



Product: [3093A](#)

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

[Request Sample](#)

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
------------------------	---

Construction Details

RG Type:	6
----------	---

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.
--------	---

History

Update and Revision:	Revision Number: 0.500 Revision Date: 04-29-2024
----------------------	--

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

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.