

Technical Specification

Cable Type: M17/94-RG-179 75 Ohm High-Temp Coaxial Cable

Western Wire Part Number: WRG17900

Revision: 10/13 Date: 29 April 2013



Physical Description

| | |
|--------------------|---|
| Inner Conductor | Stranded Silver-coated Copper-clad steel (SCCS) 7x0.10±0.002 mm, 30AWG. |
| Conductor OD | 0.305±0.025 mm |
| Dielectric | Solid extruded PTFE (Type F-1) |
| Dielectric OD | 1.60±0.10 mm |
| Outer conductor | Silver plated copper (SPC) braid, 16x5x0.102mm, 92.3% nominal coverage. Lay: 25mm nom. |
| Outer conductor OD | 2.0 mm nom. 2.133 mm max. |
| Outer Jacket | FEP (Type IX) colored Brown-tint. 0.27mm nom. thickness. |
| Outer Jacket OD | 2.54±0.10 mm OD. |
| Marking | WESTERN WIRE WRG17900 M17/94-RG179 75 OHM COAXIAL CABLE CE 2011/65/EU (RoHS-2) |
| Notes | 1. Marking shall be clear and legible and will not be erased after 5 finger rubbing. 2. Marking may be done by a printed tape, made of flame-retardant material, inserted under the jacket. The jacket shall be transparent enough to permit the reading of marking tape through the jacket. |

Mechanical Properties

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|-------------------------------------|----------------------------|
| Minimum Bend Radius | 25 mm |
| Elongation of center conductor | 8% min. |
| Tensile strength of inner conductor | 343 N/mm ² min. |
| Inner conductor adhesion to core | 6.6 N min. 16.5 N max. |
| Operating temperature | -55 to +200C |
| Cold bend | -55C. |
| Total Weight | 16 Kg/Km max. |

Electrical Properties

| | |
|-------------------------------------|-----------------------------------|
| Operating frequency | 3 GHz max. |
| Characteristic Impedance | 75±3 Ohm |
| Capacitance | 64 pF/m nom. 75 pF/m max. @ 1 KHz |
| Velocity of Propagation | 69.5% nom. |
| DC Resistance of inner conductor | 802 Ohm/Km max. @ 20C |
| Continuous working voltage | 900 V rms max. @ 20C |
| Dielectric strength | 2000 V rms min. |
| Dielectric & Jacket 100% spark test | 2000 V rms min. |
| SRL | NS |
| Attenuation | 68.8 dB/100m max. @ 400 MHz. |

| Frequency MHz | Nom. Attenuation dB/100m | Frequency MHz | Nom. Attenuation dB/100m |
|---------------|--------------------------|---------------|--------------------------|
| 1 | 9.8 | 700 | 64.6 |
| 10 | 17.4 | 800 | 69.0 |
| 50 | 27.9 | 900 | 73.2 |
| 100 | 32.8 | 1000 | 78.7 |
| 200 | 41.0 | 2000 | 111 |
| 400 | 52.5 | 3000 | 140 |

This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)