

Amphenol Hermetic High Speed/ Epoxy Sealed Connectors

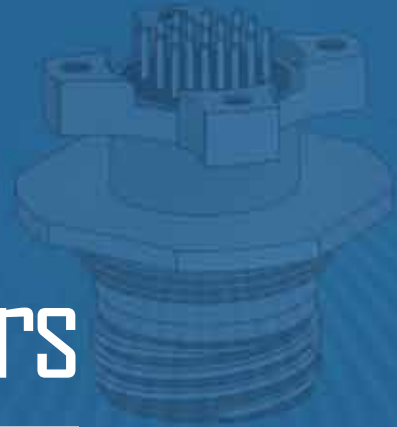


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HERMETIC QUICK REFERENCE

Hermetics in other series:

- TV Series III 36-38
- JT Series II 78, 79
- LJT Series I 90, 91
- SJT 104
- Aquacon 135
- PCB 170-172, 176, 177, 183, 184
- 83723, Series III, Pyle 369, 370, 381, 388-390
- 26500, Pyle 421



APPLICATIONS:

- Pressurized avionics boxes
- Environmental sealed boxes
- Moisture sealing for industrial equipment and missiles
- (Contact your Amphenol representative for information regarding custom configurations)

Hermetic Typical Markets:

- Military & Commercial Aviation (older designs)
- Applications Complaint with European Specifications:
PAN6433-2, LN29729, VG96912
- Military Vehicles



38999

III
HD
Dualok
II
I
SJT
Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class L

Back-Shells

Options Others

Amphenol Aerospace is offering superior electrical performance plus the rugged design of a glass sealed hermetic connector.

CUSTOM HERMETIC CONNECTORS:

Amphenol glass sealed hermetic connectors are available in a wide variety of Mil-Spec and custom configurations.



High Speed Hermetic Connectors have been designed to meet the demands of today's harsh environments and superior electrical needs

FEATURES AND BENEFITS:

- Leakage rate of 1×10^{-7} cc of He/sec or less
- Fused glass insert in steel shell
- Options include:
 - Special flanges
 - PC board mounting stand-offs
 - PC board mounting tails
 - EMI Filtering
 - Through bulkhead configurations
 - Crimp termination

CONNECTOR SPECIFICATIONS & BENEFITS:

- Leak rate of 1×10^{-7} cc He/sec or less @ 1atm differential
- Fused glass insert in stainless steel
- Operating Frequency: 0-500 MHz
- Insulation Resistance: 1,000 megohms min. at 25°C
- Dielectric Withstanding Voltage: Center to Outer 500 VAC Rms at sea level
- Contact Resistance:
 - Center at 1 Amp, 55 millivolts max. voltage drop at 25°C
 - Outer at 1 Amp, 55 millivolts max. voltage drop at 25°C

CONNECTOR FEATURES:

- Incorporates size 8 coax contacts
- Termination choices:
 - Printed circuit tails
 - Solder cup
 - Shell Finishes:
 - Passivated stainless steel, 200°C
 - Passivated stainless steel with Nickel plate
 - Leak rate of 1×10^{-7} cc He/sec or less @ 1atm differential

CONNECTOR OPTIONS:

- Special flanges
- PC board mounting stand-offs
- EMI filtering
- Through-bulkhead configurations

EPOXY SEALED CONNECTORS

Amphenol epoxy sealed connectors are a light-weight alternative to glass sealed hermetic connectors for use in avionics and other weight-sensitive applications where a high level of sealing is required. Epoxy sealed connectors are an optimal solution when increasingly stringent sealing requirements must be met in radio and vetronics applications.

- Same epoxy as used in EMI filter connectors
- Less than 1×10^{-5} cc of He/sec leak rate
- Maintained after temperature cycling, 5 cycles -55 to +125°C
- Custom designs available with lower leak rates upon request
- Available in standard and custom configurations including PC tail, solder cup, and crimp termination, board mounting stand-offs, and thru-bulkhead configurations.

For other epoxy sealed connector options please see "Filter How to Order" page 278 or contact Amphenol Aerospace

Sealed Receptacles with UTS Crimp Contacts for Bulkhead Applications

Amphenol Aerospace offers a lightweight 38999 Series III interconnect solution for sealed bulkhead applications.

