



For more Information  
please call

1-800-Belden1



## Description:

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

## Physical Characteristics (Overall)

### Conductor

#### AWG:

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

### Insulation

#### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.683

### 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 Material
PVC - Polyvinyl Chloride

### Overall Cabling

Overall Nominal Diameter: 5.918 mm

## Mechanical Characteristics (Overall)

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)/Minor Axis: 63.500 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

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): 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

### 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): No

Plenum Number: 1506A

## 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 (%)

83

### Nominal Delay:

Delay (ns/m)

4.00282

### 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

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
3000.000	43.965
2250.000	38.060
4500.000	53.808

**Max. Operating Voltage - UL:**

<b>Voltage</b>
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.

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1505A N3U1000	305 MT	15.876 KG	GREEN, MIL	C	#20 PE/GIFHDPE SH FR PVC
1505A N3U5000	1,524 MT	74.843 KG	GREEN, MIL	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0011000	305 MT	15.876 KG	BROWN	C	#20 PE/GIFHDPE SH FR PVC
1505A 0015000	1,524 MT	74.843 KG	BROWN	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0021000	305 MT	15.876 KG	RED	C	#20 PE/GIFHDPE SH FR PVC
1505A 002500	152 MT	7.031 KG	RED	C	#20 PE/GIFHDPE SH FR PVC
1505A 0025000	1,524 MT	74.843 KG	ORANGE	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0031000	305 MT	15.876 KG	ORANGE	C	#20 PE/GIFHDPE SH FR PVC
1505A 0035000	1,524 MT	74.843 KG	ORANGE	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0041000	305 MT	15.876 KG	YELLOW	C	#20 PE/GIFHDPE SH FR PVC
1505A 0045000	1,524 MT	74.843 KG	YELLOW	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0061000	305 MT	15.876 KG	BLUE, LIGHT	C	#20 PE/GIFHDPE SH FR PVC
1505A 006500	152 MT	7.031 KG	BLUE, LIGHT	C	#20 PE/GIFHDPE SH FR PVC
1505A 0065000	1,524 MT	74.843 KG	BLUE, LIGHT	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0071000	305 MT	15.876 KG	VIOLET	C	#20 PE/GIFHDPE SH FR PVC
1505A 0075000	1,524 MT	74.843 KG	VIOLET	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0081000	305 MT	15.876 KG	GRAY	C	#20 PE/GIFHDPE SH FR PVC
1505A 0085000	1,524 MT	74.843 KG	GRAY	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0091000	305 MT	15.876 KG	WHITE	C	#20 PE/GIFHDPE SH FR PVC
1505A 0095000	1,524 MT	74.843 KG	WHITE	C N	#20 PE/GIFHDPE SH FR PVC
1505A 0101000	305 MT	15.876 KG	BLACK	C	#20 PE/GIFHDPE SH FR PVC

1505A 010500	152 MT	7.031 KG	BLACK	C	#20 PE/GIFHDPE SH FR PVC
1505A 0105000	1,524 MT	74.843 KG	BLACK	C N	#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.

Revision Number: 6    Revision Date: 09-30-2009

© 2011 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.