

Technical Specification

Cable Type: M17/93-RG-178 50 Ohm High-Temp Coaxial Cable (SRL)

Western Wire Part Number: WRG17801

Revision: 04/13 Date: 11 March 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	0.85±0.05 mm
Outer conductor	Silver plated copper (SPC) braid, 16x3x0.10mm, 95.9% nominal coverage. Lay: 8.3mm nom.
Outer conductor OD	1.25 mm nom. 1.37mm max.
Outer Jacket	FEP (Type IX) colored white. 0.28mm nom. thickness.
Outer Jacket OD	1.80±0.10 mm OD.
Marking	WESTERN WIRE WRG17801 M17/93-RG178 50 OHM COAXIAL CABLE CE 2011/65/EU (RoHS)
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

Minimum Bend Radius	25 mm
Elongation of center conductor	10% min.
Tensile strength of inner conductor	343 N/mm ² min.
Inner conductor adhesion to core	4.4N min. 17.8N max.
Operating temperature	-55 to +200C
Cold bend	-55C.
Total Weight	9.3 Kg/Km max.

Electrical Properties

Operating frequency	3 GHz max.
Characteristic Impedance	50±2 Ohm
Capacitance	105 pF/m max. @ 1 KHz
Velocity of Propagation	69.5% nom.
DC Resistance of inner conductor	802 Ohm/Km max. @ 20C
Continuous working voltage	750 V rms max. @ 20C
Dielectric strength	2000 V rms min.
Dielectric & Jacket 100% spark test	2000 V rms min.

Frequency MHz	Max. Attenuation dB/100m Sweep tested @ 50-3000MHz	Min. SRL dB Sweep tested @ 50-3000MHz
50	38.05	26
100	52.5	25
400	108.2	22
1000	170.6	19
3000	308.4	14

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