

SEAL3D™ Sealed 38999 III Interconnect Solution

INTRODUCTION



Our SEAL3D™ adapter connectors are bulkhead-mount interconnect devices that:

- Can be designed for most MIL-STD-1560 contact patterns
- Are configurable to socket/pin, pin/socket, or pin/pin mating faces
- Feature lighter aluminum shells that are fully sealed to 10^{-5} cc/sec helium leak rate (10^{-6} cc/sec air)
- Provide fully sealed performance from -55 °C to 150 °C
- Meet all applicable requirements of MIL-DTL-38999
- Are up to 50% lighter than stainless steel sealed feed-thru connectors

FEATURE	BENEFIT
Fully sealed to 10^{-5} cc/sec helium leak rate (10^{-6} cc/sec air)	<ul style="list-style-type: none"> • Meet the requirements of most avionics and bulkhead applications
Bulkhead adapter	<ul style="list-style-type: none"> • Configure to either wall mount or jam nut shells
Interfaces for M38999	<ul style="list-style-type: none"> • All socket and pin contacts meet mating and performance of M39029
Size 9–25 shells	<ul style="list-style-type: none"> • Select from most MIL-STD-1560 contact patterns for standard or high-density contacts
Double-end triple-start threads	<ul style="list-style-type: none"> • Meets all interface and vibration performance requirements of MIL-DTL-38999

SUGGESTED APPLICATIONS

- » Aerospace & military
 - Avionics
 - In-flight entertainment & connectivity
 - Feed thru in aircraft pressure bulkhead or fuselage
 - Environmentally controlled systems
- » Any weight reduction feed-thru application

PART NUMBER	DESCRIPTION
EXAMPLE	SEE CONFIGURATOR (Back Page)
CS93AAEF08SN	Jam Nut Adapter 17-8 Skt/Pin
CS93AAFF35SN	Jam Nut Adapter 17-35 Skt/Pin

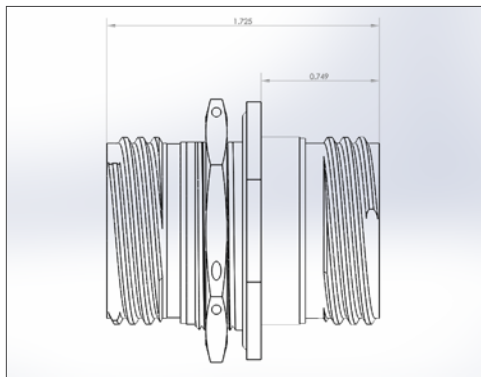
*In-line and jam nut designs available

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SPECIFICATIONS & PERFORMANCE

Test Scope	Per Specification
Environmental	
Operating Temperature Range	-65 °C to 175 °C
Temp Cycling	EIA-364-32, 250 Cycles
Leak Rate	Helium 10 ⁻⁵ cc/sec (10 ⁻⁶ cc/sec air)
Fluid Immersion	EIA-364-10
Humidity	EIA-364-31, Method IV, 100 MΩ
Corrosion Resistance	EIA-364-26, Condition B 48 Hours
Vibration - Random	EIA-364-28, Condition VI, 3 Axes
Shock	Half Sine, 300 G, 3 msec
Durability	500 Matings at Max 300/Hour
Electrical	
Insulation Resistance	5000 MΩ at 250 V
Dielectric Withstand Volt	EIA-364-20, 2 mA at Voltage (table)

Contact Density	STD #20	High #22 (-35)
@ Sea Level	1800	1300
@ 70K ft	400	350



ORDERING INFORMATION

Standard Part Number Guide for SEAL3D™

Shell Configuration
= MIL-DTL-38999

Series
1, 2, 3

Shell Style

- J Jam Nut Receptacle (Flange Mil Spec Front)
- L Jam Nut Receptacle (Flange Mil Spec Rear)
- W Wall Mount Receptacle (Flange Mil Spec Front)
- Z Wall Mount Receptacle (Flange Mil Spec Rear)
- A Adapter, Jam Nut*
- B Adapter, Wall Mount*

