



Description:

26 AWG stranded (7x34) .020" silver-plated copper-covered steel conductor, TFE Teflon® insulation, silver-plated copper braid shield (95% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--|------------|
| 1 | 26 | 7x34 | SPCCS - Silver Plated Copper Covered Steel | .020 |

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Dia. (in.) |
|-----------------------|---------------------------|------------|
| Teflon® | TFE - Tetrafluoroethylene | .058 |

Outer Shield

Outer Shield Material:

| Type | Outer Shield Material | Coverage (%) |
|-------|----------------------------|--------------|
| Braid | SPC - Silver Plated Copper | 95 |

Outer Jacket

Outer Jacket Material:

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

Overall Cabling

Overall Nominal Diameter: 0.098 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

Non-UL Temperature Rating: 200°C

Bulk Cable Weight: 10 lbs/1000 ft.

Max. Recommended Pulling Tension: 21 lbs.

Min. Bend Radius (Install)/Minor Axis: 1 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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: M17/172-00001

RG Type: 316/U

Flame Test

UL Flame Test: UL1685 UL Loading, VW-1

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/ft)

0.067

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

29.0

Nominal Velocity of Propagation:

VP (%)

69.5

Nominal Delay:

Delay (ns/ft)

1.48

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

84.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.5

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

| | |
|------|------|
| 1 | 1.2 |
| 10 | 2.7 |
| 50 | 5.6 |
| 100 | 8.3 |
| 200 | 12.0 |
| 400 | 17.5 |
| 700 | 23.7 |
| 900 | 27.3 |
| 1000 | 29.0 |

Max. Operating Voltage - Other:

| Voltage | Description |
|------------------------|-------------|
| Military Specification | 900 V RMS |

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|--------------------------|
| 83284 009100 | 100 FT | 1.100 LB | WHITE | E | #26TFE BRD RG-316/U COAX |
| 83284 0091000 | 1,000 FT | 11.000 LB | WHITE | E | #26TFE BRD RG-316/U COAX |
| 83284 009500 | 500 FT | 6.000 LB | WHITE | E | #26TFE BRD RG-316/U COAX |

Notes:

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

MIL-C-17G QPL Cable

50 Ohm Coax

| Description | Part No. | UL NEC/ C(UL) CEC Type | Standard Lengths | | Standard Unit Weight | | Conductor (stranding) Diameter Nom. DCR | Nominal Core OD | | Shielding Materials Nom. DCR | Nominal OD | | Nom. Imp. (Ω) | Nom. Vel. of Prop. | Nominal Capacitance | | Nominal Attenuation | | |
|-------------|----------|------------------------------|------------------|---|----------------------|----|---|-----------------|----|---------------------------------|------------|----|---------------|--------------------|---------------------|------|---------------------|------------|---------|
| | | | Ft. | m | Lbs. | kg | | Inch | mm | | Inch | mm | | | pF/Ft. | pF/m | MHz | dB/100 Ft. | dB/100m |

30 AWG Stranded (7x38) .012" Silver-plated Copper-covered Steel Conductor • Silver-plated Copper Braid Shield (96% Coverage)

| TFE Teflon® Insulation • White FEP Jacket | | | | | | | | | | | | | | | | | | | | |
|--|--------------|---|-------|-------|-----|-----|--|------|-----|---|------|------|----|-------|------|------|-----|------|------|-------|
| 200°C | 83265 | — | 100† | 30.5 | .8 | .4 | 30 AWG (7x38) .012" SPCCS 244.0Ω/M' 801.0Ω/km | .033 | .84 | SPC Braid 96% Shield Coverage 14.6Ω/M' 47.9Ω/km | .071 | 1.80 | 50 | 69.5% | 29.0 | 95.1 | 1 | 2.6 | 8.5 | |
| VW-1 | | | 500† | 152.4 | 4.0 | 1.6 | | | | | | | | | | | 10 | 5.6 | 18.4 | |
| | | | 1000† | 304.8 | 6.0 | 3.2 | | | | | | | | | | | 50 | 10.5 | 34.5 | |
| | | | | | | | | | | | | | | | | | 100 | 14.0 | 45.9 | |
| | | | | | | | | | | | | | | | | | | 200 | 19.0 | 62.3 |
| | | | | | | | | | | | | | | | | | | 400 | 28.0 | 91.9 |
| | | | | | | | | | | | | | | | | | | 700 | 37.0 | 121.4 |
| | | | | | | | | | | | | | | | | | | 900 | 42.5 | 139.4 |
| | | | | | | | | | | | | | | | | | | 1000 | 46.0 | 150.9 |

M17/169-00001 (RG-178B/U). Non-SWR swept version of RG-178.

