

# Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



1506A Coax - RG-59/U Type



For more Information  
please call

1-800-Belden1



## General Description:

20 AWG solid .032" bare copper conductor, plenum, foam FEP insulation, Duofoil® + tinned copper braid shield (95% coverage), Flamarrest® jacket.

## Physical Characteristics (Overall)

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.8128

Total Number of Conductors: 1

### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	3.3782

### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	PVC - Polyvinyl Chloride

### Overall Cable

Overall Nominal Diameter: 4.978 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	43.158 Kg/Km
Max. Recommended Pulling Tension:	302.478 N
Min. Bend Radius/Minor Axis:	50.800 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (RoHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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:	NFPA 262
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	1505A

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.8241

Nominal Velocity of Propagation:

VP (%)
84

Nominal Delay:

Delay (ns/m)
3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
32.81

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
10.4992

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.95149
3.58	2.03422
5	2.2967
7	2.69042
10	3.44505
67.5	7.2182
71.5	7.38225
100	8.8587
135	10.4992
143	10.6633
180	11.9757
270	14.9286
360	17.2252
540	20.9984
720	23.9513
750	24.6075
1000	30.8414
1500	41.9968
2250	57.4175
3000	71.8539

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1:

Impedance tested in accordance with ASTM D-4566 paragraph 48.2, option 2 using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2:

Return Loss tested in accordance with ASTM D-4566 paragraph 50.3, using a 75 Ohm fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
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5.000	1600.000	23.000
1600.000	4500.000	21.000

## Sweep Test

Sweep Testing:

100&#37; Sweep tested 5 MHz to 3 GHz.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1506A N3U1000	1,000 FT	31.000 LB	GREEN, MIL	C Z	#20 FFEP SH FLMRST
1506A 0011000	1,000 FT	31.000 LB	BROWN	C Z	#20 FFEP SH FLMRST
1506A 0021000	1,000 FT	31.000 LB	RED	C Z	#20 FFEP SH FLMRST
1506A 0031000	1,000 FT	31.000 LB	ORANGE	Z	#20 FFEP SH FLMRST
1506A 0041000	1,000 FT	31.000 LB	YELLOW	Z	#20 FFEP SH FLMRST
1506A 0061000	1,000 FT	31.000 LB	BLUE, LIGHT	C Z	#20 FFEP SH FLMRST
1506A 0071000	1,000 FT	31.000 LB	VIOLET	C Z	#20 FFEP SH FLMRST
1506A 0081000	1,000 FT	31.000 LB	GRAY	Z	#20 FFEP SH FLMRST
1506A 0101000	1,000 FT	31.000 LB	BLACK	C	#20 FFEP SH FLMRST
1506A 010500	500 FT	16.500 LB	BLACK	C Z	#20 FFEP SH FLMRST
1506A 8771000	1,000 FT	31.000 LB	NATURAL	C	#20 FFEP SH FLMRST
1506A 877500	500 FT	16.500 LB	NATURAL	C Z	#20 FFEP SH FLMRST

### Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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