

Special Purpose Interconnection Products

“Breakaway”/Quick Disconnect Connectors with Lanyard Release

Consult your local Amphenol sales office for further information. Consult catalog 12-092 for 38999 Fail Safe connector information.



“Breakaway” Fail-Safe Subminiature MIL-DTL-38999 - available in Series I, II and III. The Series III Fail Safe is qualified for MIL-STD-1760 electrical interface between an aircraft and its “stores”.



Fail Safe Breakaways with Improved Durability Composite Shells and Low Profile Backshells

OPTIONAL FEATURES

- Four series to choose from for lanyard release design flexibility.
- Availability of different lanyard lengths, depending on connector series.
- MIL-DTL-38999 Series III Fail Safe available in two shell lengths.
- MIL-DTL-38999 Series III Fail Safe has option of hybrid composite shells (consult Amphenol Aerospace for shell size availability).
- Full range of accessories are available with MIL-DTL-38999 Series III Fail Safes, including low profile backshells in shell size 25. These backshells have three heights available and they offer rear access covers to help ease harness assembly and reparability. Also available are dummy contacts for sealing unused contact cavities and wire combs to help stabilize and prevent contact side loading.
- MIL-DTL-38999 Series III Fail Safe available with fiber optic termini, coax, or twinax contacts.
- MIL-DTL-38999 Fail Safe connectors can be designed with larger flanges and other customer specific requirements.

APPLICATION

Cylindrical connectors with lanyard release capability. Designed to provide quick disconnect of a connector plug and receptacle with axial pull on the lanyard. Provides instant decoupling and damage free separation. Ideal for weapons release and blind or difficult accessibility situations.

STANDARDS REQUIREMENTS

Available in and meeting requirements of the following series:

- MIL-DTL-38999 Series I, II, III
- MIL-C-26482, Series 1
- Matrix MIL-C-83723, Series III
- Matrix MIL-C-5015

Also meets requirements of MIL-STD-1760 and Fail-Safe MIL-DTL-38999/29, /30, /31. MIL-STD-1760 arrangements are compatible with MIL-STD-1553 Aircraft Multiplex data bus systems.

COUPLING/MOUNTING

Uses straight plug connector style. Connector mating is accomplished in the normal fashion:

- MIL-DTL-38999 types are threaded coupling.
- MIL-C-26482 types are bayonet coupling.
- Matrix MIL-C-83723 are push-pull coupling.
- Matrix MIL-C-5015 are push-pull coupling.

Unmating is by axial pull on the coupling nut via the swivel lanyard or conventional coupling nut rotation. The Fail Safe will disconnect even when not fully mated. Other styles need to be fully mated before disengagement by lanyard pull.

CONTACT TERMINATION

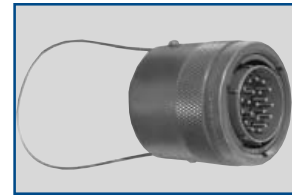
Contact termination is per connector series used. Intermateability is possible with standard receptacles within each series used. MIL-STD-1760 types use special inserts as designated.

PERFORMANCE ENVIRON./ELECT.

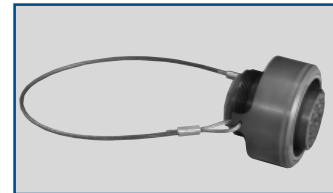
Connector performances are compatible with the Mil-spec requirements of the connector type used. Separation forces vary per connector series. Lanyard lengths can be custom specified.



Quick Disconnect Miniature Matrix MIL-C-83723



“Breakaway” Twist Pull Miniature MIL-C-26482



Quick Disconnect Push Pull Miniature Matrix MIL-C-5015

MARKETS

- Military Aerospace
- Missiles and Space Applications

Stores Management Type II, Rail Launch Connectors

Reference Pyle Bulletin RL-100



OPTIONAL FEATURES

- Buffers are replaceable.

APPLICATION

Designed for use on aircraft that carry rail launch missiles such as AMRAAM. Buffer plug and missile receptacle are designed for blindmating of stores on rail launch applications. Used on F-18, B-52, B-2 and SRAM II programs.

STANDARDS/REQUIREMENTS

Meets specifications of MIL-STD-1760 Stores Management. Designed to MIL-C-83538 specifications.

COUPLING/MOUNTING

Bayonet and push pull coupling.

CONTACT TERMINATION

Standard MIL-DTL-38999 crimp termination with power, coax and twinax contacts.

PERFORMANCE ENVIRON./ELECT.

Connector performances are compatible with MIL-C-83538 specifications. Buffer provides flame barrier.

MARKETS

- Missiles