# Detailed Specifications & Technical Data

**ENGLISH MEASUREMENT VERSION**

**83242 Coax - 50 Ohm Coax**

For more Information
please call

1-800-Belden1

## Description:

19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE Teflon® insulation, double silver-coated copper braid shield (96% coverage), FEP jacket.

## Physical Characteristics (Overall)

### Conductor

**AWG:**

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|---|---|---|---|---|
| 1 | 19 | Solid | SCCCS - Silver-coated Copper-covered Steel | 0.037 |

### Insulation

**Insulation Material:**

| Insulation Trade Name | Insulation Material | Dia. (in.) |
|---|---|---|
| Teflon® | TFE - Tetrafluoroethylene | .116 |

### Outer Shield

**Outer Shield Material:**

| Layer # | Type | Outer Shield Material | Coverage (%) |
|---|---|---|---|
| 1 | Braid | Silver-coated Copper | 96 |
| 1 | Braid | Silver-coated Copper | 94 |

### Outer Jacket

**Outer Jacket Material:**

| Outer Jacket Material |
|---|
| FEP - Fluorinated Ethylene Propylene |

### Overall Cable

| | |
|---|---|
| **Overall Nominal Diameter:** | 0.195 in. |

## Mechanical Characteristics (Overall)

| | |
|---|---|
| **Operating Temperature Range:** | -70°C To +200°C |
| **UL Temperature Rating:** | 200°C |
| **Bulk Cable Weight:** | 43 lbs/1000 ft. |
| **Max. Recommended Pulling Tension:** | 146 lbs. |
| **Min. Bend Radius (Install)/Minor Axis:** | 2 in. |

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

| | |
|---|---|
| **NEC/(UL) Specification:** | CMP |
| **CEC/C(UL) Specification:** | CMP |
| **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 |
| **MII Order #39 (China RoHS):** | Yes |
| **Military Specification:** | MIL-C-17G, M17/158-00001 |
| **RG Type:** | 142B/U |

### Flame Test

| | |
|---|---|
| **UL Flame Test:** | VW-1, NFPA 262 |
| **C(UL) Flame Test:** | FT6 |
| **Other Information (Trademarks):** | Teflon® is a DuPont trademark |

### Plenum/Non-Plenum

| | |
|---|---|
| **Plenum (Y/N):** | Yes |

## Electrical Characteristics (Overall)

**Nom. Characteristic Impedance:**

| Impedance (Ohm) |
|---|
| 50 |

**Nom. Inductance:**

| Inductance (µH/ft) |
|---|
| .067 |

**Nom. Capacitance Conductor to Shield:**

| Capacitance (pF/ft) |
|---|
| 29.0 |

**Nominal Velocity of Propagation:**

| VP (%) |
|---|
| 70% |

**Nominal Delay:**

| Delay (ns/ft) |
|---|
| 1.48 |

**Nom. Conductor DC Resistance:**

| DCR @ 20°C (Ohm/1000 ft) |
|---|
| 19.3 |

**Nominal Outer Shield DC Resistance:**

| DCR @ 20°C (Ohm/1000 ft) |
|---|
| 2.3 |

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|---|---|
| 10 | 1.1 |
| 50 | 2.6 |
| 100 | 3.8 |
| 200 | 5.4 |
| 400 | 7.9 |
| 700 | 10.7 |
| 900 | 12.3 |
| 1000 | 13.1 |
| 2000 | 19.3 |
| 3000 | 24.2 |
| 5000 | 32.6 |
| 8000 | 43.2 |

**Max. Operating Voltage - UL:**

| Voltage |
|---|
| 150 V RMS |

**Max. Operating Voltage - Other:**

| Voltage | Description |
|---|---|
| 1400 V RMS | Military |

## Misc. Information (Overall)

## Notes (Overall)

**Notes:** Non-SWR swept version of RG-142. Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---|---|---|---|---|---|
| 83242 001100 | 100 FT | 5.200 LB | BROWN | C E | M17/158-00001 COAX |
| 83242 0011000 | 1,000 FT | 44.000 LB | BROWN | C E | M17/158-00001 COAX |
| 83242 001500 | 500 FT | 22.000 LB | BROWN | C E | M17/158-00001 COAX |

**Notes:**
C = CRATE REEL PUT-UP.
E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

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