



The World's Most Complete Selection
**Mil-QPL and Commercial
Hermetic Connectors**

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First Edition • December 2009

Glenair's In-House *Hermetic* Manufacturing Capabilities



**Plenty of Available Capacity—
For Even the Biggest
Hermetic Connector Orders**



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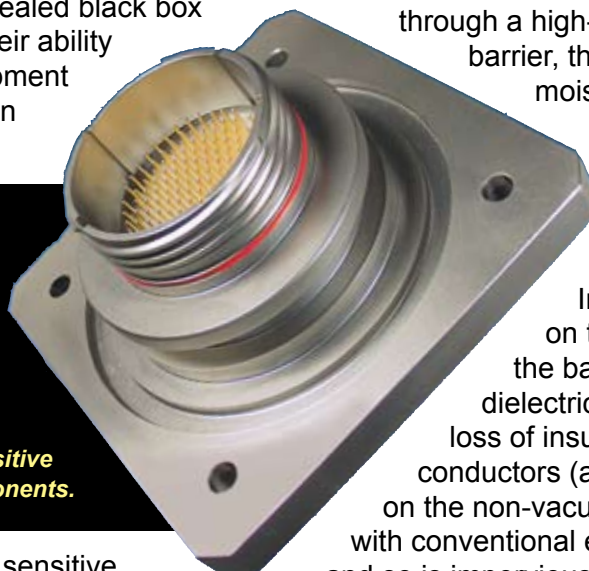
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Glenair In-House Hermetic Solutions

Hermetic connectors are designed for use in harsh application environments. Sensitive photographic, sensor and surveillance equipment mounted in the tactical Unmanned Aerial Vehicle for example, must be able to operate in severe weather conditions, at high altitudes, under extremes of atmospheric pressure and in rapidly changing temperature gradients. Hermetic connector devices interconnecting the vacuum sealed black box equipment are selected for their ability to protect the controlled equipment environment by maintaining an air-tight seal between severe

Glenair typically specifies stainless steel, titanium or Kovar for its hermetic products to provide an effective barrier against gas ingress and corrosion caused by dew point condensation. The hermetic sealing helps insure against damage to sensitive electronic systems and components.



flight conditions and aircraft's sensitive payload.

Hermetic connectors are specified for applications as divergent as submarines and orbiting satellites. They are deployed to resist moisture ingress in underground applications and to withstand pressure differentials in vacuum chambers, laboratory equipment and commercial and military aircraft. Hermetic connectors, such as the MIL-DTL-38999 Series I, II, III and IV supplied by Glenair, are principally designed for use in military aerospace—in fact, the requirement for connector hermeticity was originally driven by military electronic applications. But the products are equally at home in commercial applications

such as oil-patch logging equipment or medical devices.

Hermeticity is generally defined as the state or condition of being air or gas tight. In interconnect applications, hermetic refers to packaging technology designed to prevent gasses from passing through pressure barriers via the connector. The reason this is important is to prevent any moisture in the leaked gas from condensing inside the pressurized enclosure. The point at which moisture will condense is called the “dew point”—or the precise moment when humidity, pressure, and temperature allows condensation to form.

When an electric current must pass through a high-pressure differential barrier, the potential exists for gases, moisture, and in some rare

cases particulate matter, to also penetrate the barrier and, as described above, to form condensation in the equipment enclosure.

In the receptacle cabling on the pressurized side of the barrier this may result in dielectric breakdown, corrosion, and loss of insulation resistance between conductors (a properly built plug assembly on the non-vacuum side is adequately sealed with conventional environmental protections and so is impervious to moisture ingress). The classic hermetic application is a receptacle feed-through penetrating a pressurized bulkhead, or a pressurized equipment housing—such as is found in inertial navigation units in aircraft. The introduction of moisture-laden air into such an enclosure may be enough to produce false readings and other malfunctions in the device. The ultimate purpose of hermetic sealing then is not merely to “avert the ingress of air or gas into pressurized environments to prevent corrosion resulting from dew point condensation,” but more precisely to insure malfunctions do not occur in sensitive electronic systems due to said ingress. Hermetic connectors must perform their magic

Introduction to Glenair Hermetic Connector Products



The connectors enter the furnace on a conveyor belt and a gas-tight hermetic seal is formed around all contacts, and between the glass seal and the connector shell, when the vitreous glass is melted in the furnace and then cooled under controlled conditions.

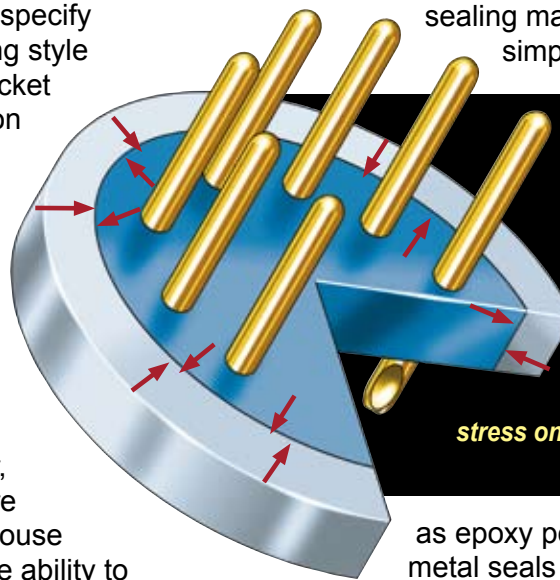
at extremely high pressure differentials, often as high as 20,000 psi, in order to prevent fluids and high pressure in one area from impacting normal environmental conditions and pressures in another. Hermetic customers may specify the mating connector series, mounting style (jam nut, weld mount, etc.), pin or socket gender and layout, contact termination type (solder cup, flat eyelet or PCB termination), conductive or non-conductive finish, polarization and so on. Glenair customers may also choose from a broad range of contact densities and package sizes, including standard-density MIL-DTL-38999 Series I, II, III and IV, our .76 in. contact spacing Series 80 "Mighty Mouse" Connector, and both Micro-D and D-Subminiature rectangulars. Glenair's complete in-house hermetic capability also affords us the ability to produce a wide-range of special purpose hermetic connectors designed to meet individual and unique customer specifications.

