

# Product Data Sheet

## Amphenol® PMAT (ARINC 644) Connectors

No. 157-1

The ARINC 644 PMAT (Portable Maintenance Access Terminal) Connectors were originally developed for use in commercial aircraft, however they can be used in military, geophysical, ground support and shipboard 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 non-glaring black oxide finish on stainless steel 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 transmission of very low current and voltage signals, particularly under extreme ambient conditions.

### Amphenol PMAT Plug Connectors feature:

- Ease of Mating
  - Four large flange grips
  - Push and turn, detent locking
  - Can be accomplished with gloved hand
- 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 PMAT Receptacle Connectors feature:

- Environmental Closure
  - Self-contained trap door
  - Keyed to main key
  - Torsion spring activated
- Fixed button contacts – ref. MIL-C-55116B
- Jam nut mounting – .040 - .120 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

### Amphenol PMAT Performance:

- Rated at 60 VDC and 0.5 amps current (surges to 500 VDC and 7.5 amps)
- Contact pressure of .82 pounds to 1.22 pounds in fully mated condition
- Mating force of 10.6 pounds to 14.8 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



PMAT Plug and Receptacle

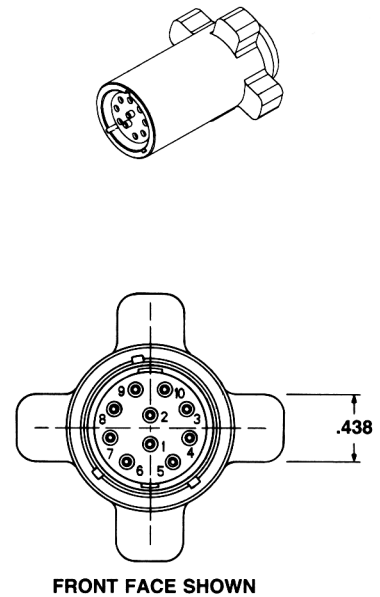
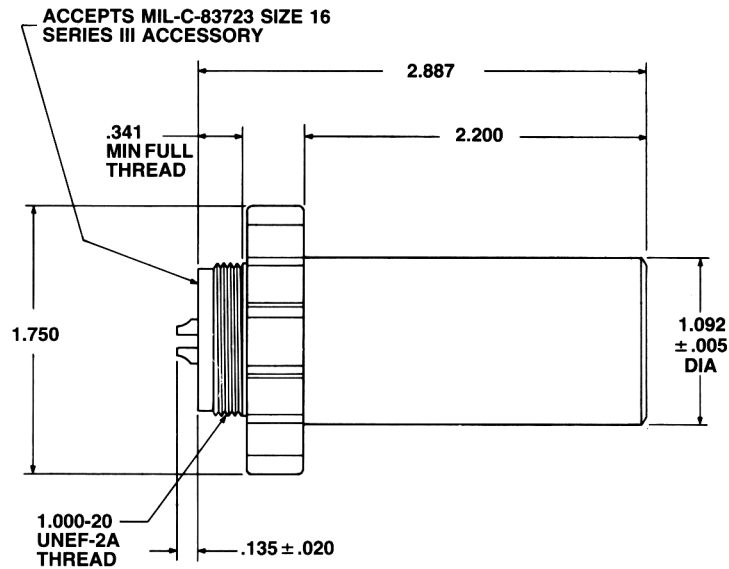
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# **PMAT PLUG CONNECTOR** Utilizes MIL-C-83723 Series III Accessories



# **PORT RECEPTACLE CONNECTOR** Utilizes MIL-C-83723 Series III Socket Contacts and Accessories

