

## 9248 Coax - 75 Ohm Coax



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1-800-Belden1

See Put-ups and Colors

### Description:

18 AWG solid .040" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (60% coverage), PVC jacket.

### PHYSICAL CHARACTERISTICS:

#### CONDUCTOR:

|                            |                  |
|----------------------------|------------------|
| Number of Coax             | 1                |
| Total Number of Conductors | 1                |
| RG Type                    | 6/U              |
| AWG                        | 18               |
| Stranding                  | Solid            |
| Conductor Diameter         | .040 in.         |
| Conductor Material         | BC - Bare Copper |

#### INSULATION:

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Insulation Material | Gas-injected FHDPE - Foam High Density Polyethylene |
| Insulation Diameter | .180 in.                                            |

#### OUTER SHIELD:

|                                  |            |
|----------------------------------|------------|
| Outer Shield Material Trade Name | Duofoil®   |
| Outer Shield Type                | Tape/Braid |

#### Outer Shield Material :

| Layer Number | Trade Name | Type  | Material                                   | % Coverage (%) |
|--------------|------------|-------|--------------------------------------------|----------------|
| 1            | Duofoil®   | Tape  | Aluminum Foil-Polyester Tape-Aluminum Foil | 100            |
| 2            |            | Braid | TC - Tinned Copper                         | 60             |

|                        |       |
|------------------------|-------|
| Outer Shield %Coverage | 100 % |
|------------------------|-------|

#### OUTER JACKET:

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

#### OVERALL NOMINAL DIAMETER:

|                          |          |
|--------------------------|----------|
| Overall Nominal Diameter | .270 in. |
|--------------------------|----------|

#### MECHANICAL CHARACTERISTICS:

|                             |                          |
|-----------------------------|--------------------------|
| Operating Temperature Range | -40°C To +80°C           |
| UL Temperature Rating       | 80°C (UL AWM Style 1354) |

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|                                  |                 |
|----------------------------------|-----------------|
| Bulk Cable Weight                | 30 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 44 lbs.         |
| Min. Bend Radius (Install)       | 2.75 in.        |

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

|                                       |                           |
|---------------------------------------|---------------------------|
| NEC/(UL) Specification                | CM                        |
| CEC/C(UL) Specification               | CM                        |
| AWM Specification                     | UL Style 1354 (30 V 80°C) |
| EU CE Mark (Y/N)                      | Yes                       |
| EU RoHS Compliant (Y/N)               | Yes                       |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004                |

#### FLAME TEST:

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

#### SUITABILITY:

|                       |     |
|-----------------------|-----|
| Suitability - Indoor  | Yes |
| Suitability - Outdoor | Yes |

#### PLENUM/NON-PLENUM:

|               |                 |
|---------------|-----------------|
| Plenum (Y/N)  | N               |
| Plenum Number | 89248 and 82248 |

#### ELECTRICAL CHARACTERISTICS:

|                                           |                  |
|-------------------------------------------|------------------|
| Nom. Characteristic Impedance             | 75 Ohms          |
| Nom. Inductance                           | .106 $\mu$ H/ft  |
| Nom. Capacitance Conductor to Shield      | 16.2 pF/ft       |
| Nominal Velocity of Propagation           | 82 %             |
| Nominal Delay                             | 1.24 ns/ft       |
| Nom. Conductor DC Resistance @ 20 Deg. C  | 6.4 Ohms/1000 ft |
| Nominal Outer Shield DC Resistance @ 20°C | 5.6 Ohms/1000 ft |

#### Minimum Return Loss :

| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Minimum Return Loss (dB) |
|-------------|-----------------|-----------------------|----------------------|--------------------------|
|             |                 | 5                     | 450                  | 23                       |

#### Nom. Attenuation :

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| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Nom. Attenuation (dB/100 ft.) |
|-------------|-----------------|-----------------------|----------------------|-------------------------------|
|             | 1               |                       |                      | .30                           |
|             | 5               |                       |                      | .54                           |
|             | 10              |                       |                      | .70                           |
|             | 50              |                       |                      | 1.5                           |
|             | 100             |                       |                      | 2.0                           |
|             | 200             |                       |                      | 2.8                           |
|             | 400             |                       |                      | 4.0                           |
|             | 700             |                       |                      | 5.3                           |
|             | 900             |                       |                      | 6.1                           |
|             | 1000            |                       |                      | 6.5                           |
|             | 1500            |                       |                      | 8.3                           |

Max. Operating Voltage - UL

30 V RMS (UL AWM Style 1354); 300 V RMS (CM)

### PUT-UPS AND COLORS:

| Item          | Description             | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|---------------|-------------------------|--------------|--------------------|--------------|-------|
| 9248 0101000  | #18 PE/GIFHDPE SH FRPVC | 1000         | 35                 | BLACK        | C     |
| 9248 0101640  | #18 PE/GIFHDPE SH CORE  | 1640         | 39.36              | BLACK        | C     |
| 9248 0103280  | #18 PE/GIFHDPE SH FRPVC | 3280         | 42.64              | BLACK        | C     |
| 9248 010500   | #18 PE/GIFHDPE SH FRPVC | 500          | 33.5               | BLACK        | C     |
| 9248 010U1000 | #18 PE/GIFHDPE SH FRPVC | U1000        | 35                 | BLACK        |       |
| 9248 010U500  | #18 PE/GIFHDPE SH FRPVC | U500         | 17.5               | BLACK        |       |

C = CRATE REEL PUT-UP.

Revision Number: 2

Revision Date: 02-10-2006

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