Connector Hermeticity

Connector Hermeticity may be negatively affected both by the permeability of shell materials and the quality of the sealing technology. Metal materials are chosen due to their relative

impermeability to gas, although certain plastics may also be used. Glenair typically specifies stainless steel, titanium or Kovar® for its hermetic products, as all three base materials provide an effective barrier against gas ingress and are able to withstand the high heat of the fabrication process. But even metal materials are permeable to gas leakage, and their permeability can be compromised when weld and solder joints are formed between connector shell materials and the base material of the bulkhead. Electrode coatings used in welding readily attract moisture in the work which can result in micro-cracks and fissures. If other stresses are present, such as vibration and shock, micro-cracking can progress to fissures which are visible to the human eye. Optimizing hermeticity should therefore always include examination of welds for any cracks or fissures that could provide a leakage path.

Although moderately effective sealing may be produced with simple techniques such



In Matched Seal hermetics, thermal expansion of the glass and metal materials is relatively small—an important factor in the design of Micro-D hermetic connectors, due to varying degrees of stress on the glass caused by the rectangular shape.

as epoxy potting, fused glass-to-metal seals are usually specified in high-pressure applications. Glass is an excellent insulator, bonds well to metallic surfaces and is extremely corrosion resistant. And because of its robust mechanical strength and resistance to radical changes in temperature and pressure, glass seals are extremely resistant to any cracking which may introduce leaks into the hermetic package.

Kovar® is a registered trademark of Westinghouse Electric Company.

Series 80 Mighty Mouse Hermetic Connectors



Series 80 Mighty Mouse Hermetic Mighty Mouse Hermetic Receptacles feature stainless steel shells and Alloy 52 iron alloy contacts. The compression glass seal is rated at 1×10^{-7} cc/second helium leak rate. Coupling styles include double-start stub acme, quick disconnect and bayonet.

Receptacles are available in four mounting styles:

- Solder Mount ■ Square Flange
- Jam Nut ■ Weld Mount

Technical Specifications

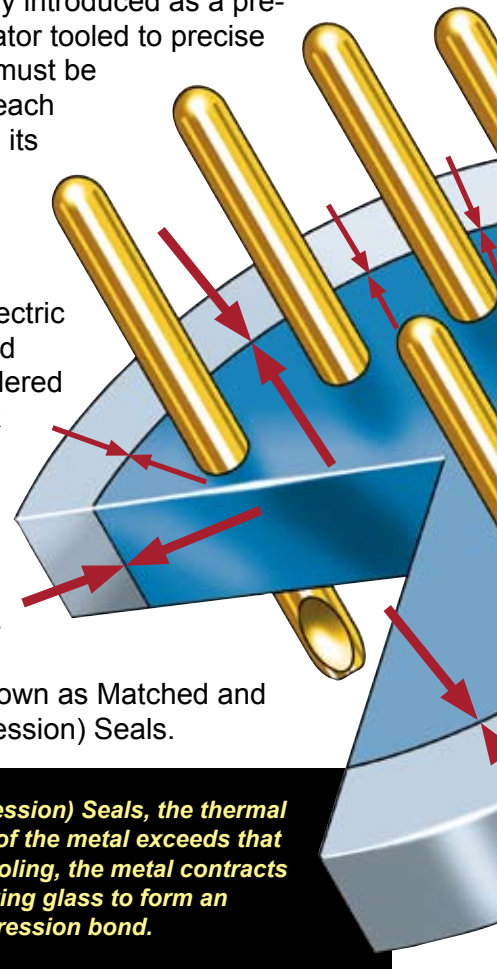
- 3 Through 130 Contacts
- Hermetically Sealed
- 5 Amp Contact for #22 thru #28 Wire
- .076" (1.9) Contact Centers
- 500 Volt AC
- Printed circuit board or solder cup contacts.

Fused glass seals may be produced from various recipes of ground, non-crystalline solids such as silicates, borates and phosphates. When heated to high temperature and then cooled, these materials fuse into an amorphous solid called glass. In hermetic connector manufacturing, the glass material is typically introduced as a pre-formed glass seal insulator tooled to precise dimensions. The glass must be exactly selected for each application according to its ability to form a strong bond with the chosen metal materials.

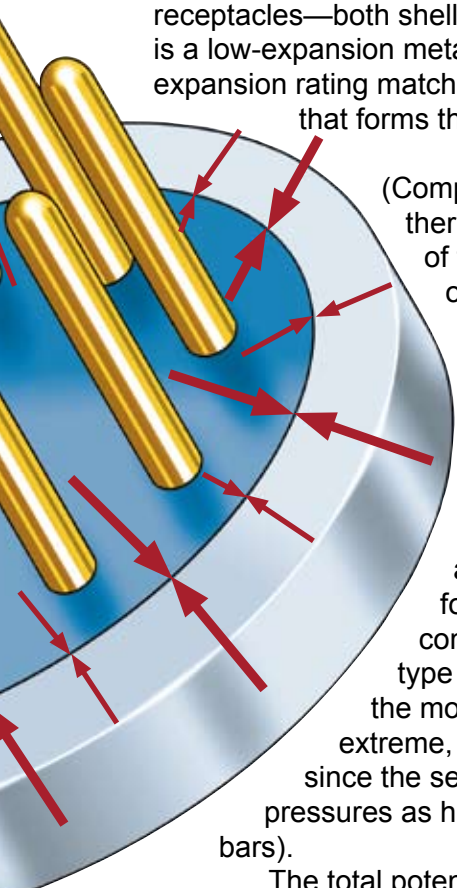
Electrical properties, such as dielectric withstanding voltage and strength are also considered as is thermal and shock stability. Depending on the style of connector being produced (rectangular versus circular, for example) two categories of glass-seal hermetics may be specified. These are known as Matched and Mismatched (or Compression) Seals.

