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1-800-Belden1



## Description:

RG-6/U Type, 18 AWG solid .040" 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      | 18  | Solid     | BC - Bare Copper   | 1.016     |

### Insulation

#### Insulation Material:

| Insulation Material                                 | Dia. (mm) |
|---|-----------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 4.572     |

### 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: 6.960 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 61.016 Kg/Km

Max. Recommended Pulling Tension: 306.926 N

Min. Bend Radius (Install)/Minor Axis: 69.850 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): 01/01/2004

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: 6/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: 1695A

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/m)

0.347786

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.1522

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/m)

4.06844

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

20.9984

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

9.1868

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

1.000 0.787

3.580 1.444

5.000 1.706

6.000 1.870

7.000 2.001

10.000 2.330

12.000 2.559

25.000 3.543

67.500 5.414

71.500 5.545

88.500 6.103

100.000 6.398

135.000 7.349

143.000 7.546

## 1694A Coax - Low Loss Serial Digital Coax

|          |        |
|----------|--------|
| 180.000  | 8.432  |
| 270.000  | 10.401 |
| 360.000  | 12.107 |
| 540.000  | 15.093 |
| 720.000  | 17.652 |
| 750.000  | 18.046 |
| 1000.000 | 21.064 |
| 1500.000 | 26.215 |
| 2000.000 | 30.743 |
| 2250.000 | 32.843 |
| 3000.000 | 38.650 |
| 4500.000 | 48.953 |

### 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 7710A through 7713A.

### Related Documents:

No related documents are available for this product

### Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc                |
|---------------|----------|-------------|-------------|-------|--------------------------|
| 1694A N3U1000 | 305 MT   | 20.412 KG   | GREEN, MIL  | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A N3U5000 | 1,524 MT | 102.059 KG  | GREEN, MIL  | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0011000 | 305 MT   | 20.412 KG   | BROWN       | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0015000 | 1,524 MT | 102.059 KG  | BROWN       | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0021000 | 305 MT   | 20.412 KG   | RED         | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0025000 | 1,524 MT | 102.059 KG  | RED         | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0031000 | 305 MT   | 20.412 KG   | ORANGE      | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0041000 | 305 MT   | 20.412 KG   | YELLOW      | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0061000 | 305 MT   | 20.412 KG   | BLUE, LIGHT | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0065000 | 1,524 MT | 102.059 KG  | BLUE, LIGHT | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0071000 | 305 MT   | 20.412 KG   | VIOLET      | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0075000 | 1,524 MT | 102.059 KG  | VIOLET      | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0081000 | 305 MT   | 20.412 KG   | GRAY        | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0085000 | 1,524 MT | 102.059 KG  | GRAY        | C N   | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0091000 | 305 MT   | 20.412 KG   | WHITE       | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0101000 | 305 MT   | 20.412 KG   | BLACK       | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 010500  | 152 MT   | 9.299 KG    | BLACK       | C     | #18 PE/GIFHDPE SH FR PVC |
| 1694A 0105000 | 1,524 MT | 102.059 KG  | BLACK       | C N   | #18 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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