



Series 89 Nanominiature Connectors Performance Summary, Materials and Finishes

Glenair's 0.025 inch contact spacing Series 89 Nanominiature connector is the latest evolution in rectangular shaped connectors for board-level I/O applications. Featuring solid gold 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

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|-----------------------------------|--|
| 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. |
| Contact Resistance | 71 Millivolt Drop Maximum, 1 AMP Current, #30 AWG Wire |
| Vibration | 20 g's, in Accordance with EIA-364-28, Condition IV |
| Shock | 100 g's, in Accordance with EIA-364-27, Condition G |
| Durability | 200 Mating Cycles |
| Corrosion Resistance | 48 Hours Salt Spray In Accordance With EIA-364-26, Condition B |
| Humidity | 96 Hours, In Accordance with 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

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| Connector Shell | Aluminum Alloy, Cadmium Plated per SAE-AMS-QQ-P-416 Type II Class 1. Aluminum Alloy, Electroless Nickel Plated Per SAE-AMS-C-26074, Class 3 or 4, Grade B Titanium Alloy per MIL-T-81556, Unplated 300 Series Stainless Steel per ASTM A582 |
| 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 |
| PCB Trays | Liquid Crystal Polymer (LCP), per MIL-M-24519 GLP-30F, 30% Glass-Filled |
| Encapsulant | Epoxy |