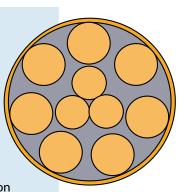
## Not All Micro-D's Are Created The MIL-DTL-83513 and MIL-DTL-32139 specification define the minimum acceptable performance level Micro-D and Nanominiature connectors. While the Micro-D and Nanominiature connectors while the Micro-D and Nanominiature connectors.

## **Seven Points of Electrical Contact**

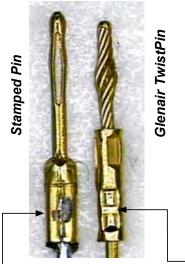
The TwistPin size #24
contact has seven strands
of BeCu wire surrounding
three filler strands.
Each strand makes
contact with the socket,
assuring low resistance,
plenty of contact wipe, and
excellent shock and vibration
performance.



The MIL-DTL-83513 and MIL-DTL-32139 specifications define the minimum acceptable performance levels for Micro-D and Nanominiature connectors. While the specs are rigid in their performance benchmarks, manufacturers are given considerable leeway when it comes to contact design, crimp fabrication, contact finish and material selection. Stamped and formed contacts, for example, are widely used in Micro-d connectors due to their lowcost and ease of manufacture. But independent testing clearly shows that TwistPin style contacts provide superior performance in such areas as high temperature tolerance, contact retention and crimp strength. If you have already made the decision to use either a Micro-D or Nano sized connector because its ruggedized performance outweighs the potential cost-savings realized in a lesser-caliber connector, then you owe it to yourself to understand the very real differences between stamped pins and the Glenair TwistPin Contact System.

This unretouched photograph shows important differences between the TwistPin and stamped pins.

Stronger Front End
Both types of contacts meet the requirements of MIL-DTL-83513. But only the TwistPin offers a stronger frontend with its seven points of contact, high normal force and better resistance to vibration.



**Better Crimp Joint** 

Micro-D connectors are factory-terminated to wire. Board mount and insulated wire pigtails have crimp joints where the wire attaches to the contact. Micro-D crimp joints are concealed with epoxy potting. The Micro-D is unique among high reliability mil spec connectors because the mil spec allows stamped crimp barrels and does not specify that the crimping process must use mil spec crimp tools. The thin sheet metal in the stamped pin cannot produce a satisfactory gas-tight crimp joint, so spot welding is required to reduce the chance of failure.

8 Indent Mil Spec Crimp Joint

"B" Crimp With Spot Weld

**Split-Tine Contact Systems** 

The socket contact is made by machining a copper alloy tube, then cutting a longitudinal slot. The contact is then crimped to bend the tines together. The smallest split tine contact systems are used in connectors with .075 inch spacing. The TwistPin offers improved vibration performance and higher contact density.

M39029 Split Tine Contact System

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High Performance Micro-D Connectors and Cables

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