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please call

1-800-Belden1



### General Description:

28.5 AWG solid .012" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® foil + tinned copper braid shield (95% coverage), PVC jacket.

### Usage (Overall)

Suitable Applications: Broadcast Mobil Trucks, Digital Video, Precision Video, Telecommunications

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Coax | AWG  | Stranding | Conductor Material | Dia. (mm) |
|--------|------|-----------|--------------------|-----------|
| 1      | 28.5 | Solid     | BC - Bare Copper   | 0.30988   |

Total Number of Conductors: 1

#### Insulation

Insulation Material:

| Insulation Material                                 | Dia. (mm) |
|---|-----------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 1.4224    |

#### 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 Cable

Overall Nominal Diameter: 2.540 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 11.906 Kg/Km

Max. Recommended Pulling Tension: 80.068 N

Min. Bend Radius/Minor Axis: 25.400 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

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: 179/U

**Flame Test**

UL Flame Test: UL1666 Vertical Shaft

**Suitability**

Suitability - Indoor: Yes

Suitability - Outdoor: No

Suitability - Aerial: No

**Plenum/Non-Plenum**

Plenum (Y/N): No

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Impedance (Ohm)

75

**Nom. Inductance:**

Inductance (µH/m)

0.347786

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)

57.0894

**Nominal Velocity of Propagation:**

VP (%)

77

**Nominal Delay:**

Delay (ns/m)

4.33092

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)

231.311

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)

26.248

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 1.000       | 3.872                 |
| 5.000       | 6.070                 |
| 6.000       | 6.529                 |
| 7.000       | 7.054                 |
| 10.000      | 7.842                 |
| 12.000      | 12.566                |
| 67.500      | 19.325                |
| 71.500      | 19.620                |
| 88.500      | 21.687                |
| 100.000     | 22.606                |
| 135.000     | 25.756                |
| 143.000     | 26.478                |
| 180.000     | 29.299                |
| 270.000     | 35.435                |
| 360.000     | 41.013                |
| 540.000     | 50.527                |
| 720.000     | 58.730                |
| 750.000     | 60.042                |
| 1000.000    | 69.885                |
| 1500.000    | 86.290                |
| 2000.000    | 101.055               |
| 2250.000    | 107.617               |
| 3000.000    | 125.662               |
| 4500.000    | 155.848               |

**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 +/- 3 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&#37; Sweep tested 5 MHz to 4.5 GHz.

**Misc. Information (Overall)**

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc            |
|---------------|----------|-------------|-------------|-------|----------------------|
| 179DT N3U1000 | 1,000 FT | 9.000 LB    | GREEN, MIL  | C     | #28H PE/GIFPE SH PVC |
| 179DT 0011000 | 1,000 FT | 9.000 LB    | BROWN       |       | #28H PE/GIFPE SH PVC |
| 179DT 0021000 | 1,000 FT | 9.000 LB    | RED         | C     | #28H PE/GIFPE SH PVC |
| 179DT 0031000 | 1,000 FT | 9.000 LB    | ORANGE      | C     | #28H PE/GIFPE SH PVC |
| 179DT 0041000 | 1,000 FT | 9.000 LB    | YELLOW      | C     | #28H PE/GIFPE SH PVC |
| 179DT 0061000 | 1,000 FT | 9.000 LB    | BLUE, LIGHT |       | #28H PE/GIFPE SH PVC |
| 179DT 0071000 | 1,000 FT | 9.000 LB    | VIOLET      |       | #28H PE/GIFPE SH PVC |
| 179DT 0081000 | 1,000 FT | 9.000 LB    | GRAY        | C     | #28H PE/GIFPE SH PVC |
| 179DT 0091000 | 1,000 FT | 9.000 LB    | WHITE       |       | #28H PE/GIFPE SH PVC |
| 179DT 0101000 | 1,000 FT | 9.000 LB    | BLACK       |       | #28H PE/GIFPE SH PVC |
| 179DT 010500  | 500 FT   | 4.500 LB    | BLACK       |       | #28H PE/GIFPE SH PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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