Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



3092F Coax - ControlNet™ and ControlBus™ Quad Shielded Coax

For more Information please call

1-800-Belden1



General Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	105x40	BC - Bare Copper	1.016

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
FPE - Foam Polyethylene	4.6482

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	AL - Aluminum	60.000
3	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
4		Braid	AL - Aluminum	40.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 7.696 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	59.528 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	76.200 mm
Min. Flexing Radius:	15.240 cm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CL2R, CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes

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EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	6/U
ame Test	
UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4

Surface Printing (Overall)

Surface Printing:

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 (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 75

Nom. Inductance:

Inductance (µH/m) 0.354348

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 55.777

Nominal Velocity of Propagation:

VP (%) 79

Nominal Delay:

Delay (ns/m) 4.23249

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 34.4505

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 11.8116

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	1.18116
2	1.54207
5	2.6248
10	3.9372
20	6.562
50	10.4992
100	15.0926
200	21.3265
300	26.248
400	30.5133

Other Electrical Characteristic 1:

IEEE 802.4 MAP/IEEE 802.7 Mini-Map

Shield Effectiveness:

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Description	Freq. (MHz)	Effectiveness (dB)
Unflexed	30	92
After 1.5 million flexes	30	60

Minimum Structural Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
		5	400	23

Notes (Overall)

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).

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3092F 0101000	1,000 FT	33.000 LB	BLACK		#20 GIFHDLDPE DBSH PVC
3092F 0105000	5,000 FT	170.000 LB	BLACK	С	#20 GIFHDLDPE DBSH PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 04-11-2008

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