26 AWG Stranded (7x34) .020" Silver-plated Copper-covered Steel Conductor • Silver-plated Copper Braid Shield (95% Coverage)

| TFE Teflon Insulation • White FEP Jacket | | | | | | | | | | | | | | | | | | | | |
|---|--------------|---|-------|-------|------|-----|---|------|------|--|------|------|----|-------|------|------|-----|------|------|------|
| 200°C | 83284 | — | 100† | 30.5 | 1.2 | .5 | 26 AWG (7x34) .020" SPCCS 84.1Ω/M' 275.9Ω/km | .058 | 1.47 | SPC Braid 95% Shield Coverage 6.5Ω/M' 21.3Ω/km | .098 | 2.49 | 50 | 69.5% | 29.0 | 95.1 | 1 | 1.2 | 3.9 | |
| VW-1 | | | 500† | 152.4 | 5.5 | 2.7 | | | | | | | | | | | 10 | 2.7 | 8.9 | |
| | | | 1000† | 304.8 | 11.0 | 5.0 | | | | | | | | | | | 50 | 5.6 | 18.4 | |
| | | | | | | | | | | | | | | | | | 100 | 8.3 | 27.2 | |
| | | | | | | | | | | | | | | | | | | 200 | 12.0 | 39.4 |
| | | | | | | | | | | | | | | | | | | 400 | 17.5 | 57.4 |
| | | | | | | | | | | | | | | | | | | 700 | 23.7 | 77.8 |
| | | | | | | | | | | | | | | | | | | 900 | 27.3 | 89.6 |
| | | | | | | | | | | | | | | | | | | 1000 | 29.0 | 95.1 |

M17/172-00001 (RG-316/U). Non-SWR swept version of RG-316.

| TFE Teflon Insulation • Brown FEP Jacket | | | | | | | | | | | | | | | | | | | | |
|---|--------------|---|-------|-------|------|-----|---|------|------|--|------|------|----|-------|------|------|-----|------|------|------|
| 200°C | 84316 | — | 100† | 30.5 | 1.2 | .5 | 26 AWG (7x34) .020" SPCCS 84.1Ω/M' 275.9Ω/km | .058 | 1.47 | SPC Braid 95% Shield Coverage 6.5Ω/M' 21.3Ω/km | .098 | 2.49 | 50 | 69.5% | 29.0 | 95.1 | 1 | 1.2 | 3.9 | |
| VW-1 | | | 500† | 152.4 | 5.5 | 2.5 | | | | | | | | | | | 10 | 2.7 | 8.9 | |
| | | | 1000† | 304.8 | 11.0 | 5.0 | | | | | | | | | | | 50 | 5.6 | 18.4 | |
| | | | | | | | | | | | | | | | | | 100 | 8.3 | 27.2 | |
| | | | | | | | | | | | | | | | | | | 200 | 12.0 | 39.4 |
| | | | | | | | | | | | | | | | | | | 400 | 17.5 | 57.4 |
| | | | | | | | | | | | | | | | | | | 700 | 23.7 | 77.8 |
| | | | | | | | | | | | | | | | | | | 900 | 27.3 | 89.6 |
| | | | | | | | | | | | | | | | | | | 1000 | 29.0 | 95.1 |

M17/113-RG316

22 AWG Stranded (27x36) .030" Tinned Copper Conductor • Tinned Copper Braid Shield (95% Coverage)

| Polyethylene Insulation • Black Non-contaminating PVC Jacket | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------|------|-------|------|-----|--|------|------|---|------|------|----|-----|------|-------|---|----|------|------|------|--|--|--|--|--|--|----|-----|-----|
| UL AWM Style 1354 (30V 80°C) VW-1 | 9252 | NEC: CMX | 1000 | 304.8 | 18.0 | 8.2 | 22 AWG (27x36) .030" TC 17.1Ω/M' 56.1Ω/km | .096 | 2.44 | TC Braid Shield 95% Shield Coverage 5.2Ω/M' 17.1Ω/km | .160 | 4.06 | 50 | 66% | 30.8 | 101.0 | 1 | .4 | 1.3 | | | | | | | | | | | |
| | | CEC: CMX | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | 1.7 | 5.6 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 4.5 |
| | | | | | | | | | | | | | | | | | | | 100 | 7.0 | 23.0 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 200 | 11.0 | 36.1 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 400 | 16.5 | 54.1 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 700 | 23.5 | 77.1 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 900 | 27.3 | 89.6 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 1000 | 29.0 | 95.1 | | | | | | | | | |

M17/157-00001 (RG-122/U). Non-SWR swept version of RG-122.

DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • SPC = Silver-plated Copper • SPCCS = Silver-plated Copper-covered Steel • TC = Tinned Copper • TFE = Tetra Fluoroethylene

†May contain more than one piece, minimum length of any one piece is 25 ft.

Teflon is a DuPont trademark.