

1505F Coax - RG-59/U Type

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|  |  | <p style="text-align: center;">For more information please call 1-800-Belden1</p> <p style="text-align: center;"><u>See Put-ups and Colors</u></p> |
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Description:

22 AWG stranded (7x29) .031" bare compacted copper conductor, gas-injected foam HDPE insulation, tinned copper double braid shield (95% coverage), PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

| | |
|----------------------------|-----------------------------|
| Number of Coax | 1 |
| Total Number of Conductors | 1 |
| RG Type | 59/U |
| AWG | 22 |
| Stranding | 7x29 |
| Conductor Diameter | .031 in. |
| Conductor Material | BCC - Bare Compacted Copper |

INSULATION:

| | |
|---------------------|---|
| Insulation Material | Gas-injected FHDPE - Foam High Density Polyethylene |
| Insulation Diameter | .145 in. |

OUTER SHIELD:

| | |
|-------------------|-------------|
| Outer Shield Type | Braid/Braid |
|-------------------|-------------|

Outer Shield Material :

| Layer Number | Trade Name | Type | Material | % Coverage (%) |
|--------------|------------|-------|--------------------|----------------|
| 1 | | Braid | TC - Tinned Copper | 94 |
| 2 | | Braid | TC - Tinned Copper | 94 |

| | |
|-------------------------|------|
| Outer Shield % Coverage | 98 % |
|-------------------------|------|

Outer Shield Diameter :

| Description | Diameter (in.) | Description | Diameter (in.) |
|-------------|----------------|-------------|----------------|
| Layer 1 | .167 | Layer 2 | .189 |

OUTER JACKET:

| | |
|-----------------------|--------------------------|
| Outer Jacket Material | PVC - Polyvinyl Chloride |
|-----------------------|--------------------------|

OVERALL NOMINAL DIAMETER:

| | |
|--------------------------|----------|
| Overall Nominal Diameter | .242 in. |
|--------------------------|----------|

MECHANICAL CHARACTERISTICS:

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| | |
|----------------------------------|-----------------|
| Operating Temperature Range | -35°C To +75°C |
| UL Temperature Rating | 75°C |
| Bulk Cable Weight | 40 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 90 lbs. |
| Min. Bend Radius (Install) | 2.4 in. |

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

| | |
|---------------------------------------|------------|
| NEC/(UL) Specification | CM |
| CEC/C(UL) Specification | CM |
| EU CE Mark (Y/N) | Yes |
| EU RoHS Compliant (Y/N) | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2005 |

FLAME TEST:

| | |
|---------------|-------------------|
| UL Flame Test | UL1685 UL Loading |
|---------------|-------------------|

SWEEP TEST:

| | |
|---------------|-----------------------------------|
| Sweep Testing | 100% Sweep tested 5 MHz to 3 GHz. |
|---------------|-----------------------------------|

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) | N |
|--------------|---|

ELECTRICAL CHARACTERISTICS:

| | |
|---|-------------------|
| Nom. Characteristic Impedance | 75 Ohms |
| Nom. Inductance | 0.094 µH/ft |
| Nom. Capacitance Conductor to Shield | 17.0 pF/ft |
| Nominal Velocity of Propagation | 80 % |
| Nominal Delay | 1.3 ns/ft |
| Nom. Conductor DC Resistance @ 20 Deg. C | 12.2 Ohms/1000 ft |
| Nominal Outer Shield DC Resistance @ 20 Deg.C | 2.4 Ohms/1000 ft |

Minimum Return Loss :

| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Minimum Return Loss (dB) |
|-------------|-----------------|-----------------------|----------------------|--------------------------|
| | | 5 | 3000 | 15 |

Nom. Attenuation :

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| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Nom. Attenuation (dB/100 ft.) |
|-------------|-----------------|-----------------------|----------------------|-------------------------------|
| | 1 | | | .2 |
| | 3.6 | | | .5 |
| | 5 | | | .6 |
| | 7 | | | .73 |
| | 10 | | | .9 |
| | 67.5 | | | 2.4 |
| | 71.5 | | | 2.5 |
| | 88.5 | | | 2.8 |
| | 100 | | | 3.0 |
| | 135 | | | 3.5 |
| | 143 | | | 3.6 |
| | 180 | | | 4.1 |
| | 270 | | | 5.1 |
| | 360 | | | 6.0 |
| | 540 | | | 7.4 |
| | 720 | | | 8.7 |
| | 750 | | | 8.9 |
| | 1000 | | | 10.5 |
| | 1500 | | | 13.3 |
| | 2000 | | | 15.7 |
| | 2250 | | | 16.9 |
| | 3000 | | | 20.3 |

| | |
|-----------------------------------|---|
| Max. Operating Voltage - UL | 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. |
| Other Electrical Characteristic 2 | Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination. |

NOTES:

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| Notes | Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor. |
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PUT-UPS AND COLORS:

| Item | Description | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|---------------|--------------------------|--------------|--------------------|--------------|-------|
| 1505F 0041000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | YELLOW | C |
| 1505F B591000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | BLACK, MATTE | C |
| 1505F G7V1000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | RED, MATTE | C |
| 1505F G7W1000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | GREEN, MATTE | C |
| 1505F G7X1000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | BLUE, MATTE | C |
| 1505F G7Y1000 | #21 GIFHDLDP DBLB PVC | 1000 | 45 | WHITE, MATTE | C |

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|---------------|---------------------------|------|----|---------------|---|
| 1505F G8L1000 | #21 GIFHDLDPE DBLB PVC | 1000 | 45 | ORANGE, MATTE | C |
| 1505F Z4B1000 | #21 GIFHDLDPE DBLB PVC | 1000 | 45 | VIO Z4B | |

C = CRATE REEL PUT-UP.

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