

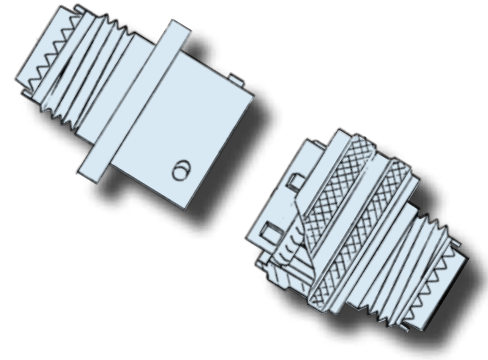


MIL-DTL-38999 Environmental Class Connectors Overview

Series I

MIL-DTL-38999 Environmental Class Connector Overview

MIL-DTL-38999 is a high-performance connector family designed for cable-to-panel I/O applications in military aerospace and other demanding situations. Environmental class plugs and receptacles—with high-density insert arrangements (up to 128 contacts)—are available with crimp removable contacts, PC tails, and solder cups. Glenair manufactures a wide range of environmental class MIL-DTL-38999 type connectors including lanyard-release products, composite and specialty metal cable plugs and receptacles, and Coax contact equipped products. This table describes the most basic attributes for the environmental class products supplied by Glenair.



Series Description

Scoop-Proof 3-Point Bayonet Coupling

Supported Contact Types and Gauges

12, 16, 20, and 22 gauge contacts, standard density and 22 gauge high density arrangements; 3 to 128 contacts. Crimp, solder and PCB tails.

Coupling/Mating Design

Bayonet coupling; quick disconnect; positive locking, keyed.

EMI Shielding

Conductive plating and thick shell wall cross-sections provide effective EMI shielding to 40 dB minimum at 10 GHz.

Vibration and Shock

Excellent resistance to vibration and shock with no electrical discontinuity and no disengagement of the mated connectors per MIL-DTL-38999 (paragraph 3.26)

Mating Speed

120 ° or 1/3 turn to full mate

Materials

Aluminum, Composite or Stainless Shells, Silicone Seals per ZZ-R-765, Beryllium Copper Alloy, Gold Plated Contacts

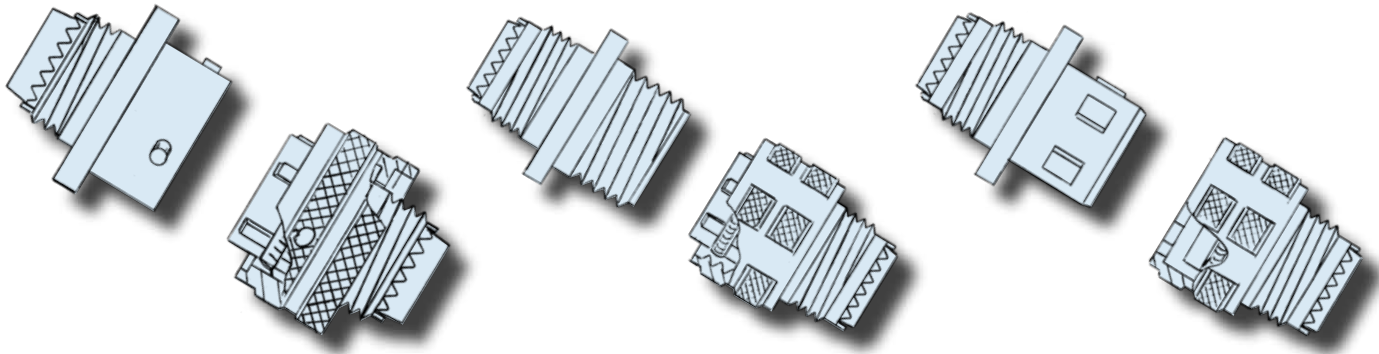
**MIL-DTL-38999
Environmental Class Connectors
Overview**



Series II

Series III

Series IV



<p>Low-Profile 3-Point Bayonet Coupling</p>	<p>Scoop-Proof, Triple Start, Self-Locking</p>	<p>Scoop-Proof, Breech Lock</p>
<p>12, 16, 20, and 22 gauge contacts, standard density and 22 gauge high density arrangements; 3 to 128 contacts. Crimp, solder and PCB tails.</p>	<p>12, 16, 20, and 22 gauge contacts, standard density and 22 gauge high density arrangements; 3 to 128 contacts. Crimp, solder and PCB tails.</p>	<p>12, 16, 20, and 22 gauge contacts, standard density and 22 gauge high density arrangements; 3 to 128 contacts. Crimp, solder and PCB tails.</p>
<p>Bayonet coupling design, quick disconnect, captive, keyed.</p>	<p>Triple-start threaded coupling design, rapid advance, self-locking and full-mate indicator, keyed.</p>	<p>Breech lock coupling design, rapid advance, self-locking, keyed.</p>
<p>Conductive plating and thick shell wall cross-sections provide effective EMI shielding to 40 dB minimum at 10 GHz.</p>	<p>Shell to shell bottoming, grounding fingers, conductive plating and thick shell wall cross-sections provide effective EMI shielding to 65 dB minimum at 10 GHz</p>	<p>Shell to shell bottoming, grounding fingers, conductive plating and thick shell wall cross-sections provide effective EMI shielding to 65 dB minimum at 10 GHz. Grounding before engagement of contacts.</p>
<p>Excellent resistance to vibration and shock with no electrical discontinuity and no disengagement of the mated connectors per MIL-DTL-38999 (paragraph 3.26)</p>	<p>Excellent resistance to vibration and shock with no electrical discontinuity and no disengagement of the mated connectors per MIL-DTL-38999 (paragraph 3.26)</p>	<p>Excellent resistance to vibration and shock with no electrical discontinuity and no disengagement of the mated connectors per MIL-DTL-38999 (paragraph 3.26)</p>
<p>120 ° or 1/3 turn to full mate</p>	<p>360 ° or one full turn to full mate</p>	<p>90° or 1/4 turn to full mate</p>
<p>Aluminum or Stainless Steel Shells, Silicone Seals per ZZ-R-765, Beryllium Copper Alloy, Gold Plated Contacts</p>	<p>Aluminum, CRES and Composite Shells, Silicone Seals per ZZ-R-765, Beryllium Copper Alloy, Gold Plated Contacts</p>	<p>Aluminum Shells, Silicone Seals per ZZ-R-765, Beryllium Copper Alloy, Gold Plated Contacts</p>