



Product: [3132A](#) 

ControlBus™, Coax RG6, #18 Sol BCCS, FEP Ins, QUAD AL Shld, PVDF Jkt, CMP

 [Request Sample](#)

Product Description

ControlBus™, Coax RG6 18AWG (Solid) Bare Copper Covered Steel, FEP Insulation, Overall Duofoil®+ Aluminum Braid(60%)+Overall Duofoil®+Aluminum Braid(40%) Shield, PVDF Outer Jacket, CMP

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

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BCCS - Bare Copper Covered Steel	0.04 in	1

Conductor Count:	1
------------------	---

Insulation

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene (Foam)	0.17 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Bonded Duofoil®	100 %
Braid	2	Aluminum		60 %
Tape	3	Alum / Poly / Alum	Duofoil®	100 %
Braid	4	Aluminum		40 %

Outer Jacket Material

Material	Nominal Diameter
PVDF - Polyvinylidene Fluoride	0.274 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
28 Ohm/1000ft	7.2 Ohm/1000ft	7.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.3 pF/ft

Inductance

Nominal Inductance
0.093 µH/ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
100 Ohm	± 3 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.36 dB/100ft
2 MHz	0.38 dB/100ft
5 MHz	0.5 dB/100ft
10 MHz	0.65 dB/100ft
20 MHz	0.95 dB/100ft
50 MHz	1.5 dB/100ft
100 MHz	2.12 dB/100ft
200 MHz	2.99 dB/100ft
300 MHz	3.66 dB/100ft
400 MHz	4.23 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	82 %

Phase Delay Distortion

f/B	%PDD/100M (5MB)
0.5	-0.54
1	-0.19
1.5	0
2	0.16
2.5	0.3

High Freq

Frequency [MHz]	Min. SRL (Structural Return Loss)
1 MHz	23 dB
2 MHz	
5 MHz	
10 MHz	
20 MHz	
50 MHz	
100 MHz	
200 MHz	
300 MHz	
400 MHz	

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Tilt 5 to 10 MHz: .48 dB/100 M
Other Electrical Characteristic 2:	Tilt 10 to 20 MHz: .93 dB/100 M
Other Electrical Characteristic 3:	Sweep Tested 5 to 400MHz.

Temperature Range

UL Temp Rating:	150°C
Operating Temp Range:	-20°C To +150°C

Mechanical Characteristics

Bulk Cable Weight:	43 lbs/1000ft
Max Recommended Pulling Tension:	104 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	6/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Outdoor:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Non-Plenum Number:	3131A
--------------------	-------

Variants

Item #	Color	Putup Type	Length	UPC
3132A F2V1000	Gray, DEC	Reel	1,000 ft	612825142065

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

Product Notes

Notes:	Tap Marks Every 2.6 Meters to aid in users installation.
--------	--

History

Update and Revision:	Revision Number: 0.323 Revision Date: 04-28-2020
----------------------	--

© 2020 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.