

LTE high-speed twinaxial cables—100Ω parallel and twisted pair

LTE low-density, air-expanded PTFE dielectric gives these cables very fast transmission speeds and low loss in a small size, along with exceptional flexibility.

These cables are just some examples of the performance levels provided by LTE dielectric—many other configurations are also available.

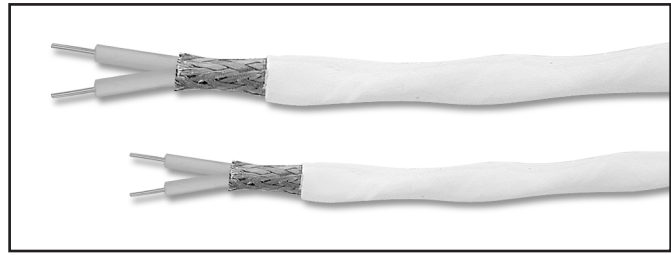
Performance:

Temperature rating: 919 series: 90° C.
TC-746: 150° C.

Velocity of propagation: 83%.

Time delay: 1.23 ns / foot nominal.

See page 3 for more information on LTE dielectric.



Construction Details

Center Conductor: 919 series: Solid silver-plated copper.
TC-746: Stranded silver-plated high-strength copper alloy.

Primary Insulation: LTE (extruded expanded low-density PTFE).

Drain Wire: 919 series: Same as conductor.
TC-746: None.

Shield: 919 series: Aluminum/polyethylene/aluminum tape.
TC-746: AWG 38 nickel-plated copper, 95% coverage.

Jacket: 919 series: Extruded PVC, white;
TC-746: Extruded ETFE, white.

Options: Other jacket colors; other conductor materials, gauges and / or stranding; other impedances; other transmission speeds.

Dimensions and Weights

Thermax P/N	Component Wire			Component Wire Insulation Diameter	Shield Diameter	Jacket Diameter	Weight
	Conductor Diameter/Stranding	Lay					
919-26XV	.0159 (.40) Solid SPC	Parallel		.037 (.94)	.076 (1.93)	.094 (2.39)	5.2 (7.7)
919-28XV	.0126 (.32) Solid SPC	Parallel		.033 (.84)	.068 (1.73)	.086 (2.18)	4.0 (5.9)
TC-746	.024 (.61) 19/36 SPCA	Twisted (1.75)		.074 (1.88)	.162 (4.12)	.182 (4.62)	18.0 (26.8)

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

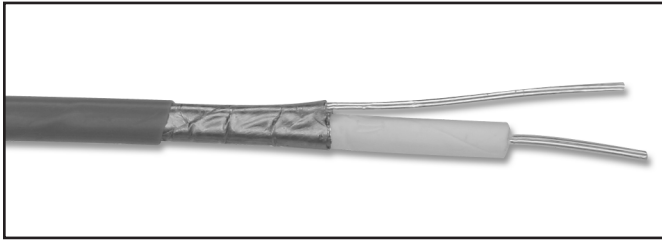
SPC: Silver-plated copper. **SPCW:** Silver-plated copper-covered steel (copperweld). **SPCA:** Silver-plated high-strength copper (alloy 135).

Electrical Performance

Thermax P/N	Impedance	Capacitance (pF/ft)	Attenuation (dB/100 ft.)				Operating Voltage (V)	Dielectric Strength (VAC RMS)
			100 MHz	400 MHz	700 MHz	900 MHz		
919-26XV	100Ω ±10%	11.0	11.5	23	30	34	30	500
919-28XV	100Ω ±10%	11.0	14	28	37	42.5	30	500
TC-746	125Ω ±10%	17.0	1.0 dB @ 2 MHz				30	1000

All values are nominal unless otherwise indicated.

LTE high-performance transmission cable—75Ω high-speed miniature



Construction Details

Center Conductor: Silver-plated copper.

Primary Insulation: LTE (extruded expanded low-density PTFE).

Drain Wire: Solid SPC, 32 AWG, parallel to component wire.

Shield: Wrapped foil / film tape.

Jacket: Extruded FEP, natural color.

Options: Other jacket colors; other conductor materials and / or stranding; other impedances.

LTE low-density, air-expanded PTFE dielectric gives these cables very fast transmission speed and low loss in a small size, along with exceptional flexibility.

This cable is just one example of the performance levels provided by LTE dielectric—many other configurations are also available.

Performance:

Temperature rating: 200° C.

Impedance: 75 ±7 Ω.

Velocity of propagation: 84% nominal.

Capacitance: 17 pF / foot nominal.

Time delay: 1.21 ns / foot nominal.

Dimensions and Weight

Thermax P/N	Inner Conductor		Insulation Diameter	Shield Diameter*	Jacket Diameter	Weight	Min. Bend Radius
	Diameter	Stranding					
E75-132DAMXE	.008 (.20)	Solid SPC	.032 (.81)	.046 (1.17)	.060 (1.52)	2.1 (3.1)	.3 (7.6)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). **SPC:** Silver-plated copper. *Measured over drain wire.