Termination Type

- S Solder Termination
- P PC Tail
- C Crimp
- W Wire Wrap
- T Solder Cup with Rear Access Thread
- D Crimp with Rear Access Thread
- A Pin/Socket (or Socket/Pin, Adapter only)
- B Pin/Pin (Adapter only)

Shell Sizes

A = 8/9, B = 10/11, C = 12/13, D = 14/15, E = 16/17
F = 18/19, G = 20/21, H = 22/23, J = 24/25

Shell Finish

- F Electroless Nickel
- W Olive Drab Cadmium over Nickel
- K Passivated Stainless Steel
- S Electro-deposited Nickel Stainless Steel
- T PTFE-Nickel

Contact Arrangement or Number of Contacts

See MIL-STD-1560 (ex. for 17-35, use "35")

Contact Type

- P Pin
- S Socket

Polarization

- N Normal
- A, B, C, D or E (series 3 only)

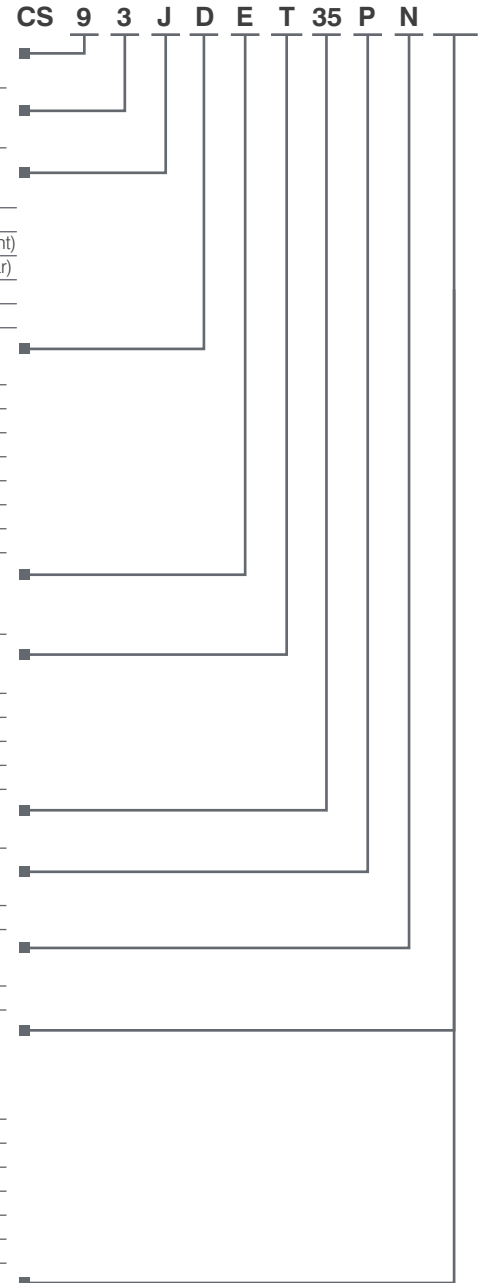
Modifier (and or accessory, blank if neither)

(example: BS = #4-40 clinchnut in flange with strain relief hardware)

- B #4-40 Clinch Nut
- C #6-32 Clinch Nut
- D #4-40 Helicoil
- E #6-32 Helicoil
- B #4-40 Thread (SS only)
- C #6-32 Thread (SS only)
- K .500" Jam Nut Bulkhead (STD is .250")

Accessories

- S Strain Relief
- P PC Board Standoffs



*Note: All adapters are double receptacle, pin/skt, skt/pin, or pin/pin. Due to pattern symmetry, not all MIL 1560 patterns are available. Contact-type pin or socket denotes the front side of adapter connectors. For all other adapter requirements, contact us for PN assistance.