



Product: [5439W5](#)

Surveillance CCTV, RG-59 #20 BC, Duobond+95% TC Braid, CM, Gel Fill

Product Description

Surveillance & CCTV Cable, RG59, Rated-CM, 20 AWG solid bare copper, foam polyolefin core, Duobond® + 95% tinned copper braid, CoreGuard® gel filled, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	CATV, MATV, Wet Location, Below-Grade Duct
------------------------	--

Physical Characteristics (Overall)

Conductor			
AWG	Material	Nominal Diameter	No. of Coax
20	BC - Bare Copper	0.032 in	1
Conductor Count:			1

Insulation		
Layer	Material	Nominal Diameter
1	PE - Polyethylene (Foam)	0.145 in
Table Notes:		Gas Injected

Outer Shield				
Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duobond®	100%
Braid	2	Tinned Copper (TC)		95%
Table Notes:			Coreguard®	

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.236 in

Electrical Characteristics

Conductor DCR				
Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
10 Ohm/1000ft	10 Ohm/1000ft		2.5 Ohm/1000ft	2.5 Ohm/1000ft

Capacitance	
Max. Capacitance Unbalance	Nom. Capacitance Conductor to Shield
1 pF/ft	16.3 pF/ft
1 pF/ft	

Inductance	
Nominal Inductance	
0.097 µH/ft	

Impedance

Nominal Characteristic Impedance
75 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.29 dB/100ft
5 MHz	0.63 dB/100ft
10 MHz	0.87 dB/100ft
50 MHz	1.7 dB/100ft
100 MHz	2.3 dB/100ft
200 MHz	3.4 dB/100ft
400 MHz	4.7 dB/100ft
700 MHz	6.3 dB/100ft
900 MHz	7.3 dB/100ft
1000 MHz	7.8 dB/100ft

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
83 ns/100m	1.22 ns/ft	83%

High Frequency

Frequency [MHz]
1 MHz
5 MHz
10 MHz
50 MHz
100 MHz
200 MHz
400 MHz
700 MHz
900 MHz
1000 MHz

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Non-UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	32 lbs/1000ft
Max. Pull Tension:	51 lbs
Min. Bend Radius/Minor Axis:	2.4 in

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CL2, CM
CEC/C(UL) Compliance:	CM
CPR Euroclass:	Eca
RG Type:	59

Applicable Environmental and Other Programs

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

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
Suitability - Sunlight Resistance:	Yes - Black only

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT1
UL Flammability:	UL1685 UL Loading
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
5439W5 010500	Black	Reel	500 ft	612825162384
5439W5 0101000	Black	Reel	1,000 ft	612825162377
5439W5 010U1000	Black	UnReel	1,000 ft	612825162360

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

Product Notes

Notes:	Flooding grease between braid and jacket. Sequential footage marks in print legend. Can be used for MATV applications. Recommend 1545A or 1546A for CATV applications.
--------	--

History

Update and Revision:	Revision Number: 0.394 Revision Date: 12-15-2021
----------------------	--

© 2022 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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:

[5439W5 0101000](#) [5439W5 010500](#) [5439W5 010U1000](#)