

Product Data Sheet

Amphenol® Gatelink Breakaway (ARINC 644 Type) Connectors

No. 170-1

The ARINC 644 Type Gatelink Breakaway Connectors were originally developed for use in commercial aircraft, however they can be used in military, geophysical, ground support and ship-board applications.

Due to its self-contained environmental closure, these high performance connectors are ideal for usage where the receptacle will be unmated and exposed to the environment. The spring loaded outer shell of the plug provides a quick breakaway release in the event that the connector is inadvertently left mated. The non-glaring black oxide finish on stainless steel shell components make an excellent combination where strength and low visibility are requirements.

Each of the 10 contacts has a wear resistant gold plating to survive repeated matings, and the wiping action of the butt contacts ensures self cleaning to achieve reliable transmission of very low current and voltage signals, particularly under extreme ambient conditions.

Amphenol Gatelink Breakaway Plug Connectors feature:

- Ease of Mating
 - Straight knurled outer body
 - Push and turn, detent locking
 - Can be accomplished with gloved hand
 - Can be quickly unmated by pulling on lanyard release
- Environmentally sealed spring loaded contacts, ref. MIL-C-55116B
- Solder termination of contacts
- Accepts standard MIL-C-83723 Series III accessories
- Keyed alignment with receptacle
- Orientation indicator for ease of coupling

Amphenol Gatelink Receptacle Connectors feature:

- Environmental Closure
 - Self-contained trap door
 - 90° to main key
 - Torsion spring activated
- Fixed button contacts – ref. MIL-C-55116B
- Panel mounting – .040 - .241 panel thickness
 - "O" ring sealed
- Utilizes Standard MIL-C-83723 Series III socket contacts (M39029/5-116)
- Accepts Standard MIL-C-83723 Series III Accessories
- Keyed alignment with plug
- Orientation indicator for ease of coupling



Gatelink Plug and Receptacle

Amphenol Gatelink Performance:

- Rated at 60 VDC and 0.5 amps current (surges to 500 VDC and 7.5 amps)
- Contact pressure of .80 pounds to 1.38 pounds in fully mated condition
- Mating force of 11.5 pounds to 15.8 pounds
- Durability: 3000 matings
- Contact Retention: 10 pound axial pull
- Insulation Resistance: 1,000 Megohms
- Dielectric Withstanding Voltage: 500 VRMS
- Contact Resistance: .050 ohm maximum
- Vibration: 10-55-10 Hz sine with .06 inch max. excursions
- Temperature cycling: -55°C to +85°C

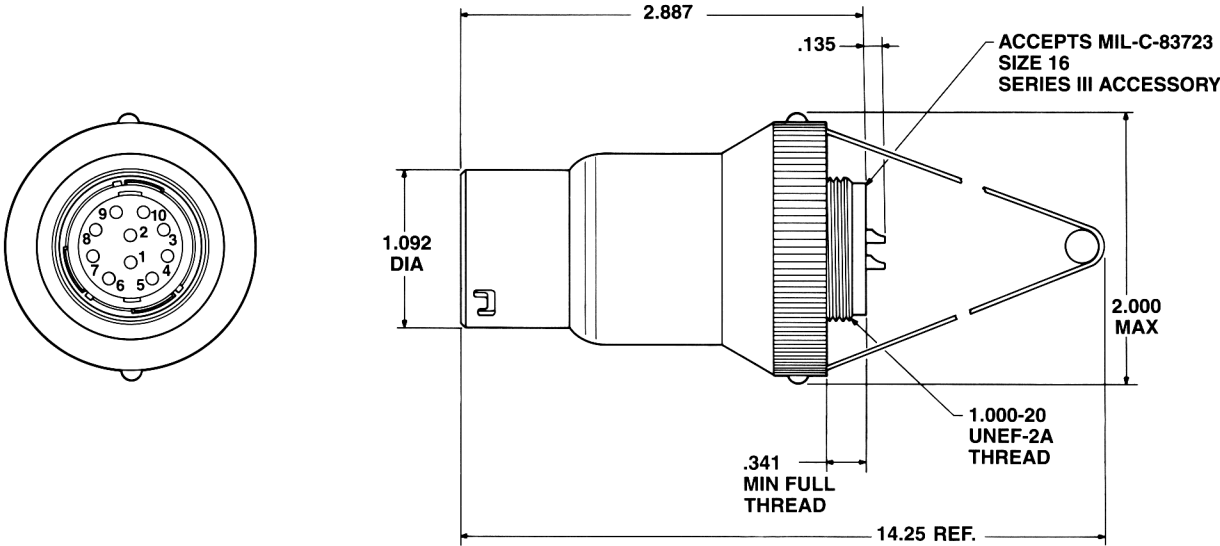
For further information on your individual application requirements, contact:

Amphenol Corporation
Amphenol Aerospace
40-60 Delaware Ave.
Sidney, New York 13838-1395
Telephone: 607-563-5011
Fax: 607-563-5157
www.amphenol-aerospace.com

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GATELINK BREAKAWAY PLUG CONNECTOR Utilizes MIL-C-83723 Series III Accessories



GATELINK RECEPTACLE CONNECTOR Utilizes MIL-C-83723 Series III Socket Contacts and Accessories

