# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



### 8241 Coax - 75 Ohm Coax

For more Information please call

1-800-Belden1



## **General Description:**

23 AWG Solid .023" bare copper or bare copper-covered steel conductor, polyethylene insulation, bare copper braid shield (95% cverage), PVC jacket.

### **Physical Characteristics (Overall)**

### Conductor

#### AWG:

| # Coax | AWG | Stranding | Conductor Material               | Dia. (mm) |
|--------|-----|-----------|----------------------------------|-----------|
| 1      | 23  | Solid     | BCCS - Bare Copper Covered Steel | 0.584     |

Total Number of Conductors:

### Insulation

### **Insulation Material:**

Insulation Material Dia. (mm)
PE - Polyethylene | 3.7084

### **Outer Shield**

### **Outer Shield Material:**

| Type  | Outer Shield Material | Coverage (%) |
|-------|-----------------------|--------------|
| Braid | BC - Bare Copper      | 95           |

### **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### **Overall Cable**

Overall Nominal Diameter: 6.096 mm

# **Mechanical Characteristics (Overall)**

| Operating Temperature Range:      | -40°C To +75°C |
|-----------------------------------|----------------|
| UL Temperature Rating:            | 75°C           |
| Non-UL Temperature Rating:        | 75°C           |
| Bulk Cable Weight:                | 55.063 Kg/Km   |
| Max. Recommended Pulling Tension: | 275.788 N      |
| Min. Bend Radius/Minor Axis:      | 63.500 mm      |

# **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

| NEC/(UL) Specification:            | CM            |
|------------------------------------|---------------|
| CEC/C(UL) Specification:           | CM            |
| AWM Specification:                 | UL Style 1354 |
| EU Directive 2011/65/EU (ROHS II): | Yes           |
| EU CE Mark:                        | Yes           |
| EU Directive 2000/53/EC (ELV):     | Yes           |

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| 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:                              | 59/U              |
| Flame Test                            |                   |
| UL Flame Test:                        | UL1685 UL Loading |
| Suitability                           |                   |
| Suitability - Indoor:                 | Yes               |
| Plenum/Non-Plenum                     |                   |
| Plenum (Y/N):                         | No                |
| Plenum Number:                        | 88241, 82241      |

### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:

**Delay (ns/m)** 5.05274

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 160.769

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.5306

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 1           | 1.9686                |
| 10          | 3.6091                |
| 50          | 7.8744                |
| 100         | 11.1554               |
| 200         | 16.0769               |
| 400         | 22.967                |
| 700         | 31.8257               |
| 900         | 36.4191               |
| 1000        | 39.372                |

## Nom. Power Rating:

| Freq. (MHz) | Rating (W | I) |
|-------------|-----------|----|
| 50          | 470       |    |

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| 100  | 310 |
|------|-----|
| 300  | 160 |
| 500  | 115 |
| 1000 | 76  |

Max. Operating Voltage - UL:

Voltage 300 V RMS 30 V RMS

Max. Operating Voltage - Non-UL:

Voltage 1700 V RMS

### **Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc             |
|---------------|----------|-------------|-------------|-------|-----------------------|
| 8241 002U1000 | 305 MT   | 17.237 KG   | RED         |       | RG59/U TYPE COAX RED  |
| 8241 003U1000 | 305 MT   | 17.237 KG   | ORANGE      |       | RG59/U TYPE COAX ORG  |
| 8241 004U1000 | 305 MT   | 17.237 KG   | YELLOW      |       | RG59/U TYPE COAX YEL  |
| 8241 005U1000 | 305 MT   | 17.237 KG   | GREEN, DARK |       | RG59/U TYPE COAX DGRN |
| 8241 006U1000 | 305 MT   | 17.237 KG   | BLUE, LIGHT |       | RG59/U TYPE COAX LBLU |
| 8241 009U1000 | 305 MT   | 17.237 KG   | WHITE       |       | RG59/U TYPE COAX WHT  |
| 8241 010U1000 | 305 MT   | 17.237 KG   | BLACK       |       | RG59/U TYPE COAX BLK  |
| 8241 010U500  | 152 MT   | 8.845 KG    | BLACK       |       | RG59/U TYPE COAX BLK  |
| 8241 010100   | 30 MT    | 1.996 KG    | BLACK       |       | RG59/U TYPE COAX BLK  |
| 8241 0101000  | 305 MT   | 18.144 KG   | BLACK       | С     | RG59/U TYPE COAX BLK  |
| 8241 0102000  | 610 MT   | 36.288 KG   | BLACK       | С     | RG59/U TYPE COAX BLK  |
| 8241 010500   | 152 MT   | 9.072 KG    | BLACK       | С     | RG59/U TYPE COAX BLK  |
| 8241 0105000  | 1,524 MT | 90.719 KG   | BLACK       | С     | RG59/U TYPE COAX BLK  |

Notes:

C = CRATE REEL PUT-UP.

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