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1-800-Belden1



### General Description:

18 AWG solid .040" bare copper conductor, plenum, foam FEP insulation, Duofoil® + tinned copper braid shield (65% coverage), Flamarrest® jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 1      | 18  | Solid     | BC - Bare Copper   | .040       |

Total Number of Conductors: 1

#### Insulation

Insulation Material:

| Insulation Material                        | Dia. (in.) |
|--------------------------------------------|------------|
| FFEP - Foam Fluorinated Ethylene Propylene | .170       |

#### 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                         | 65           |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material                 |
|-------------------------|---------------------------------------|
| Flamarrest®             | LS PVC - Low Smoke Polyvinyl Chloride |

#### Overall Cable

Overall Nominal Diameter: 0.222 in.

### Mechanical Characteristics (Overall)

|                                   |                 |
|-----------------------------------|-----------------|
| Operating Temperature Range:      | -20°C To +75°C  |
| UL Temperature Rating:            | 75°C            |
| Non-UL Temperature Rating:        | 75°C            |
| Bulk Cable Weight:                | 28 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 45 lbs.         |
| Min. Bend Radius/Minor Axis:      | 2.250 in.       |

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|                                       |            |
|---------------------------------------|------------|
| NEC/(UL) Specification:               | CMP        |
| CEC/C(UL) Specification:              | CMP        |
| EU Directive 2011/65/EU (ROHS II):    | Yes        |
| EU CE Mark:                           | No         |
| EU Directive 2000/53/EC (ELV):        | Yes        |
| EU Directive 2002/95/EC (RoHS):       | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| EU Directive 2002/96/EC (WEEE):       | Yes        |
| EU Directive 2003/11/EC (BFR):        | Yes        |
| CA Prop 65 (CJ for Wire & Cable):     | Yes        |
| MIL Order #39 (China RoHS):           | Yes        |
| RG Type:                              | 6/U        |

# Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

82248 Coax - 75 Ohm Coax

## Flame Test

UL Flame Test: NFPA 262

## Suitability

Suitability - Indoor: Yes

## Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 9248

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/ft)

.09

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.5

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/ft)

1.24

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.4

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.1

### Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1           | .3                       |
| 10          | .7                       |
| 50          | 1.6                      |
| 100         | 2.2                      |
| 200         | 3.0                      |
| 400         | 4.6                      |
| 700         | 6.6                      |
| 900         | 7.7                      |
| 1000        | 8.2                      |
| 1500        | 10.7                     |
| 1600        | 11.0                     |
| 2000        | 12.9                     |

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Max. Operating Voltage - Non-UL:

Voltage

300 V RMS

### Minimum Return Loss:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------|-------------|-------------------|------------------|--------------|
|             |             | 5                 | 450              | 23           |

## Sweep Test

Sweep Testing: 100% sweep tested. 5 MHz to 450 MHz.

## Put Ups and Colors:

| Item #         | Putup    | Ship Weight | Color   | Notes | Item Desc             |
|----------------|----------|-------------|---------|-------|-----------------------|
| 82248 877U1000 | 1,000 FT | 29.000 LB   | NATURAL |       | #18 FFEP RG6/U FLMRST |
| 82248 8771000  | 1,000 FT | 31.000 LB   | NATURAL | C     | #18 FFEP RG6/U FLMRST |

Notes:

C = CRATE REEL PUT-UP.

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