BELDEN

Product: 3092F

ControlBus™, Coax RG-6, #20 Str BC, FPE Ins, QUAD AL Shld, PVC Jkt, High Flex, CMR

⠿ Request Sample

Product Description

Coax RG-6 20 AWG (105x40) Bare Copper, Foam PE Insulation, Overall Duobond® II+Aluminum Braid(60%)+Duofoil®+Aluminum Braid(40%) Shield, PVC Outer Jacket, High Flex, CMR

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

Construction Details

RG Type:	6

Conductor

Size	Stranding	Nom. Diameter	Material
20 AWG	105x40	0.040 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.183 in (4.65 mm)	White

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Aluminum		60%
3	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
4	Braid	Aluminum		40%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.303 in (7.70 mm)

Overall Cable Diameter (Nominal):	0.303 in (7.70 mm)

Electrical Characteristics

Return Loss (RL)

Frequency	Min. Structural Return Loss
5 - 400 MHz	23 dB

Attenuation

Frequency	Nom. Attenuation
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	2.0 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

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
10.5 Ohm/1000ft	2.6 Ohm/1000ft (8.5 Ohm/km)	16.3 pF/ft (53.5 pF/m)	75 Ohm	82%

Voltage

UL Voltage Rating
300 V (CMR, CMG)

Electrical Characteristics Notes:	IEEE 802.4 MAP/IEEE 802.7 Mini-Map

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C	-40°C to +75°C

Bend Radius

Installation Min.
3 in (76 mm)

Max. Pull Tension:	35 lbs (16 kg)
Bulk Cable Weight:	29 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor, Aerial - When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1666 Riser
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMR, CL2R
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Flex Life: 1.5 Million cycles @ 6.0"" minimum bend radius. For Rockwell authorized Flexible ControlNet order YR28890 (Tinned Copper Braid Version).

History

Update and Revision:	Revision Number: 0.509 Revision Date: 02-03-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
3092F 0101000	Black	Reel	1,000 ft	612825141396	
3092F 0105000	Black	Reel	5,000 ft	612825141402	C