These jam nut or wall mount style connectors offer lighter weights than glass fused steel hermetics. They feature 1x10⁻⁵ minimum leak rates when properly installed. This, combined with crimp insertable contacts, allows quick and reliable termination using standard M39029/57 socket crimp contacts. Perfect for those pressure vessel or thru-bulkhead applications.



Sealed Jam Nut Receptacles (showing front and back) with Crimp Contacts - Use UTS Termination System with M39029/57 Socket Crimp Contacts and Standard Insertion/Removal Tool

Features and benefits:

- Aluminum shells with Electroless nickel plating standard - Also available in Durmalon and O.D. Cadmium finishes. Steel available upon request.
- Accessory threads sized for standard backshells.
- Intermateable & inter-mountable with standard 38999 Series III plugs.
- Extra thick panel mounting capable – Up to .375 in.
- Crimp termination using Amphenol's UTS (Universal Termination System)
- Uses Amphenol's standard "Filter Epoxy Compound" - 40 years of proven reliability and experience.
- Skydrol and jet fuel resistance inserts, seals and backfill.



Ideal for Thru-Bulkhead Applications

Steps to build a part number... 21-906 Series Receptacles



1. Connector Type	2. Shell Styles	3. Shell Size – Insert Arrangement	4. Alternate Keyway Position	5. Shell Finish
21-906	7	23-35	H	D

Step 1. Connector Type

	Designates
21-906	38999 Type Sealed Receptacle with M39029/57 Rear Crimp Removable Socket Contacts

Step 2. Select a Receptacle Shell Style

	Designates
7	Jam Nut Receptacle
0	Wall Mount Receptacle

Step 3. Select a Shell Size and Insert Arrangement

Shell sizes are 9 thru 25. Insert arrangements are per number IAW of MIL-STD-1560. For shell sizes and insert availability see pages 6-9.

Step 4. Select an Alternate Keying Position on Shell

	Pin	Socket
Normal	P	S
A	G	H
B	I	J
C	K	L
D	M	N
E	R	T

Step 5. Select a Shell Finish

	Designates
None	Electroless Nickel (standard)
9	Olive Drab, Nickel Base
D	Durmalon

38999

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EMI Filter Transient
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83723 III Matrix Pyle
26500 Pyle

5015 Crimp Rear Release Matrix
22992 Class 1

Back-Shells
Options Others

38999

- III
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- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts
- Connectors
- Cables

