



**Product:** [3093A](#)

ControlBus™, Coax RG-6, #18 Sol BCCS, FFEP Ins, QUAD AL Shld, PVDF Jkt, CMP High Temp 150C

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### Product Description

Coax RG-6 18 AWG (Solid) Bare Copper Covered Steel, Foam FEP Insulation, Overall Duobond® II+ Aluminum Braid(60%)+Duofoil®+Aluminum Braid(40%) Shield, PVDF Outer Jacket, CMP High Temp 150C

### Technical Specifications

#### Product Overview

Suitable Applications:	Harsh environment, factory automation, ControlNet™, Modbus II, Industrial Coax, Belden ControlNet cables provide maximum signal integrity and run length exceeding the high-speed, time-critical requirements necessary for ControlNet factory floor applications
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#### Construction Details

RG Type:	6
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#### Conductor

Size	Stranding	Nom. Diameter	Material
18 AWG	Solid	0.040 in	BCCS - Bare Copper Covered Steel

#### Insulation

Material	Nom. Insulation Diameter	Color Code
FEP - Fluorinated Ethylene Propylene (Foam)	0.170 in (4.32 mm)	White

#### Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Aluminum		60%
3	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
4	Braid	Aluminum		40%

#### Outer Jacket

Material	Nom. Diameter
PVDF - Polyvinylidene Fluoride	0.274 in (6.96 mm)
Overall Cable Diameter (Nominal):	0.274 in (6.96 mm)

#### Electrical Characteristics

##### Return Loss (RL)

Frequency	Min. Structural Return Loss
5 - 50 MHz	23 dB

##### Attenuation

Frequency	Nom. Attenuation
1 MHz	0.34 dB/100ft
2 MHz	0.37 dB/100ft
5 MHz	0.44 dB/100ft
10 MHz	0.58 dB/100ft
20 MHz	0.85 dB/100ft

50 MHz	1.39 dB/100ft
100 MHz	1.99 dB/100ft
200 MHz	2.92 dB/100ft
300 MHz	3.68 dB/100ft
400 MHz	4.38 dB/100ft

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
28 Ohm/1000ft	2.6 Ohm/1000ft (8.5 Ohm/km)	16.5 pF/ft (54.1 pF/m)	75 Ohm	82%

#### Voltage

UL Voltage Rating
300 V (CMP)

## Mechanical Characteristics

#### Temperature

UL Temperature	Operating
150°C	-20°C to +150°C

#### Bend Radius

Installation Min.
2.75 in (69.9 mm)

Max. Pull Tension:	104 lbs (47.2 kg)
Bulk Cable Weight:	36 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor, Outdoor, Aerial - When supported by messenger wire, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	3092A

## Product Notes

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

Update and Revision:	Revision Number: 0.499 Revision Date: 11-27-2023
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## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
3093A 0101000	Black	Reel	1,000 ft	612825141464	C
3093A 0102500	Black	Reel	2,500 ft	612825141488	C N
3093A 0105000	Black	Reel	5,000 ft	612825141495	C Z

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