

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

### 3093A Coax - ControlNet™ Quad Shielded Coax



For more Information  
please call

1-800-Belden1



#### General Description:

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

#### Physical Characteristics (Overall)

##### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BCCS - Bare Copper Covered Steel	1.016

Total Number of Conductors: 1

##### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
FFEP - Foam Fluorinated Ethylene Propylene	4.318

##### Outer Shield

Outer Shield Material:

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

##### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVDF - Fluorocopolymer

#### Overall Cable

Overall Nominal Diameter: 6.960 mm

#### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +150°C

Non-UL Temperature Rating: 150°C

Bulk Cable 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: CMP

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

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

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

EU RoHS Compliance Date (mm/dd/yyyy): 04/01/2005

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

##### Flame Test

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UL Flame Test: NFPA 262

#### Suitability

Suitability - Outdoor: Yes

Suitability - Burial: Yes

#### Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 3092A

#### Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)  
75

Nom. Inductance:

Inductance (μH/m)  
0.305133

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)  
53.4803

Nominal Velocity of Propagation:

VP (%)  
82

Nominal Delay:

Delay (ns/m)  
4.19968

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.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3093A X7E1000	1,000 FT	40.000 LB	BLUE X7E	C	#18 FFEP DBSH SLF
3093A 0101000	1,000 FT	40.000 LB	BLACK	C	#18 FFEP DBSH SLF
3093A 0102000	2,000 FT	80.000 LB	BLACK	C N	#18 FFEP DBSH SLF
3093A 0102500	2,500 FT	95.000 LB	BLACK	C N	#18 FFEP DBSH SLF
3093A 0105000	5,000 FT	195.000 LB	BLACK	C Z	#18 FFEP DBSH SLF

Notes:

C = CRATE REEL PUT-UP.

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

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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