

## **BELDEN**Cable\*\*

## 1505A Coax - RG-59/U Type





Metric Version
For more information please call
1-800-Belden1

See Put-ups and Colors

## **Description:**

20 AWG solid .032" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

### PHYSICAL CHARACTERISTICS:

## **CONDUCTOR:**

Number of Coax	1
Total Number of Conductors	1
RG Type	59/U
AWG	20
Stranding	Solid
Conductor Diameter	0.813 mm
Conductor Material	BC - Bare Copper

## **INSULATION:**

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	3.683 mm

### **OUTER SHIELD:**

Outer Shield Material Trade Name	Duofoil®
Outer Shield Type	Tape/Braid

### Outer Shield Material:

Layer Number	Trade Name	Туре	Material	% Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Shield % Coverage 100 %

## **OUTER JACKET:**

Outer Jacket Material PVC - Polyvinyl Chloride

### **OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter 5.918 mm

### MECHANICAL CHARACTERISTICS:

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Operating Temperature Range	-30°C To +75°C
UL Temperature Rating	75°C
Bulk Cable Weight	46.134 Kg/Km
Max. Recommended Pulling Tension	209.065 N
Min. Bend Radius (Install)	63.5 mm

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

### **APPLICABLE STANDARDS:**

NEC/(UL) Specification	CMR
CEC/C(UL) Specification	CMG
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005

### FLAME TEST:

UL Flame Test UL1666 Vertical Shaft

## SWEEP TEST:

Sweep Testing 100% Sweep tested 5 MHz to 4.5 GHz.

### **SUITABILITY:**

Suitability - Indoor Yes
Suitability - Outdoor Yes - Black only
Suitability - Aerial Yes - Black only, when supported by a messenger wire

## PLENUM/NON-PLENUM:

Plenum (Y/N) N
Plenum Number 1506A

### **ELECTRICAL CHARACTERISTICS:**

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	0.351 μH/m
Nom. Capacitance Conductor to Shield	53.48 pF/m
Nominal Velocity of Propagation	83 %
Nominal Delay	4.003 ns/m
Nom. Conductor DC Resistance @ 20 Deg. C	32.81 Ohms/km
Nominal Outer Shield DC Resistance @ 20°C	12.468 Ohms/km

### Minimum Return Loss:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Return Loss (dB)
		5	1600	23
		1600	4500	21



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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100m)
	1			0.984
	3.6			1.969
	5			2.067
	7			2.428
	10			2.953
	67.5			6.726
	71.5			6.89
	88.5			7.218
	100			7.546
	135			8.859
	143			9.187
	180			10.171
	270			12.468
	360			14.436
	540			18.045
	720			20.998
	750			21.326
	1000			24.936
	1500			30.513
	2000			35.763
	2250			38.06
	3000			43.965
	4500			53.808

Max. Operating Voltage - UL

300 V RMS

Other Electrical Characteristic 1 Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms

Other Electrical Characteristic 2 Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

#### NOTES:

Notes Also available in bundled versions. See 7794A through 7798A.

## **PUT-UPS AND COLORS:**

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
1505A 0011000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	BROWN	С
1505A 0015000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	BROWN	C N
1505A 0021000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	RED	С
1505A 002500	#20 PE/GIFHDPE SH FR PVC	152.4	7.718	RED	С
1505A 0025000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	RED	C N

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1505A 0031000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	ORANGE	С
1505A 0035000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	ORANGE	CN
1505A 0041000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	YELLOW	С
1505A 0045000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	YELLOW	C N
1505A 0061000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	BLUE, LIGHT	С
1505A 006500	#20 PE/GIFHDPE SH FR PVC	152.4	7.718	BLUE, LIGHT	С
1505A 0065000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	BLUE, LIGHT	CN
1505A 0071000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	VIOLET	С
1505A 0075000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	VIOLET	CN
1505A 0081000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	GRAY	С
1505A 0085000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	GRAY	C N
1505A 0091000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	WHITE	С
1505A 0095000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	WHITE	CN
1505A 0101000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	BLACK	С
1505A 010500	#20 PE/GIFHDPE SH FR PVC	152.4	7.718	BLACK	С
1505A 0105000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	BLACK	CN
1505A N3U1000	#20 PE/GIFHDPE SH FR PVC	304.8	15.89	GREEN, MIL	С
1505A N3U5000	#20 PE/GIFHDPE SH FR PVC	1524	74.91	GREEN, MIL	C N

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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