In Mismatched (Compression) Seals, the thermal expansion/contraction of the metal exceeds that of the glass. During cooling, the metal contracts into the already solidifying glass to form an extremely robust compression bond.

In Matched Seal hermetics, the thermal expansion of the glass and metal materials are relatively close, usually within 10% of each other. This results in a product in which the stress in the glass is relatively small, since the expansion and contraction of both materials during manufacture is closely matched. This is extremely important in glass hermetic connectors such as the Micro-d since the rectangular shape of the connector shell can exert varying degrees of stress on the glass. At ambient temperatures, the glass is chemically



wetted (bonded) to the metal shell and contacts, but under little or no pressure or stress. Matched Seals can withstand high thermal and mechanical shocks, and are generally easier to manufacture than Mismatched (Compression) hermetic seals. Kovar®, a combination of iron, nickel and cobalt, is the material of choice for Matched Seal hermetic receptacles—both shells and contacts. Kovar® is a low-expansion metal with a coefficient of expansion rating matched to the glass material that forms the hermetic seal.



In Mismatched (Compression) Seals, the thermal expansion/contraction of the metal exceeds that of the glass. During the firing process, the metal materials, usually stainless steel, expand at a greater rate than the glass. During cooling, the metals contract back into the already solidifying glass to form an extremely robust compression bond. This type of seal is consequently the most frequently specified for extreme, high-pressure applications since the seal produced is reliable to pressures as high as 14,000 psi (1000 bars).

The total potential for leakage in a hermetic connector is the sum of any permeation which may occur via the metal materials themselves (through cracks or open pores), and any leakage that may occur via the seal. An additional source of leakage—uncontrolled from the connector manufacturer's perspective—results from sub-standard mounting of the hermetic package on the bulkhead or enclosure. Depending on the surface material of the bulkhead, hermetic receptacles may be welded or soldered in place. Low temperature brazing is also possible in certain applications as is the use

Mil-Aero Cylindricals: MIL-DTL-38999, MIL-DTL-26482 Type and MIL-DTL-83723 Type Hermetic Connectors



Various styles of standard and high-density cylindrical connectors are manufactured using glass seal hermetic technology. These hermetic connectors are ideally suited for high-pressure/low leakage applications in air, sea and space environments. Glenair is on the Qualified Product List (QPL) for all families of MIL-DTL-38999 Series I, II, III and IV Hermetic Connectors. We also offer lower density cylindrical connectors from the MIL-DTL-26482 and MIL-DTL-83723 families. The latter two series are non-QPL products.

- **DSCC Approved MIL-DTL-38999**
- **Compression Glass Seals**
- **Alloy 52 Gold-Plated Contacts**
- **Four Coupling Styles: Scoop-Proof Bayonet, Low-Profile Bayonet, Triple-Start Threaded Coupling, and Scoop-Proof Breach Coupling**
- **Fluorosilicone Interfacial Seals**
- **Passivated and Nickel-Plated SS Shells**

A

MIL-DTL-5015 “H” Hermetic Connectors



Considered the “Granddaddy” of all connector specifications, MIL-DTL-5015 covers power connectors available in contact sizes ranging from #16 up to #0. Operating voltages range from 200 up to 3000 volts AC (rms).

Currently there is not a Qualified Parts List (QPL) with Defense Supply Center Columbus (DSCC) for the MIL-DTL-5015 hermetic product. However, Glenair has designed and tooled these products to meet or exceed the current Mil-Spec requirements.

Features:

- **Box Mount and Solder Mount**
- **Shell sizes 8 through 36**
- **CRS with Fused Tin plating or stainless steel with a Passivate finish**
- **All appropriate contacts in solder cup and pierced contact styles**
- **Supplied with a bonded interfacial seal to improve moisture resistance**
- **Custom configurations available**
- **Commercial equivalents available**

of adhesive sealants. Finally, mechanical mounting seals such as O-rings found on jam-nut mounts or drilled mounting flanges are used in applications where the cost or difficulty of welding or soldering is impractical. Regardless of the choice of mounting technology, care must be given to ensure inadvertent leakage paths are not introduced to the system. Vapor condensation in pressurized enclosures may also be affected by the material makeup of devices located inside the enclosure. Materials such as silicones, adhesives, lubricants and Teflon insulation can all outgas water vapor, and so contribute to the total vapor pressure inside the housing. As discussed above, this rise in vapor pressure will directly impact the condensation dew point of the protected environment.

Hermetic seals are qualified via various methodologies including helium testing and dye penetrant. The purpose of both types of tests is to detect and measure leakage under pressure. The dye penetrant method has the advantage of revealing the exact location of a full-scale leak, while helium testing measures overall leakage of the hermetic device. In helium testing, a pressure differential between the internal volume of the package and the external environment is created. The resultant pressure gradient causes the helium to diffuse through the connector shell, contacts and/or glass seals. Quantitative and qualitative measurements are then taken using appropriate sensing instruments.

Manufacturing Capability

Hermetic connectors are constructed from a core component-set that includes the connector shell, the vitreous glass insert and the selected contacts. Matched hermetic shells may be machined from Kovar®, an iron-nickel-cobalt alloy with a coefficient of expansion closely balanced to the glass inserts. Stainless and cold-rolled steels with 52 nickel-alloy contacts are suitable for compression-seal hermetics. Contacts used in hermetic connectors must be fabricated from Kovar® or from other high-grade materials

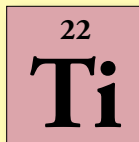
that can withstand high-heat and bond effectively to the vitreous glass seal.

