



**Part Number:** 3131A

ControlBus™, (1) 18 AWG Solid BCCS, FPE/PVC,  
Foil+Braid Shld, CMR

## Product Description

One 18 AWG solid bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® IV Quad Shield (100% coverage), PVC Jacket.

## Product Specifications

## Technical Specifications

<b>Suitable Applications:</b>	RG-6/U Type
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## Construction and Dimensions

### Conductor:

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

<b>Total Number of Conductors:</b>	1
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### Insulation:

Material	Nominal Diameter
Gas-injected FPE - Foam Polyethylene	0.18 in

### Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	Bonded Duofoil®	100 %
Braid	2	AL - Aluminum		60 %
Tape	3	Aluminum Foil-Polyester Tape-Aluminum Foil	Duofoil®	100 %
Braid	4	AL - Aluminum		40 %

## Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.3 in
<b>Print Legend:</b>	CONTROLBUS(R) BY BELDEN - 3131A RG-6/U TYPE 75C QUAD SHIELD 1C18 E108998 (UL) CL2R OR CMR OR C(UL) CMG

## Electrical Characteristics

### Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
28 Ohm/1000ft	3.6 Ohm/1000ft

### Capacitance:

Nom. Capacitance Conductor to Shield	
16.2 pF/ft	
<b>Other Electrical Characteristic 1:</b>	Tilt 5 to 10 MHz: 0.53 dB/100 M
<b>Other Electrical Characteristic 2:</b>	Tilt 10 to 20 MHz: 0.89 dB/100 M

### Impedance:

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	± 3 Ohm

### High Frequency (Nominal/Typical):

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.35 db/100ft
2 MHz	0.38 db/100ft
5 MHz	0.45 db/100ft
10 MHz	0.59 db/100ft
20 MHz	0.86 db/100ft
50 MHz	1.37 db/100ft
100 MHz	1.97 db/100ft
200 MHz	2.82 db/100ft
300 MHz	3.48 db/100ft
400 MHz	4.04 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	-1.03
1	-0.3
1.5	0
2	0.2
2.5	0.4

**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	
400 MHz	
5 MHz	

**Inductance:**

Nominal Inductance
0.097 µH/ft

**Use**

Max Recommended Pulling Tension:	162 lbs
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**Safety**

CSA Flammability:	FT4
UL Flammability:	UL1666 Riser

**Temperature Range**

Operating Temp Range:	-30°C To +75°C
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**Mechanical Characteristics**

Min Bend Radius/Minor Axis:	3 in
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## Part Number

Plenum (Y/N):	No
Plenum Number:	3132A

## Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) Specification
IEEE Specification:	IEEE Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC/(UL) Specification:	NEC/(UL) Specification
RG Type:	RG Type
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	EU CE Mark

## History

Notes:	Sweep tested 5 to 400 MHz. Tap Marks Every 2.6 Meters to aid in users installation.
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## Product Variants

Part Number	Color	Put-Up Type	Length
3131A F2V1000	GRAY, DEC	Reel	1000 ft

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