# **Detailed Specifications & Technical Data**



# 3094A Coax - ControlBus™ Quad Shielded Coax

For more Information please call

1-800-Belden1



# **General Description:**

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

	verall)						
Suitabl	Suitable Applications:			G-11/U Тур	9		
hysical (	Characteris	tics (Overall)	)				
Conducto AWG:	r						
# Coax	AWG Stranding	g Conductor Mate	erial	Dia. (mm)			
1	14 Solid	BCCS - Bare Co	pper Covered Steel	1.6256			
nsulation	Total Number of Conductors: 1						
	ion Material	Di	a. (mm)				
Gas-injected FPE - Foam Polyethylene 7.112							
Gas-inj Outer Shi							
Gas-inj Outer Shi Outer Sh	eld hield Material:		Outer Shield Mate	ial		Coverage (%)	I
Gas-inj Outer Shi Outer Sh	eld hield Material:	rade Name Type Tape			Tape-Aluminum Foil	<b>Coverage (%)</b> 100 60	

#### **Outer Jacket**

3

4

Outer Jacket Material:

Outer Jacket Material

PVC - Polyvinyl Chloride

Duofoil®

# **Overall Cable**

**Overall Nominal Diameter:** 

10.338 mm

Tape Aluminum Foil-Polyester Tape-Aluminum Foil

Braid AL - Aluminum

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +80°C			
Bulk Cable Weight:	87.804 Kg/Km			
Max. Recommended Pulling Tension:	1370.046 N			
Min. Bend Radius/Minor Axis:	114.300 mm			

100

40

Applicable Specifications and Agen	oplicable Specifications and Agency Compliance (Overall)					
Applicable Standards & Environmental	Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	CL2R, CMR					
CEC/C(UL) Specification:	CMG					
EU Directive 2000/53/EC (ELV):	Yes					

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

# 3094A Coax - ControlBus™ Quad Shielded Coax

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
MII Order #39 (China RoHS):	Yes
RG Type:	11/U
Flame Test	
UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	3095A

# Surface Printing (Overall)

#### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)Tolerance (Ohms)75± 3

### Nom. Inductance:

Inductance (µH/m)

0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 53.1522

Nominal Velocity of Propagation:

**VP (%)** 82

Nominal Delay:

Delay (ns/m)

3.9372

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 36.091

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

4.9215

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.52496
2	0.59058

5	0.85306
10	1.24678
20	1.80455
50	2.72323
100	3.83877
200	5.2496
300	6.52919
400	7.5463

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

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#### METRIC MEASUREMENT VERSION

# 3094A Coax - ControlBus™ Quad Shielded Coax

1	1.08273
2	1.14835
5	1.44364
10	2.16546
20	2.55918
50	3.24819
100	4.33092
200	6.13547
300	7.51349
400	8.66184

Max. Operating Voltage - UL:

Voltage 300 V RMS

Minimum Structural Return Loss:

Description Fi	req. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
		5	400	20

# 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	Color	Notes	Item Desc
3094A F2V1000	305 MT	30.391 KG	GRAY, DEC		#14 GIFHDLDPE DSH PVC
3094A F2V2000	610 MT	61.689 KG	GRAY, DEC	С	#14 GIFHDLDPE DSH PVC
3094A F2V500	152 MT	15.649 KG	GRAY, DEC		#14 GIFHDLDPE DSH PVC

#### Notes:

C = CRATE REEL PUT-UP.

# **Test Reports**

a) UL

i) UL Test Reports are available on-line through the UL Client Document Access web portal.

ií) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal. ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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