The individual parts are mounted into special fixtures that align them during the exothermic atmosphere firing process. A conveyor belt transports the work through the furnace chamber, where a reducing atmosphere prevents oxidation of the metal components. As discussed above, a gas-tight hermetic seal is formed around all contacts and the glass seal and connector shell when the vitreous glass is melted in the furnace and then cooled under controlled conditions. After firing, helium testing and finish plating are completed and the remaining connector components such as interfacial seals, O-rings, jam-nuts and so on are assembled to the connector body.

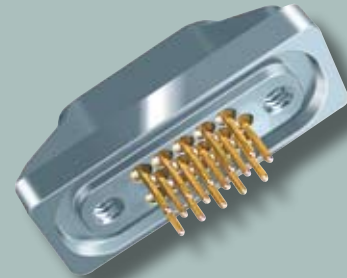
Quality control is a critical step in hermetic connector manufacturing. Connectors are not only subjected to a rigorous leak test, but are also visually inspected to ensure all components are seated in their correct positions and no surface imperfections or micro-cracking is evident. The connectors are also subjected to electrical testing as required by military and industry standards and by customer requirements.

Dating back to our first hermetic order, Glenair has been in the hermetic connector business for over 30 years. Today, our capabilities are an arm and a leg greater than they once were, but our commitment to high-quality and outstanding availability has remained constant. As you can see from the wide range of commercial and military standard hermetic products we now produce, Glenair is positioned to service an incredibly broad range of both commercial and military standard hermetic packaging requirements.

Glenair now offers shells in Inconel and Titanium; built to meet the demands of extreme pressure differentials and corrosion resistance. Consult the factory for product ordering information.



M24308/9 Hermetic D-Subminiature Hermetic Connectors



These hermetically sealed connectors are specifically designed for applications where conditions of extreme pressure differentials exist, or where an inert gas atmosphere must be maintained.

Glenair is currently qualified for the MIL-DTL-24308/9 -1 through 20 as well as for the Space Grade class, M24308/9-21 through 40.

Features:

- **One-piece machined shell for both the Solid Flange Mount (Type A) and Jackpost Mount (Type B) configurations**
- **Shell sizes 1 through 5**
- **CRS with Fused Tin plating, "H" Class, stainless steel with a matte nickel finish ("K" Class), or Aluminum Alloy Electroless Nickel w/ Hermetic Epoxy Seal**
- **Space Grade Versions**
- **All appropriate contacts in solder cup or pierced contact styles**
- **Many custom configurations available**

A

Micro-D Hermetics: O-Ring Sealed and Weld Mount Receptacles



These high contact density hermetic connectors feature .050 inch contact spacing, rugged construction for demanding applications and glass hermetic sealing for severe environmental and pressure differential operating conditions. Designed for use in missile systems and other high altitude aerospace applications, Glenair's Micro-D Hermetic Connectors offer outstanding performance in a lightweight microminiature package. The two basic mounting configurations, a weld-mount or O-ring mount design may be customized for unique application requirements.

Features:

- **Socket Receptacles**
- **Matched, Glass to Metal Seals, PLUS potted Epoxy Solutions**
- **1,000 PSI**
- **9 through 100 Contacts**
- **Weld Mount or O-Ring Mount; Integral Jackposts**
- **1.5 AMP; 150 Volt AC**
- **Solder Cup (#26 Gage Wire), PC Tails, and Special Contacts for Wire Bonding**

Hermetic Glossary

Air Leakage

The measure of gas ingress across an hermetic barrier. Total air leakage is the sum of the gas which passes through the seal itself, the permeable shell materials or via cracks or gaps in the mounting area.

Bonding

In hermetic glass-to-metal sealing, the permanent fusing of the constituent connector parts —contacts, connector body and glass seal—to one another using surface preparation techniques and high-heat.

Coefficient of Expansion

A mathematically derived value describing the dimensional change of a material when subjected to a measured change in temperature. Factored into hermetic connector fabrication to insure the glass and metal materials return to a known state of compression after the heating and cooling process is completed.

Compression Seal

The most effective glass-to-metal sealing. It is created by using metal shell and contact materials which expand at a greater rate than the glass during heating. During cooling, the metal materials contract back into the already solidifying glass to form a robust compression bond.

Environmentally Sealed

A class of interconnect components which are sealed against moisture ingress through the use of gaskets, O-rings, grommets or other means. Many applications that could use costlier hermetically-sealed connectors can be adequately protected using simpler environmental sealing techniques. The decision to use hermetics is generally made when the ability to withstand high-pressure differentials (32psi and up) is added to the application performance specifications.

Feedthrough

A double-sided receptacle connector device, mounted in a bulkhead or wall, used in interconnect systems to pass wires through barriers without creating an entry point for moisture, dust or

Introduction to Glenair Hermetic Connector Products



chemical pollutants. Hermetic feedthrough connectors are used when the compartments on either side of a bulkhead must be maintained at different pressure levels.

Flange

Disc-shaped projection extending from or around the periphery of a receptacle connector designed to house O-ring sealing devices, fasteners or other mounting hardware. A flange may also be used to provide a greater surface area of metal material to aid in weld or solder mount attachment of receptacle connectors to bulkheads.

Hermeticity

The measure of a connector's permeability to gas ingress. In general terms, it means how "airtight" the device is when measured using a helium mass spectrometer leakage test. Since all materials are ultimately permeable to gas ingress at some point, hermeticity ratings are used to define acceptable performance levels as required by each individual application.

