



Glenair's 0.025 Inch Contact Spacing for Series 89 Nanominiature Connectors

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The latest evolution in rectangular shaped connectors for board-level I/O applications. Featuring gold alloy TwistPin contacts and aluminum, titanium or stainless steel shells, the Nanominiature is the smallest, yet remarkably robust, connector we make. Glenair is one of the first interconnect manufacturers to qualify to the new MIL-DTL-32139 Nanominiature Mil-Spec for these precision-machined connectors that deliver both ultra high density and maximum weight and space savings. These high reliability ultra miniature interconnects are ideal for critical applications where size and weight restrictions preclude the use of larger connectors such as M24308 D-Sub-miniatures. Ideal for military applications of all types, the rugged contact system allows Glenair's Nano connectors to be used in the most demanding miniaturized applications. The Glenair Nano contact system consists of a TwistPin (a miniaturized version of the Glenair Micro-D TwistPin) and a tubular socket providing excellent durability and superior resistance to shock and vibration. Accommodating #30 or #32 AWG wire, Nano TwistPin contacts handle 1 AMP current rating and 70 Volts AC RMS operating voltage.

Series 89 Nanominiature Connector Performance Summary

Contact Spacing	.025" (0.64) Contact Centers
Wire Accommodation	#30-#32 AWG
Current Rating	1 AMP Maximum
Voltage Rating (DWV)	250 VAC RMS Sea Level, 100 VAC RMS 70,000 Feet
Insulation Resistance	5000 Megohms Minimum
Operating Temperature	-55° C. to +125° C.
Optional High Operating Temperature	Mod Code 534 rated up to 200° C.
Contact Resistance	71 Millivolt Drop Maximum, 1 AMP Current, #30 AWG Wire
Vibration	20 g's, IAW EIA-364-28, Condition IV
Shock	100 g's, IAW EIA-364-27, Condition G
Durability	200 Mating Cycles
Corrosion Resistance	48 Hours Salt Spray IAW EIA-364-26, Condition B
Humidity	96 Hours, IAW EIA-364-31 Condition A
Contact Engaging/Separation Force	5 Ounce Maximum, 0.4 Ounce Minimum
Thermal Vacuum Outgassing	Total Mass Loss (TML) 1.0% Max., Volatile Condensable Material (VCM) 0.1% Max.

Materials and Finishes

Connector Shell	Aluminum Alloy, Cadmium Plated per SAE-AMS-QQ-P-416 Type II Class 1. Aluminum Alloy, Electroless Nickel Plated Per SAE-AMS-2404, Class 3 or 4, Grade B Titanium Alloy per MIL-T-81556, Unplated 300 Series Stainless Steel per ASTM A276, Passivated IAW SAE AMS 2700
Insulator	Liquid Crystal Polymer (LCP), per MIL-M-24519 GLCP-30F, 30% Glass-Filled
Pin Contact	Spring Temper Gold Alloy, Unplated, Per ASTM B477 and ASTM B541.
Socket Contact	Gold Alloy, Unplated, Per ASTM B477 or ASTM B541.
Hardware	300 Series Stainless Steel. Recommended Torque for Nano Jackscrews is 0.5 - 1.0 In/Lb for #0-80, 1.0 - 2.0 In/Lb for #2-56
PCB Trays	Liquid Crystal Polymer (LCP), per MIL-M-24519 GLP-30F, 30% Glass-Filled
Encapsulant	Epoxy