

#### METRIC MEASUREMENT VERSION

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



For more Information please call

1-800-Belden1



#### **General Description:**

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

hysical Characteristics (Ov	verall)			
Conductor AWG:	,			
# Coax AWG Stranding Conduct	tor Material Dia. (mm)			
	e Copper 0.8128			
Total Number of Conductors:	1			
	1			
nsulation Insulation Material:				
Insulation Material	Dia. (			
Gas-injected FHDPE - Foam High I	Density Polyethylene 3.683			
Outer Shield Outer Shield Material:				
Layer # Outer Shield Trade Name	e Type Outer Shield Mate	rial	Coverage (%)	
1 Duofoil®	· · · ·	ester Tape-Aluminum Foil		
2	Braid TC - Tinned Coppe	r	95	
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter:	-	918 mm		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter: lechanical Characteristics	(Overall)			
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter:	(Overall) e: -3	918 mm 0°C To +75°C 5°C		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter: lechanical Characteristics Operating Temperature Range	(Overall) e: -3	0°C To +75°C		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter: lechanical Characteristics Operating Temperature Range UL Temperature Rating:	(Overall) e: -3 7 4	0°C To +75°C 5°C		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter: lechanical Characteristics Operating Temperature Range UL Temperature Rating: Bulk Cable Weight:	(Overall) e: -3 7 4 Fension: 2	0°C To +75°C 5°C 5.134 Kg/Km		
PVC - Polyvinyl Chloride         Overall Cable         Overall Nominal Diameter:         lechanical Characteristics         Operating Temperature Range         UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling T         Min. Bend Radius/Minor Axis:         Opplicable Specifications and	(Overall) e: -3 7: 4: Fension: 2 : 6 nd Agency Compli	0°C To +75°C 5°C 5.134 Kg/Km 31.306 N 3.500 mm		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter:  Iechanical Characteristics Operating Temperature Range UL Temperature Rating: Bulk Cable Weight: Max. Recommended Pulling T Min. Bend Radius/Minor Axis:  pplicable Specifications an Applicable Standards & Enviro	(Overall) e: -3 7 4 Fension: 2 : 6 nd Agency Compli onmental Programs	0°C To +75°C 5°C 5.134 Kg/Km 31.306 N 3.500 mm <b>ance (Overall)</b>		
PVC - Polyvinyl Chloride         Overall Cable         Overall Nominal Diameter:         lechanical Characteristics         Operating Temperature Range         UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling T         Min. Bend Radius/Minor Axis:         Opplicable Specifications and	(Overall) e: -3 7 4 Fension: 2 : 6 nd Agency Compli onmental Programs	0°C To +75°C 5°C 5.134 Kg/Km 31.306 N 3.500 mm		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter:  Iechanical Characteristics Operating Temperature Range UL Temperature Rating: Bulk Cable Weight: Max. Recommended Pulling T Min. Bend Radius/Minor Axis:  pplicable Specifications an Applicable Standards & Enviro	(Overall) e: -3 7: 4 Fension: 2 : 6 nd Agency Compli onmental Programs	0°C To +75°C 5°C 5.134 Kg/Km 31.306 N 3.500 mm <b>ance (Overall)</b>		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter: lechanical Characteristics Operating Temperature Range UL Temperature Rating: Bulk Cable Weight: Max. Recommended Pulling T Min. Bend Radius/Minor Axis: pplicable Specifications and Applicable Standards & Environ NEC/(UL) Specification:	(Overall) e: -3 7 4 Fension: 2 : 6 nd Agency Compli onmental Programs C	0°C To +75°C 5°C 5.134 Kg/Km 81.306 N 8.500 mm ance (Overall) MR		
PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diameter:  Iechanical Characteristics Operating Temperature Range UL Temperature Rating: Bulk Cable Weight: Max. Recommended Pulling T Min. Bend Radius/Minor Axis:  pplicable Specifications an Applicable Standards & Enviro NEC/(UL) Specification: CEC/C(UL) Specification:	(Overall) e: -3 7 4 Tension: 2 : 6 nd Agency Compli onmental Programs C C tS II): Y	0°C To +75°C 5°C 5.134 Kg/Km 81.306 N 8.500 mm <b>ance (Overall)</b> MR MG		
PVC - Polyvinyl Chloride         Overall Cable         Overall Nominal Diameter:         lechanical Characteristics         Operating Temperature Range         UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling T         Min. Bend Radius/Minor Axis:         Opplicable Specifications and Applicable Standards & Environ         CEC/(UL) Specification:         EU Directive 2011/65/EU (ROF	(Overall) e: -3 7 4 Fension: 2 : 6 nd Agency Compli onmental Programs C C HS II): Y	0°C To +75°C 5°C 3.134 Kg/Km 31.306 N 3.500 mm ance (Overall) MR MG es		





