

MIL-DTL-38999 SERIES-III CONNECTOR

D38999 connectors are designed for harsh environments with rugged, capable connectors for Signal, Power, Control, and Optical Needs. AMPMIL helps to meet the need for reliable performance with rugged MIL-DTL-38999 connectors having 500 mating cycles, operating temperatures to 200°C, corrosion-resistant and corrosion-proof connector versions, scoop-proof designs, and excellent electromagnetic interference (EMI) control. Lighter, smaller connectors can make a big difference in terms of contributing to greater performance: longer flight times, greater payload capability, and increased efficiency.



Jam Nut Receptacle is single-hole mounting and an integral o-ring allows a sealed mounting with a single hex nut threaded onto the front of the connector to secure it in place. Jam nut receptacles are rear-mount connectors.



Wall mount receptacles have a relatively large four-hole flange for front or rear mounting to a panel with Gaskets



Plugs are free-hanging cable-mount halves of a connection. They contain the coupling ring used to secure the plug to the receptacle.

CONNECTOR SPECIFICATIONS

SL.NO.	CONSTRUCTION	MATERIAL	FINSIH
1	Shell body	Aluminium Alloy	Cadmium Olive Drab over electroless Nickle, Electroless Nickel
2	Insert	Engineering Plastic	Natural
3	Oring	Silicon Rubber	Natural
4	Grommet / Seal	Silicon Rubber	Natural
5	Contact Pin/Socket	Copper Alloy	1.27μ Gold Plated
6	Contact Retainer	Beryllium Copper	Natural
7	Lock rings	Stainless Steel	Passivated

MECHANICAL		
Durability	500	cycles
Contact retention Force		
Contact Size	Value	UOM
22D	44	N
20	67	N
16	111	N
12	111	N
Vibration		
Sine 60G, @ 140 - 2000Hz @ -55 to +175 °C ± 5°C		
Shock (Peak Acceleration)		
Half Sine wave pulse 300G ± 15 percent magnitude, duration 3 ± 1msec		

ELECTRICAL		
Insulation Resistance @500 VDC	>5000	MΩ
Current Rating		
Contact Size	Value	UOM
22D	5	A
20	7.5	A
16	13	A
12	23	A
Voltage Rating		
Service Rating	@Sea Level (V)	@70,000 ft. (V)
M	1300	800
I	1800	1000
EMI Shielding Effectiveness		
100MHZ @ 10GHZ attenuation 50db		

ENVIRONMENTAL		
Insulation Resistance @500 VDC	>5000	MΩ
Operating Temperature		
Class	Range	UOM
W	- 65 to +175	°C
F	- 65 to +200	°C
Corrosion Resistance (Salt Spray Hr)		
Class	Value @ 35°C	UOM
W	500	Hr
F	48	Hr
Resistance to Fluids		
Hydraulic fluid	Temperature	UOM
Aircraft Turbine Fuel	100	°C
Lubricating Oil	35	°C
Defrosting Fluid	125	°C
Cleaning Solution	100	°C
Isopropanol, Alcohol, Coolants	35	°C