

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.

| Phy | sical Cha | racteris | tics (Overall |) | | | | |
|------|----------------------------|-------------|------------------------|-----------------|-------------------|--------------|--|--|
| | nductor WG: | | | | | | | |
| A | - | Stranding | g Conductor Mat | vrial Dia (mm) | | | | |
| | 1 20 | Solid | BC - Bare Copp | | | | | |
| | | | | | | | | |
| _ | Total Numb | er of Con | ductors: | | 1 | | | |
| | ulation Isulation Ma | terial: | | | | | | |
| | Insulation M | | | | a. (mm) | | | |
| | Gas-injected | FHDPE - F | oam High Density | Polyethylene 3. | 683 | | | |
| | ter Shield Outer Shield | Material: | | | | | | |
| | Layer # Out | er Shield T | rade Name Type | Outer Shield N | aterial | Coverage (%) | | |
| | | foil® | | | , 1 | | | |
| | 2 | | Braid | TC - Tinned Co | pper | 95 | | |
| - | Overall Nor | | neter: ristics (Ove | ·all) | 5.918 mm | | | |
| viec | Operating 1 | | • | all) | -30°C To +75°C | | | |
| - | UL Tempera | - | | | 75°C | | | |
| - | Bulk Cable | Weight: | | | 46.134 Kg/Km | | | |
| | Max. Recon | nmended | Pulling Tensio | 1: | 231.306 N | | | |
| _ | Min. Bend F | Radius/Mi | nor Axis: | | 63.500 mm | | | |
| | | | - | | oliance (Overall) | | | |
| | | | & Environme | ntal Program | | | | |
| _ | NEC/(UL) S | pecificatio | on: | | CMR | | | |
| _ | CEC/C(UL) Specification: | | | CMG | | | | |
| _ | EU Directiv | e 2011/65 | /EU (ROHS II): | | Yes | | | |
| _ | EU CE Mark | (: | | | Yes | | | |
| | EU Directiv | e 2000/53 | /EC (ELV): | | Yes | | | |
| | EU Directiv | e 2002/95 | /EC (RoHS): | | Yes | | | |
| - | | | | | | | | |





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| 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:

| 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 | 7.938 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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