



**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

Insulation, Table Note:	Gas Injected
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##### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Duobond® (bonded to dielectric)	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Shield Table Note:	Coreguard®
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##### Outer Jacket Material

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 Freq**

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 Recommended Pulling Tension:	51 lbs
Min Bend Radius/Minor Axis:	2.4 in

**Standards**

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

**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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes

EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
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, LSOH, Toxicity Testing

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

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	Putup 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: 0.303 Revision Date: 04-28-2020
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