Hermetic Connector

Any of various forms of interconnect devices which are outfitted with specialized seals to prevent moisture and gas from passing through the connector and damaging sensitive electronic equipment. Glass sealed hermetic connectors are the most effective, with compression-glass sealed connectors providing the highest levels of protection.

Kovar®

An iron-nickel-cobalt alloy with a coefficient of expansion closely matched to certain glass seals commonly used in both connector bodies and contacts.

Matched Seal

A category of glass-to-metal sealing. In matched seals, the coefficient of expansion for the glass seal, contacts and connector body are relatively the same, resulting in a finished product with little or no built-in stress between the constituent parts.

Mismatched Seal

Also known as compression sealing, the different

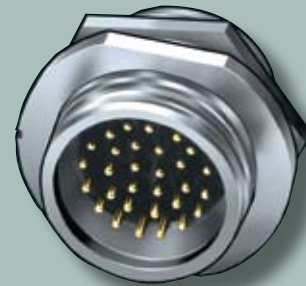
material coefficient of expansion values in the glass and metal materials result in an hermetic seal that is under significant compression stress after cooling. Hermetics of this type can withstand higher-pressure differentials than matched seals.

Solder or Weld Mount

One of the most common mounting configurations for hermetic connectors, especially for electronic equipment such as switches and transducers. Unlike jam-nut mounted connectors, weld mount hermetics are permanently attached to the pressurized bulkhead, typically with laser, TIG or MIG welding technology.

A

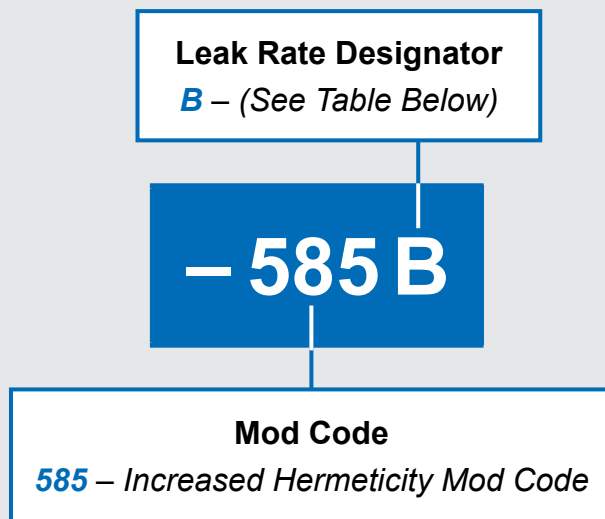
Series 22 Geo-Marine® Hermetic Connectors



Series 22 Geo-Marine® Connectors offer high-density insert arrangements for a variety of oceanographic, geophysical and other severe commercial applications. The mated stainless steel plug and receptacle have a hydrostatic pressure sealing capability of up to 5000 psi (345 bar) and are available in either glass-seal hermetic or rigid dielectric environmental insulators.

- *Single-start, stub-Acme thread reduces thread fouling and binding due to dirt, grit and other foreign matter. Castellated and knurled coupling ring provides easy mating and unmating—even with arctic gloves.*

A



What is the –585 Mod Code?

Glenair offers an array of hermetic connectors with more stringent leak rate requirements. By adding “–585” and the designator letter “A”, “B” or “C”—depending on the hermeticity desired—to the end of a standard part number, connectors will be built to exceed the standard 1×10^{-7} cc Helium per second leak rate specified on most Glenair hermetics.

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
A	1×10^{-10} cc's Helium per second
B	1×10^{-9} cc's Helium per second
C	1×10^{-8} cc's Helium per second

Glenair Hermetic Connector Products Space Grade Modification Codes



HOW TO ORDER SPACE GRADE CONNECTORS

Step 1: Find a Standard Part Number

Electroless nickel plated shells are preferred for space flight. Cadmium plating is prohibited.

Step 2: Select a NASA Screening Level

The term "Screening Level" refers to the final inspection procedure.

Level 1 for mission-critical highest reliability

Level 2 for high reliability

Level 3 for standard reliability

Step 3: Choose Outgassing Processing

A detailed explanation of outgassing is on the following pages. The fluorosilicone rubber seals commonly used on aerospace-grade connectors such as MIL-DTL-38999 and Series 79 connectors, along with certain bonding agents and inks, do not meet NASA outgassing requirements unless the connector is specially processed. Glenair outgassing tests have shown oven baking or thermal vacuum outgassing processing are sufficient to reduce outgassing levels to NASA standards. Oven baking is more economical than thermal vacuum outgassing.

Step 4: Select the Mod 429 Code that Matches the Desired Level of Screening and Outgassing

Use the following table to choose the right modification code. Add the mod code to the connector part number. Example: 790-024PC-13ML-**429C**

What is outgassing?

Plastic and rubber materials give off gaseous molecules. For example, the smell inside a new car is caused by polymer outgassing. Heat and vacuum increase the rate of diffusion. In a spacecraft the gases coming off polymers can contaminate optical surfaces and instruments. The result is degraded performance.

How is outgassing measured?

The space industry has adopted a standardized test procedure, **ASTM E 595**, to evaluate outgassing properties of polymers. Small samples of material are heated to 125° C. at a vacuum of 5×10^{-5} torr for 24 hours. Then the sample is weighed to calculate the **Total Mass Loss** (TML). The TML cannot exceed 1.00% of the total initial mass. During the test, outgassed matter condenses on a cooled collector plate. The quantity of outgassed matter is calculated to determine the **Collected Volatile Condensable Material** (CVCN). The CVCN cannot exceed 0.10% of the original specimen mass.

What is NASA screening?

NASA specification EEE-INST-002 provides instructions on selecting, screening and qualifying parts for use on NASA GSFC space flight projects.

What screening level is required?

