MIL-C-83723 SERIES III

Pyle-National has a long history as a quality supplier of connectors for demanding environments. Proven technology and traditional Pyle attention to design details are incorporated into all styles and classes of the Pyle-National MIL-C-83723 Series III connectors.

In our M83723/95, 96 Series (featured on page 2), Pyle offers the user a major performance advantage through a unique threaded coupling mechanism that features a greater resistance to decoupling than to coupling. This device eliminates the need for safety wiring and tends to couple during vibration – thus offering the user added assurance and a margin of safety.

MIL-C-83723 SERIES III–HIGH TEMPERATURE

Using MIL-C-83723 Series III design concepts, Pyle-National has also developed a series of High Temperature firewall connectors (featured on page 2), that are capable of operation at 260° C/500° F. A 100% scoop-proof version of the high temperature connector is also available under specificaton ESC 11/Pyle HTK Series. In addition, this connector series incorporates a unique sealing grommet that is capable of sealing on standard diameter wire as well as Kapton wire of reduced diameter.

This connector was developed for the higher operating temperatures inherent in today's newest high performance aircraft and aircraft engines. These connectors meet the performance requirements of the following specifications:

- Aerospatiale: ASN-EO44X Class KE/SE
- European: AECMA EN2997
- General Electric: M50TF3564
- Rolls Royce/SBAC:ESC 10/ESC 11

It is because of our history and proven design capability that we are able to offer connectors in environmental, firewall and hermetic classes that exceed even the most stringent specification requirements.

PERFORMANCE CHARACTERISTICS

Operating Temperature Data
Std: −85°F (−65°C) to 392°F (200°C).
Class K types meet fireproof test per MIL-C-83723 2000°F (1093°C).
High Temperature Series: Operates at 500°F (260°C).

Altitude
Sea Level to 110,000 feet.

Voltage Breakdown Rating

Service Rating I	
Sea Level	1,500
50,000 feet	500
70,000 feet	375
110,000 feet	200

Current Rating
Size 20 contacts . . . . . .
7.5 amperes maximum
Size 16 contacts . . . . . .
13.0 amperes maximum
Size 12 contacts . . . . . .
23 amperes maximum

Contact Retention Strength
Exceeds MIL-C-83723 requirements.

Connector Durability
500 cycles per MIL-C-83723 for threaded coupling.
500 cycles per General Electric M50TF2321 for non-decoupling.

Humidity
To 98% relative humidity, including condensation.

Exposure Freezing rain.

Non-Decoupling
Exceeds requirements of MIL-C-83723/95 and 96.
Non-decoupling feature tends to tighten connectors under vibration.

Vibration
Meets MIL-C-83723 of 41.7G's for 16 hours.
Boeing BACC63BR/BT for 36 hours.
General Electric vibration specifications.
M50TF2321 and M50TF2238 for 36 hours, which includes:

TEMPERATURE EXTREMES	G LEVEL	TIME LENGTH
Room Temp.	60 G's	12 hours (4 hours each axis)
−65F ± 5°F	60 G's	12 hours (4 hours each axis)
350 ± 5°F	60 G's	12 hours (4 hours each axis)