## **Low-Noise Cables**



## **Construction Options**

Jacket: Tape wrapped PTFE; extruded jacket or our unique Seamless Wrap PTFE tape optional.

Shield: Nickel- or silver-plated copper.

**Dielectric:** Tape wrapped PTFE with semiconductive inner and outer PTFE tape."SS" part numbers feature our proprietary easy-stripping design.

**Center Conductor:** Nickel or silver-plated stranded copper.

**Options:** Wide variety of options for conductor and shield materials and plating and configurations of low-noise layering available.

**Thermax Low-Noise cables** minimize triboelectric noise generated by cable movement, as well as providing superior shielding to protect signals from external interference.

These cables are ideal for use with piezoelectric accelerometers or other sensitive transducers, or other applications with low-power signals and/or electrically noisy environments.

They are also used in airborne EVM (Engine Vibration Monitoring) systems, with approvals from many major aerospace manufacturers.

The cables shown below are just a few examples of our low-noise cable expertise. Many other combinations of materials and construction can be used to produce a low-noise cable that will fulfill your needs; please contact your Thermax representative with your requirements.

## Low-Noise Four-Conductor Shielded and Jacketed Cable



Thermax P/N: LN34-MTTF-134(4)STJE
Conductor: Solid SPCA, 34 AWG, .0063 (.16) diameter.
Insulation: Extruded PTFE, .018 (.46) diameter. Colors: Red, black, yellow, white.
Noise Barrier: Low-noise tape over twisted core, .051 (1.30) diameter.
Shield: 40 AWG silver-plated copper braid, 90% coverage, .063 (1.60) diameter.
Jacket: Blue Seamless Wrap PTFE tape, .076 (1.93) diameter.
Temperature rating: -55 to 200° C. Voltage rating: 160V.

## Low-Noise Twinaxial Cables—Dimensions, Materials, and Weights

Thermax P/N	Conductor AWG / Diameter Stranding / Material	Insulation Diameter	Inner Shield Diameter AWG / Material	Jacket Diameter Material	Outer Shield Diameter AWG / Material	Outer Jacket Diameter Material	Weight
SS72012	22 .030 (.76) 19/34 NPC	.062 (1.58)	.160 (4.06) 38 NPC	.180 (4.57) PTFE Tape	None	None	26 (36.7)
SS72013	20 .037 (.94) 19/32 NPC	.070 (1.78)	.180 (4.57) 38 NPC	.200 (5.08) PTFE Tape	None	None	31 (46.1)
SS72014	18 .047 (1.20) 19/30 NPC	.080 (2.03)	.200 (5.08) 38 NPC	.220 (5.59) PTFE Tape	None	None	40 (59.5)
SS72016	20 .037 (.94) 19/30 NPC	.070 (1.78)	.180 (4.57) 38 NPC	.200 (5.08) PTFE Tape	.218 (5.54) 38 NPC	.238 (6.05) PTFE Tape	40 (59.5)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal unless otherwise indicated. **NPC:** Nickel-plated copper. **SPC4:** Silver-plated copper. **SPC4:** Silver-plated high-strength copper alloy. **SPCW:** Silver-plated copper-covered steel (copperweld).