NASA defines three levels of screening: level 1 for highest reliability, level 2 for high reliability, and level 3 for standard reliability. Level 3 equates to standard lot acceptance inspection. Levels 1 and 2 call for additional testing.

NASA SCREENING LEVELS AND MODIFICATION CODES

NASA Screening Level	Special Screening Only	Special Screening Plus Outgassing Processing	
		8 Hour Oven Bake 400° F.	Thermal Vacuum Outgassing 24 hrs. 125° C.
Level 1 Highest Reliability	Mod 429B	Mod 429J	Mod 429C
Level 2 High Reliability	Mod 429	Mod 429K	Mod 429A
Level 3 Standard Reliability	(Use standard part number)	Mod 186	Mod 186M

MIL-DTL-38999 Series I, II, III and IV Qualified Hermetic Connectors

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The Full Range of MIL-DTL-38999 Series I, II, III and IV Hermetic Receptacles—*Plus Glenair Commercial Equivalents*

Product Applications

The MIL-DTL-38999 Series I, II, III and IV family of hermetic connectors are ideal for high-pressure/low-leakage applications in air, sea and space environments. Glenair is on the Qualified Product List (QPL) for all configurations of MIL-DTL-38999 Series I through IV pin and socket hermetic connectors. We also offer our D38999 type commercial part numbers for applications that do not require MS qualified products.

Materials

Glenair MIL-DTL-38999 Series I, II, III and IV Hermetic Connectors are made of stainless (CRES) or cold rolled steel (CRS), with glass

Nickel-iron alloy 52 gold-plated contacts, available in sizes 8, 10, 12, 16, 20 and 22D, depending on the layout chosen, offer a wide selection of insert arrangement options. Solder cup, feed through (PCB Flexprint) and eyelet contact styles are also available.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders.

Same-Day Delivery on Most Common Shell Styles and Layouts

*Full Range of D38999 Series I thru IV Pin and Socket
Insert Arrangements*

DSCC Approved QPL Hermetics

1 x 10⁻⁷ cc/Helium per Second Leakage Rate

*CRES, CRS, Titanium and Inconel® Shells with
Vitreous Glass Sealing*

Jam Nut, Solder Mount, Wall Mount and Box Mount Options



insulators fused to the connector shell, and contacts meeting a leak rate of 1 X 10⁻⁷ cc/Helium per second. Maximum design flexibility is built into the Series I, II, III and IV Military Standard Hermetic Connectors—with a minimum of 2 to a maximum of 128 circuits per connector in a wide variety of contact arrangements IAW MIL-STD-1560. Fluorosilicone rubber interfacial and peripheral seals ensure positive sealing with plug connectors.

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately on our website, www.glenair.com.



MIL-DTL-38999 Series I, II, III, and IV Hermetic Class Connectors Insert Arrangements (IAW MIL-STD-1560)

B

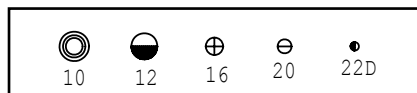
Series I	9-35	9-98	11-2	11-4	11-5	11-35	11-98	11-99
Series II	8-35	8-98	10-2	10-4	10-5	10-35	10-98	10-99
Series III	A35	A98	B2	B4	B5	B35	B98	B99
Series IV	---	---	---	---	B5	B35	B98	B99

Series I	13-4	13-8	13-35	13-98
Series II	12-4	12-8	12-35	12-98
Series III	C4	C8	C35	C98
Series IV	C4	---	C35	C98

Series I	15-5	15-15	15-18	15-19	15-35	15-97
Series II	14-5	14-15	14-18	14-19	14-35	14-97
Series III	D5	D15	D18	D19	D35	D97
Series IV	D5	---	D18	D19	D35	D97

Series I	17-6	17-8	17-26	17-35	17-99
Series II	16-6	16-8	16-26	16-35	16-99
Series III	E6	E8	E26	E35	E99
Series IV	E6	E8	E26	E35	---

Series I	19-11	19-28	19-30	19-32	19-35	19-45
Series II	18-11	18-28	18-30	18-32	18-35	18-45
Series III	F11	F28	F30	F32	F35	F45
Series IV	F11	---	---	F32	F35	---



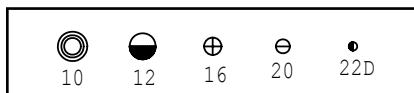
MIL-DTL-38999 Series I, II, III, and IV Hermetic Class Connectors Insert Arrangements (IAW MIL-STD-1560)



MIL-DTL
38999

B

Series I 21-11	Series II 21-16	Series III, IV G11, G11	Series I 21-35	Series II 21-41
Series I 20-11	Series II 20-16	Series III, IV G16, G16	Series I 20-35	Series II 20-41
Series I G24, G24	Series II G25, ---	Series III, IV G27, ---	Series I G39, ---	
Series I 23-21	Series II 23-35	Series III, IV H21, H21	Series I 23-53	Series II 23-55
Series I 22-21	Series II 22-35	Series III, IV H35, H35	Series I 22-53	Series II 22-55
Series I H34, ---	Series II H36, ---	Series III, IV H53, ---	Series I H55, H55	Series II H32, ---
Series I 23-34	Series II 23-36	Series III, IV 23-97	Series I 23-99	
Series I 22-34	Series II 22-36	Series III, IV 22-97	Series I 22-99	
Series I H34, ---	Series II H36, ---	Series III, IV H97, ---	Series I H99, ---	
Series I 25-29	Series II 25-35	Series III, IV J29, J29	Series I 25-61	Series II 25-4
Series I 24-29	Series II 24-35	Series III, IV J35, J35	Series I 24-61	Series II 24-4
Series I J43, J43	Series II J19, J19	Series III, IV J24, J24	Series I J11 (Series IV Only)	