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

EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	59/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	1506A
Plenum (Y/N):	

#### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 75

Nom. Inductance:

Inductance (µH/m)

0.351067

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.4803

Nominal Velocity of Propagation:

**VP (%)** 82.000

Nominal Delay:

Delay (ns/m)

4.068

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

32.81

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

12.4678

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
3.600	1.969
5.000	2.067
6.000	2.264
7.000	2.428
10.000	2.953
12.000	2.986
25.000	4.265
67.500	6.726
71.500	6.890
88.500	7.218
100.000	7.546
135.000	8.859





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143.000	9.187
180.000	10.171
270.000	12.468
360.000	14.436
540.000	18.046
720.000	20.998
750.000	21.327
1000.000	24.936
1500.000	30.513
2000.000	35.763
2250.000	38.060
3000.000	43.965
4500.000	53.808

#### Max. Operating Voltage - UL:

Voltage 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.

#### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	1600	23
1600	4500	21

#### **Sweep Test**

Sweep Testing:

100% Sweep tested 5 MHz to 4.5 GHz.

#### Misc. Information (Overall)

#### **Notes (Overall)**

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

#### **Put Ups and Colors:**

ltem #	Putup	Ship Weight	Color	Notes	Item Desc
1505A N3U1000	305 MT	15.876 KG	GREEN, MIL	С	#20 PE/GIFHDPE SH FR PVC
1505A N3U5000	1,524 MT	74.843 KG	GREEN, MIL	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0011000	305 MT	15.876 KG	BROWN	С	#20 PE/GIFHDPE SH FR PVC
1505A 0015000	1,524 MT	74.843 KG	BROWN	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0021000	305 MT	15.876 KG	RED	С	#20 PE/GIFHDPE SH FR PVC
1505A 002500	152 MT	7.938 KG	RED	С	#20 PE/GIFHDPE SH FR PVC
1505A 0025000	1,524 MT	74.843 KG	ORANGE	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0031000	305 MT	15.876 KG	ORANGE	С	#20 PE/GIFHDPE SH FR PVC
1505A 0035000	1,524 MT	74.843 KG	ORANGE	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0041000	305 MT	15.876 KG	YELLOW	С	#20 PE/GIFHDPE SH FR PVC
1505A 0045000	1,524 MT	74.843 KG	YELLOW	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0061000	305 MT	15.876 KG	BLUE, LIGHT	С	#20 PE/GIFHDPE SH FR PVC
1505A 006500	152 MT	7.938 KG	BLUE, LIGHT	С	#20 PE/GIFHDPE SH FR PVC
1505A 0065000	1,524 MT	74.843 KG	BLUE, LIGHT	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0071000	305 MT	15.876 KG	VIOLET	С	#20 PE/GIFHDPE SH FR PVC
1505A 0075000	1,524 MT	74.843 KG	VIOLET	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0081000	305 MT	15.876 KG	GRAY	С	#20 PE/GIFHDPE SH FR PVC
1505A 0085000	1,524 MT	74.843 KG	GRAY	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0091000	305 MT	15.876 KG	WHITE	С	#20 PE/GIFHDPE SH FR PVC
1505A 0095000	1,524 MT	74.843 KG	WHITE	CN	#20 PE/GIFHDPE SH FR PVC
1505A 0101000	305 MT	15.876 KG	BLACK	С	#20 PE/GIFHDPE SH FR PVC
1505A 010500	152 MT	7.938 KG	BLACK	С	#20 PE/GIFHDPE SH FR PVC
1505A 0105000	1,524 MT	74.843 KG	BLACK	CN	#20 PE/GIFHDPE SH FR PVC





Notes:

C = CRATE REEL PUT-UP.

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

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