



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
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Physical Characteristics (Overall)

Conductor

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

Conductor Count:	1
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Insulation

Layer	Material	Nominal Diameter
1	PE - Polyethylene (Foam)	0.145 in

Table Notes:	Gas Injected
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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®
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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 Temperature 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
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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
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Related Part Numbers

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.
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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.
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History

Update and Revision:	Revision Number: 0.396 Revision Date: 05-11-2022
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