



**Part Number:** 3093A

ControlNet™, (1) 18 AWG Solid BCCS, FFEP/PVDF, Foil+Braid Shld, CMP

## Product Description

One 18 AWG solid bare copper-covered steel conductor, foam fluorinated ethylene propylene (FFEP) insulation, Duobond® IV Quad Shield (100% coverage), fluorocopolymer (PVDF) Jacket.

## Product Specifications

## Technical Specifications

### 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

#### Insulation:

Material	Nominal Diameter
FFEP - Foam Fluorinated Ethylene Propylene	0.17 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
PVDF - Fluorocopolymer	0.274 in

## Electrical Characteristics

### Conductor DCR:

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

### Capacitance:

Nom. Capacitance Conductor to Shield
16.3 pF/ft

### Impedance:

Nominal Characteristic Impedance
75 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) [%]
1.28 ns/ft	82 %

### 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	
5 MHz	
50 MHz	

### Inductance:

Nominal Inductance
0.093 $\mu$ H/ft

### Use

Suitability - Burial:	Yes
Suitability - Outdoor:	Yes
Max Recommended Pulling Tension:	104 lbs

### Safety

UL Flammability:	NFPA 262
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### Temperature Range

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

### Mechanical Characteristics

Min Bend Radius/Minor Axis:	2.75 in
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### Part Number

Plenum (Y/N):	Yes
Non-Plenum Number:	3092A

### Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
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)

## History

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

Part Number	Color	Put-Up Type	Length
3093A 0101000	BLACK	Reel	1000 ft
3093A 0102000	BLACK	Reel	2000 ft
3093A 0102500	BLACK	Reel	2500 ft
3093A 0105000	BLACK	Reel	5000 ft
3093A X7E1000	BLUE X7E	Reel	1000 ft

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