MIL-DTL-38999 Series I, II, III, and IV Hermetic Class Connectors Layouts and Pin Counts

B

Shell Size and Insert Arrangements				Number of Pins			
MS Series I	MS Series II	D38999 Series III	Service Rating	22D	20	16	12
9-35	8-35	A35	M	6			
9-98	8-98	A98	I		3		
11-2	10-2	B2	I			2	
11-4	10-4	B4	I		4		
11-5	10-5	B5	I		5		
11-35	10-35	B35	M	13			
11-98	10-98	B98	I		6		
11-99	10-99	B99	I		7		
13-4	12-4	C4	I			4	
13-8	12-8	C8	I		8		
13-35	12-35	C35	M	22			
13-98	12-98	C98	I		10		
15-5	14-5	D5	II			5	
15-15	14-15	D15	I		14	1	
15-18	14-18	D18	I		18		
15-19	14-19	D19	I		19		
15-35	14-35	D35	M	37			
15-97	14-97	D97	I		8	4	
17-6	16-6	E6	I				6
17-8	16-8	E8	II			8	
17-26	16-26	E26	I		26		
17-35	16-35	E35	M	55			
17-99	16-99	E99	I		21	2	
19-11	18-11	F11	II			11	
19-28	18-28	F28	I		26	2	
19-30	18-30	F30	I		29	1	
19-32	18-32	F32	I		32		
19-35	18-35	F35	M	66			
19-45	18-45	F45	M	67			
21-11	20-11	G11	I				11
21-16	20-16	G16	II			16	
21-24	20-24	G24	I		24		
21-25	20-25	G25	I		25		
21-27	20-27	G27	I		27		
21-35	20-35	G35	M	79			
21-39	20-39	G39	I		37	2	
21-41	20-41	G41	I		41		
23-21	22-21	H21	II			21	
23-32	22-32	H32	I		32		
23-34	22-34	H34	I		34		
23-35	22-35	H35	M	100			
23-36	22-36	H36	I		36		
23-53	22-53	H53	I		53		
23-55	22-55	H55	I		55		
23-97	22-97	H97	I			16	
23-99	22-99	H99	II			11	
25-4	24-4	J4	I		48	8	
25-19	24-19	J19	I				19
25-24	24-24	J24	I			12	12
25-29	24-29	J29	I			29	
25-35	24-35	J35	M	128			
25-37	N/A	J37				37	
25-43	24-43	J43	I		23	20	
25-61	24-61	J61	I		61		

Shell Size / Insert Arrangements	Number of Pins				
D38999 Series IV	22D	20	16	12	10
B5		5			
B35	13				
B98		6			
B99		7			
C4			4		
C35	22				
C98		10			
D5			5		
D18		18			
D19	37	19			
D35					
D97		8	4		
E6				6	
E8			8		
E26		26			
E35	55				
F11			11		
F32		32			
F35	66				
G11				11	
G16			16		
G35	79				
G41		41			
H21			21		
H35	100				
H55		55			
J4		48	8		
J11		2			9
J19				19	
J24			12	12	
J29			29		
J35	128				
J37			37		
J43		23	20		
J61		61			

**MIL-DTL-38999 Series I, II, III and IV
Hermetic Class Connectors
Material Specifications**



MIL-DTL
38999

B

TABLE I: HERMETIC CLASS MATERIALS

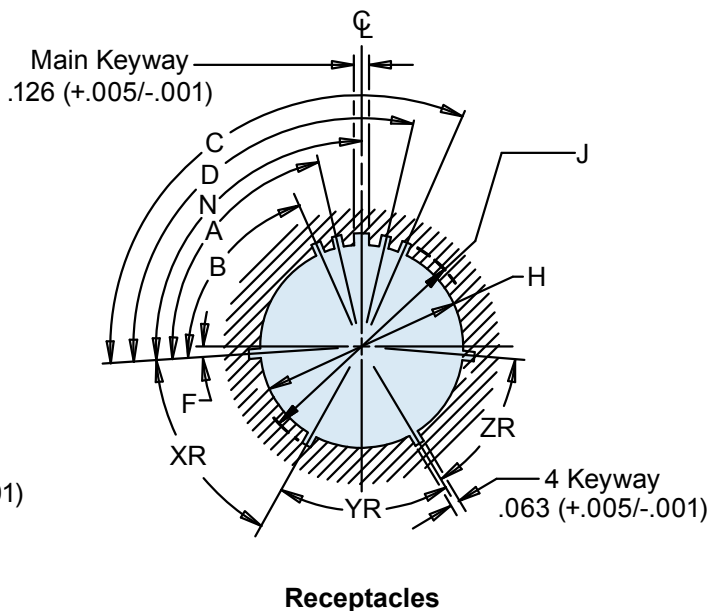
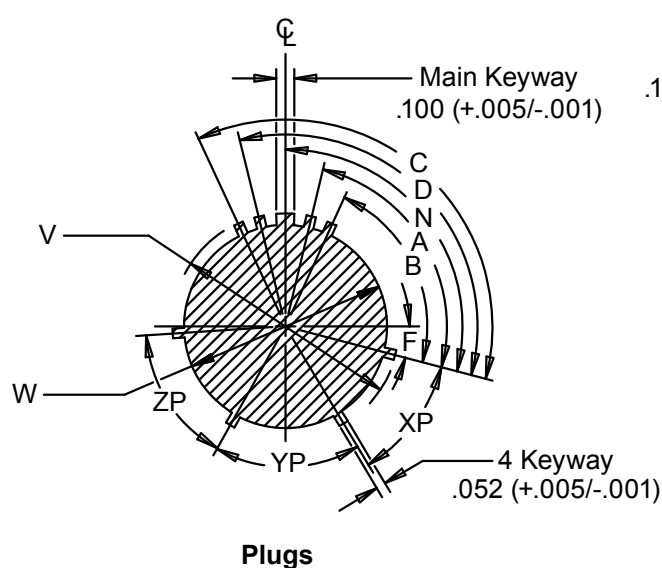
Shell, Barrel Coupling and Jam Nut (Hermetic)	Stainless steel per AMS-QQ-S-763
Shell, Barrel, Coupling Nut and Jam Nut (Hermetic)	Carbon steel per ASTM-A108, Tin plated per ASTM-B545
Front and Rear Insulators	Glass-filled liquid crystal polymer (LCP) in accordance with MIL-M-24519, Type GLP-30F
Grommet, Peripheral Seal and Interfacial Seal	Blended elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Hermetic Insert	Vitreous glass
Pin Contact (Hermetic)	Nickel-iron alloy per ASTM F30 (Alloy 52), 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1, 27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches
Socket Contact (Hermetic)	Copper Alloy, Gold Plated IAW ASTM B488, Type 3, Code C
Adhesives	Silicone and epoxy
Potting Compound, PCB and Solder Cup Versions	Environmental and Hermetic Connectors: High-strength epoxy, Hysol EE4215. Filter Connectors: Stycast 2850FT/Catalyst 11 thermally conductive epoxy encapsulant.

