

# PERFORMANCE AND MATERIAL SPECIFICATIONS

MIL-DTL-83723

Series III - Threaded Coupling

## PERFORMANCE SPECIFICATIONS:

All performance characteristics in accordance with the requirements specified for the applicable class contained in Paragraph 1.2 of MIL-DTL-83723 for metal connectors. The following performance characteristics are derived directly from that specification, unless otherwise noted.

# Test Dielectric Withstanding Voltage

Altitude		Service Rating	
ft.	m	1	11
Sea Level	0	1500	2300
50,000	15,240	500	750
70,000	21,336	375	500
110,000	33,528	200	200

# Contact Information and Specifications

Contact Size	Test Current	Contact Retention Axial Load	
	DC Test Amperage		
	DC Test Amperage	lb	N
20	5.0 (7.5)	20	89.0
16	10.0 (22.0)	25	111.2
12	17.0 (41.0)	30	133.5

(\*.\*) = Firewall Classes K, N (Plug), and S

Note: Current ratings can vary greatly dependant on system requirements and thermal heat-rise.

## Test description & Parameters

- Durability

Minimum of 500 mating cycles.

- Operating Temperature Range

Class H: -65°C to +150°C (-85°F to +302°F) Class W: -65°C to +175°C (-85°F to +347°F)

All Other Classes: -65°C to +200°C (-85°F to +392°F)

#### - Vibration

Mated connectors are vibrated harnessed to the following

levels:

Sine Vibration: Up to 60 G's at rated temperature Random Vibration: 43.7 Grms at rated temperature

49.5 Grms at ambient temperature

- EMI Shielding Effectiveness of mated shells with Spring Fingers

Frequency (MHz)	Leakage attenuation (dB)
100	65
200	60
300	55
400	55
600	50
800	45
1000	45

#### Corrosion Resistance

Classes G, K, W, and Y will withstand 500 hours salt spray.

#### - Fluid Immersion

Connectors are fluid resistant to many different fuels, solvents, coolants, and oils.

#### - Hermetic Leak Rate

Less than 1 x 10-7 cm 3/s

Note: For specific Hermetic or other test data, please consult HIRELCO in Claremont, CA.

## MATERIAL SPECIFICATIONS:

All material in accordance with requirements specified for the applicable class in Paragraph 3.3.5 of MIL-DTL-83723.

Finishes shall be in accordance with requirements specified for the applicable class in Paragraph 3.4.6 of MIL-DTL-83723.

For specifics, see different available connector Classes in "ORDERING INFORMATION" section.