



**Part Number:** 3092F

ControlNet™, (1) 20 AWG (105x40) TC, FPE/PVC,  
Foil+Braid Shld, CMR

## Product Description

One 20 AWG stranded (105x40) bare copper conductor, foam polyethylene insulation, Duobond IV® quad shield (100% coverage), PVC Jacket.

## Product Specifications

## Technical Specifications

### Construction and Dimensions

#### Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	105x40	BC - Bare Copper	0.04 in	1
<b>Total Number of Conductors:</b>				1

#### Insulation:

Material	Nominal Diameter
FPE - Foam Polyethylene	0.183 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	0.303 in
<b>Print Legend:</b>	CONTROLBUS(R) BY BELDEN - 3092F RG-6/U TYPE 75C QUAD SHIELD E108998 1C20 (UL) CL2R OR CMR OR C(UL) CMG---FT4

## Electrical Characteristics

### Conductor DCR:

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

### Capacitance:

Nom. Capacitance Conductor to Shield	
17 pF/ft	
<b>Other Electrical Characteristic 1:</b>	IEEE 802.4 MAP/IEEE 802.7 Mini-Map

### Impedance:

Nominal Characteristic Impedance
75 Ohm

### High Frequency (Nominal/Typical):

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.36 db/100ft
2 MHz	0.47 db/100ft
5 MHz	0.8 db/100ft
10 MHz	1.2 db/100ft
20 MHz	2 db/100ft
50 MHz	3.2 db/100ft
100 MHz	4.6 db/100ft
200 MHz	6.5 db/100ft
300 MHz	8 db/100ft
400 MHz	9.3 db/100ft

### Delay:

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.29 ns/ft	79 %

### 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
0.108 $\mu$ H/ft

### Screening:

Frequency [MHz]	Shield Effectiveness	Shield Effectiveness Description
30 MHz	92 dB	Unflexed
30 MHz	60 dB	After 1.5 million flexes

### Use

Max Recommended Pulling Tension:	35 lbs
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### Safety

CSA Flammability:	FT4
UL Flammability:	UL1666 Riser

### Temperature Range

Operating Temp Range:	-40°C To +75°C
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### Mechanical Characteristics

Min Bend Radius/Minor Axis:	3 in
Min Flexing Radius:	6 in

### Part Number

## Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) 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:	CPE Jacket optional. Flex Life: 1.5 Million cycles @ 6.0" minimum bend radius. For Rockwell authorized Flexible ControlNet order YR28890 (Tinned Copper Braid Version).
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## Product Variants

Part Number	Color	Put-Up Type	Length
3092F 0101000	BLACK	Reel	1000 ft
3092F 0105000	BLACK	Reel	5000 ft

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