- EMI Filter
- Transient

- 26482
- Matrix 2

- 83723 III
- Matrix | Pyle

- 26500
- Pyle

- 5015
- Crimp Rear Release Matrix

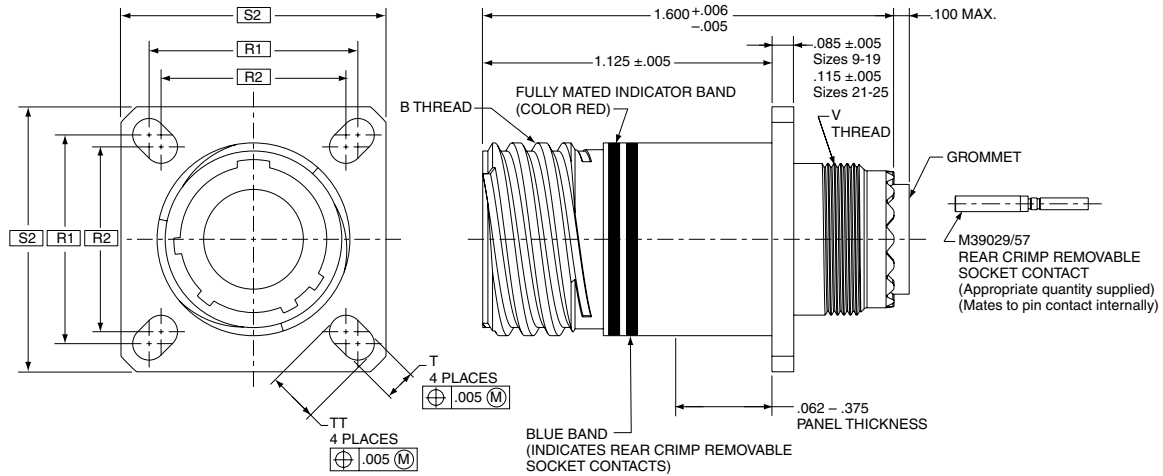
- 22992
- Class I

- Back-Shells

- Options
- Others

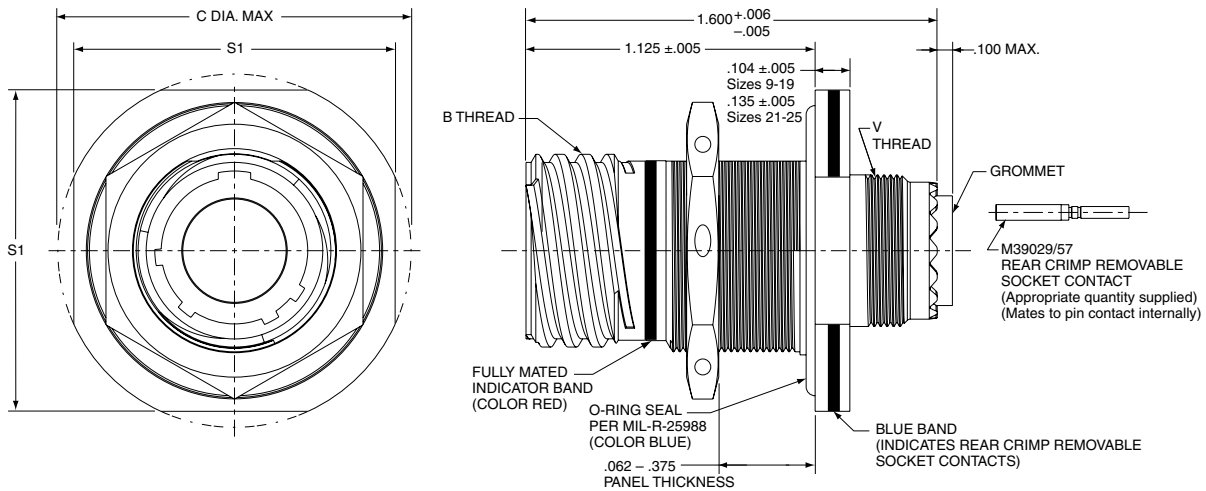
Wall Mount Receptacle 21-9060 ()* Similar to D38999/20

* See How to Order information on previous page to complete part number.



Jam Nut Receptacle 21-9067 ()* Similar to D38999/24

* See How to Order information on previous page to complete part number.



Part Number	B Thread 0.1P - 0.3L - TS Class 2A	C Dia. Max.	R1	R2	S1	S2	T +.008 -.006	TT +.008 -.006	V Thread
21-906X09-XXXX	.6250	1.199	.719	.594	1.062	.938	.128	.216	M12 X 1-6g0.100R
21-906X11-XXXX	.7500	1.386	.812	.719	1.250	1.031	.128	.194	M15 X 1-6g0.100R
21-906X13-XXXX	.8750	1.511	.906	.812	1.375	1.125	.128	.194	M18 X 1-6g0.100R
21-906X15-XXXX	1.0000	1.636	.969	.906	1.500	1.219	.128	.173	M22 X 1-6g0.100R
21-906X17-XXXX	1.1875	1.761	1.062	.969	1.625	1.312	.128	.194	M25 X 1-6g0.100R
21-906X19-XXXX	1.2500	1.949	1.156	1.062	1.812	1.438	.128	.194	M28 X 1-6g0.100R
21-906X21XXXX	1.3750	2.073	1.250	1.156	1.938	1.562	.128	.194	M31 X 1-6g0.100R
21-906X23-XXXX	1.5000	2.199	1.375	1.250	2.062	1.688	.154	.242	M34 X 1-6g0.100R
21-906X25-XXXX	1.6250	2.323	1.500	1.375	2.188	1.812	.154	.242	M37 X 1-6g0.100R

All dimensions for reference only

 Designates true position dimensioning