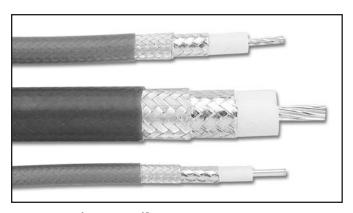
# LTE high-performance coaxial cables (RG replacement)



### **Construction Details**

Center Conductor: See table below.

Dielectric: LTE (extruded low-density PTFE) or

low density / composite.

**Inner Shield:** 

875-892: None.

900-142: Flat silver-plated copper braid, 95% coverage. 900-316: Flat silver-plated copper braid, 95% coverage. 900-393: Flat silver-plated copper braid, 92% coverage.

Outer Shield: Silver-plated copper braid, 95%

nominal coverage. Can be provided with optional shield types such as flat braid, tape composites, or combinations.

Jacket: Extruded FEP.

LTE is a patented low-density, air-expanded PTFE dielectric which provides reduced weight and increased velocity of propagation (up to 85%).

LTE dielectric also exhibits low loss and stable performance throughout its temperature range.

These cables are ideal replacements for MIL-C-17 cables in demanding applications such as aerospace and high-reliability commercial systems.

875-892 is a replacement for RG-179 (M17/94). 900-142 is a replacement for RG-142 (M17/60, /158). 900-316 is a replacement for RG-316 (M17/113, /172). 900-393 is a replacement for RG-393 (M17/127,/174).

#### **Performance:**

Temperature rating: 200° C.

**Impedance:** 875-892:  $75\Omega$  nominal. All others:  $50\Omega$  nominal.

## **Dimensions and Weights**

١	Thermax	Thermax Inner Conductor		Dielectric Inner Shield		Outer Shield	Jacket	W-1-1-	Min. Bend
	P/N	Diameter	Stranding	Diameter	Diameter	Diameter	Diameter	Diameter Weight	
	875-892	.015 (2.67)	7/36 SPCA	.063 (1.60)	_	.080 (2.03)	.100 (2.54)	8.5 (12.6)	.50 (12.7)
	900-142	.051 (1.30)	Solid SPC	.145 (3.68)	.153 (3.85)	.171 (4.34)	.190 (4.83)	39.0 (57.8)	1.0 (25.4)
	900-316	.020 (.51)	Solid SPCW	.060 (1.53)	.068 (1.73)	.085 (2.16)	.105 (2.68)	10.4 (15.5)	.50 (12.7)
	900-393	.105 (2.67)	7/.038 SPC	.285 (7.24)	.291 (7.39)	.318 (8.08)	.390 (9.91)	133.0 (197.1)	2.0 (50.8)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal unless otherwise indicated.

SPC: Silver-plated copper. SPCW: Silver-plated copper-covered steel (copperweld). SPCA: Silver-plated high-strength copper (alloy 135).

#### **Electrical Performance**

Thermax	Velocity of	Capacitance		Time Delay				
P/N	Propagation	(pF/ft)	100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	ns / foot
875-892	81%	15.5	_	14.0	_	_	_	1.23
900-142	79%	26.0	2.8	6.5	9.4	14.0	23.0	1.28
900-316	75%	27.5	7.0	15.8	22.6	32.3	52.4	1.33
900-393	80%	26.0	1.5	3.5	5.2	7.8	13.5	1.28

All values are nominal unless otherwise indicated.

