

### METRIC MEASUREMENT VERSION

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



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 Ch                | aracteristics (Ove                        | erall)   |  |                |  |  |  |
|----------------------------|---|----------|--|----------------|--|--|--|
| Conductor                  |   | or any   |  |                |  |  |  |
| AWG:                       |   |          |  |                |  |  |  |
|                            | NG Stranding Conducto                     |          |  |                |  |  |  |
| 1 20                       | Solid BC - Bare                           | Coppe    | r 0.8128                                   |                |  |  |  |
| Insulation<br>Insulation M | latarial                                  |          |  |                |  |  |  |
| Insulation                 |   |          | Dia. (mm)                                  |                |  |  |  |
|                            | ed FHDPE - Foam High De                   | ensity F |  |                |  |  |  |
| Outer Shield               |   |          |  |                |  |  |  |
| Layer # O                  | uter Shield Trade Name                    | Туре     | Outer Shield Material                      | Coverage (%)   |  |  |  |
|                            | uofoil®                                   |          | Aluminum Foil-Polyester Tape-Aluminum Foil |                |  |  |  |
| 2                          |   | Braid    | TC - Tinned Copper                         | 95             |  |  |  |
| Overall Cabl               | winyl Chloride<br>ing<br>ominal Diameter: |          | 5.918 mm                                   |                |  |  |  |
|                            |   |          |  |                |  |  |  |
|                            | Characteristics (                         |          |  |                |  |  |  |
|                            | Temperature Range:                        |          |  | -30°C To +75°C |  |  |  |
|                            | erature Rating:                           |          |  | 75°C           |  |  |  |
|                            | le Weight:                                |          |  | 46.134 Kg/Km   |  |  |  |
|                            | ommended Pulling Te                       |          |  | 209.065 N      |  |  |  |
| Min. Bend                  | l Radius (Install)/Minc                   | or Axis  | s: 63.500 mm                               |                |  |  |  |
|                            | -   |          | ency Compliance (Overall)                  |                |  |  |  |
|                            | Standards & Enviro                        | nmen     | •  |                |  |  |  |
|                            | Specification:                            |          | CMR  |                |  |  |  |
| CEC/C(UL                   | .) Specification:                         |          | CMG  |                |  |  |  |
| EU CE Ma                   | ark:                                      |          | Yes  |                |  |  |  |
| EU Direct                  | ive 2000/53/EC (ELV):                     |          | Yes  |                |  |  |  |
| EU Direct                  | ive 2002/95/EC (RoHS                      | 6):      | Yes  |                |  |  |  |
| EU RoHS                    | Compliance Date (mr                       | n/dd/y   | <b>/yyy):</b> 01/01/2005                   |                |  |  |  |
| EU Direct                  | ive 2002/96/EC (WEE                       | E):      | Yes  |                |  |  |  |
|                            |   |          |  |                |  |  |  |

### METRIC MEASUREMENT VERSION

143.000

9.187



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| EU Dire               | ctive 2003/11/EC (BFR    | ): Yes   |
|-----------------------|--------------------------|--|
| CA Prop               | o 65 (CJ for Wire & Cat  | ble): Yes  |
| MII Orde              | er #39 (China RoHS):     | Yes  |
| RG Typ                | e:                       | 59/U   |
| lame Test             | t                        |  |
| UL Flam               |                          | UL1666 Vertical Shaft                                |
|                       |                          |  |
|                       | ity Indoor               | Yes  |
|                       | ity - Indoor:            |  |
| Suitabil              | ity - Outdoor:           | Yes - Black only                                     |
| Suitabil              | ity - Aerial:            | Yes - Black only, when supported by a messenger wire |
| Plenum/No             | on-Plenum                |  |
| Plenum                | (Y/N):                   | No   |
| Plenum                | Number:                  | 1506A  |
|                       |                          |  |
|                       | Characteristics (O       | verall)  |
|                       | cteristic Impedance:     |  |
| Impedance             | e (Ohm)                  |  |
| 75                    |                          |  |
| lom. Induct           |                          |  |
| Inductance            | e (µH/m)                 |  |
| 0.351067              |                          |  |
|                       | itance Conductor to S    | hield:   |
| Capacitan             | ce (pF/m)                |  |
| 53.4803               |                          |  |
| lominal Vel<br>VP (%) | locity of Propagation:   |  |
| 83                    |                          |  |
| lominal De            | lay:                     |  |
| Delay (ns/            | m)                       |  |
| 4.00282               |                          |  |
| lom. Condu            | uctor DC Resistance:     |  |
| DCR @ 20              | °C (Ohm/km)              |  |
| 32.81                 |                          |  |
| Iominal Ou            | ter Shield DC Resistan   | nce:   |
| DCR @ 20              | °C (Ohm/km)              |  |
| 12.4678               |                          |  |
| lom. Attenu           | uation:                  |  |
| Freq. (MHz            | z) Attenuation (dB/100m) |  |
| 1.000                 | 0.984                    |  |
| 3.600                 | 1.969                    |  |
| 5.000                 | 2.067                    |  |
| 6.000<br>7.000        | 2.264<br>2.428           |  |
| 10.000                | 2.428                    |  |
| 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                    |  |

METRIC MEASUREMENT VERSION



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

| 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:

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:**

| item #        | 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   | 7.031 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   | 7.031 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       | C N   | #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   | 7.031 KG    | BLACK       | С     | #20 PE/GIFHDPE SH FR PVC |
| 1505A 0105000 | 1,524 MT | 74.843 KG   | BLACK       | C N   | #20 PE/GIFHDPE SH FR PVC |

Notes:

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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

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