------------------------|----------|
| | EU Directive 2003/11/EC (BFR): | Yes |
| | CA Prop 65 (CJ for Wire & Cable): | Yes |
| | MII Order #39 (China RoHS): | Yes |
| | RG Type: | 6/U |
| Fla | ame Test | |
| | UL Flame Test: | NFPA 262 |
| Sι | itability | |
| | Suitability - Outdoor: | Yes |
| | Suitability - Burial: | Yes |
| | | |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/m)

0.305133

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 53.4803

Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/m) 4.19968

4.19900

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

91.868

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

11.8116

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

| • • • | · · · |
|-------|---------|
| 1 | 1.18116 |
| 2 | 1.24678 |
| 5 | 1.6405 |
| 10 | 2.13265 |
| 20 | 3.11695 |
| 50 | 4.9215 |
| 100 | 6.95572 |
| 200 | 9.81019 |
| 300 | 12.0085 |
| 400 | 13.8786 |
| | |

Minimum Structural Return Loss:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Min. SRL (dB) |
|-------------|-------------|-------------------|------------------|---------------|
| | | 5 | 50 | 23 |

Notes (Overall)

Notes: Blue available as standard in 1000-ft put-up only. Suitable for Outdoor and Direct Burial applications.



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Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|--------|-------------|----------|-------|-------------------|
| 3093A X7E1000 | 305 MT | 18.144 KG | BLUE X7E | С | #18 FFEP DBSH SLF |
| 3093A 0101000 | 305 MT | 18.144 KG | BLACK | С | #18 FFEP DBSH SLF |
| 3093A 0102000 | 610 MT | 36.288 KG | BLACK | CN | #18 FFEP DBSH SLF |
| 3093A 0102500 | 762 MT | 43.091 KG | BLACK | CN | #18 FFEP DBSH SLF |

Notes:

C = CRATE REEL PUT-UP

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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