

Product: <u>9165</u> ☑



Composite ENG, EFP and CCTV

Product Description

Composite, RG-59 22 AWG BC Coax, stranded (7x30), BC braid 95% coverage, 3 PR 22 AWG TC, stranded (7x30), w/drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs	No. of Coax
22	7x30	BC - Bare Copper	0.03 in		1
22	7x30	TC - Tinned Copper	0.029 in	3	

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.146 in
PVC - Polyvinyl Chloride	0.054 in

Color Chart

Number	Color
1	Black and Red
2	Orange and Brown
3	Green and White

Inner Shield

Туре	Material	Material Trade Name	Coverage [%]	Drainwire Diameter	Drainwire AWG	Drainwire Construction n x D
Braid	Bare Copper (BC)	Beldfoil® (Z-Fold®)	95%	0.03 in	22	7x30
Таре	Bi-Laminate (Alum+Poly)		100%			

Outer Shield

Type	Layer	Material	Coverage [%]
Braid	1	Bare Copper (BC)	95%

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.290 x 0.561 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR	Outer Conductor DCR
15.0 Ohm/1000ft	15 Ohm/1000ft	2.6 Ohm/1000ft	2.6 Ohm/1000ft
	11 Ohm/1000ft		

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
51 pF/ft	17.3 pF/ft

Inductance

Nominal Inductance

Impedance

Nominal Characteristic Impedance
75 Ohm
35 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
5 MHz	0.7 dB/100ft
10 MHz	1 dB/100ft
50 MHz	2.1 dB/100ft
100 MHz	3 dB/100ft
400 MHz	7.4 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%	
1.3 ns/ft	78%	
	58%	

Voltage



Temperature Range

Non-UL Temp Rating:	60°C
Operating Temperature Range:	-30°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	85 lbs/1000ft
Max. Pull Tension:	147 lbs
Min. Bend Radius/Minor Axis:	3 in

Standards

NEC/(UL) Compliance:	CL2X
UL AWM Style Compliance:	AWM 20006
RG Type:	59

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Aerial
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	No
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LS0H, Toxicity Testing

UL voltage rating:	30 V RMS	

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
9165 010500	Black	Reel	500 ft	612825225058
9165 0101000	Black	Reel	1,000 ft	612825225041

Footnote: C - CRATE REEL PUT-UP.

Product Notes

Notes:	Siamese Type Construction. Coax jacket diameter: .240 in. Pairs jacket diameter: .290 in.

History

	Update and Revision:	Revision Number: 0.282 Revision Date: 04-29-2024

© 2025 Belden, Inc

All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.