TABLE II: HERMETIC CLASS FINISHES

Plating Code	Material	Finish	Specification
Glenair Commercial Equivalent Plating Codes			
Z1	Stainless Steel	Passivate	AMS-QQ-P-35
FT	Carbon Steel	Fused Tin Plate	ASTM-B545 or ASTM-B339
ZL	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290, Class 2
MIL-DTL-38999 Plating Codes			
D	Carbon Steel	Fused Tin Plate	ASTM-B545 or ASTM-B339
E	Stainless Steel	Passivate	AMS-QQ-P-35
N	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290, Class 2

*Additional materials are available, including titanium and Inconel®. Consult factory for ordering information.

B



SERIES I ALTERNATE KEY POLARIZATION

Shell Size	F	Normal Rotation				Letter Designation			
		N	XR XP	YR YP	ZR ZP	A	B	C	D
9	5°	95°	45°	88°	27°	77°	---	---	113°
11	5°	95°	45°	88°	27°	81°	67°	123°	109°
13	5°	95°	45°	88°	27°	75°	63°	127°	115°
15	5°	95°	45°	88°	27°	74°	61°	129°	116°
17	5°	95°	45°	88°	27°	77°	65°	125°	113°
19	5°	95°	45°	88°	27°	77°	65°	125°	113°
21	5°	95°	45°	88°	27°	77°	65°	125°	113°
23	5°	95°	45°	88°	27°	80°	69°	121°	110°
25	5°	95°	45°	88°	27°	80°	69°	121°	110°

SERIES II ALTERNATE KEY POLARIZATION

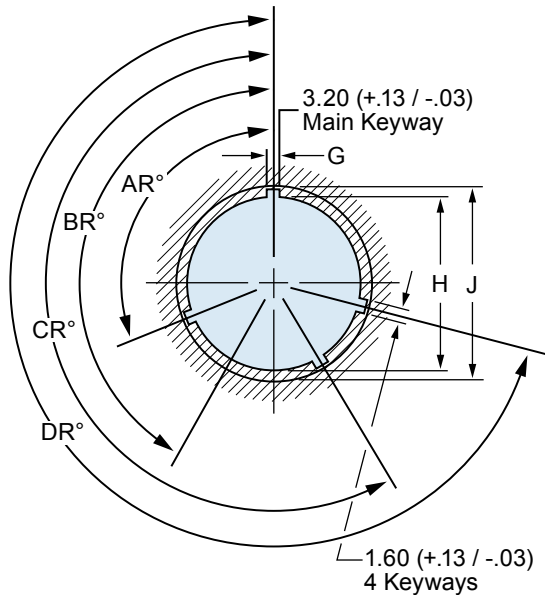
Shell Size	F	Normal Rotation				Letter Designation			
		N	XR XP	YR YP	ZR ZP	A	B	C	D
8	10°	100°	28°	100°	37°	82°	---	---	118°
10	10°	100°	28°	100°	37°	86°	72°	128°	114°
12	10°	100°	28°	100°	37°	80°	68°	132°	120°
14	10°	100°	28°	100°	37°	79°	66°	134°	121°
16	10°	100°	28°	100°	37°	82°	70°	130°	118°
18	10°	100°	28°	100°	37°	82°	70°	130°	118°
20	10°	100°	28°	100°	37°	82°	70°	130°	118°
22	10°	100°	28°	100°	37°	85°	74°	126°	115°
24	10°	100°	28°	100°	37°	85°	74°	126°	115°

MIL-DTL-38999 Series III Alternate Keyway Positions

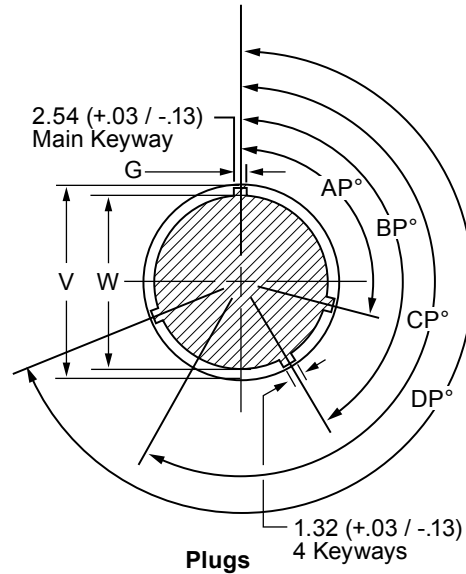


MIL-DTL
38999

B



Receptacles

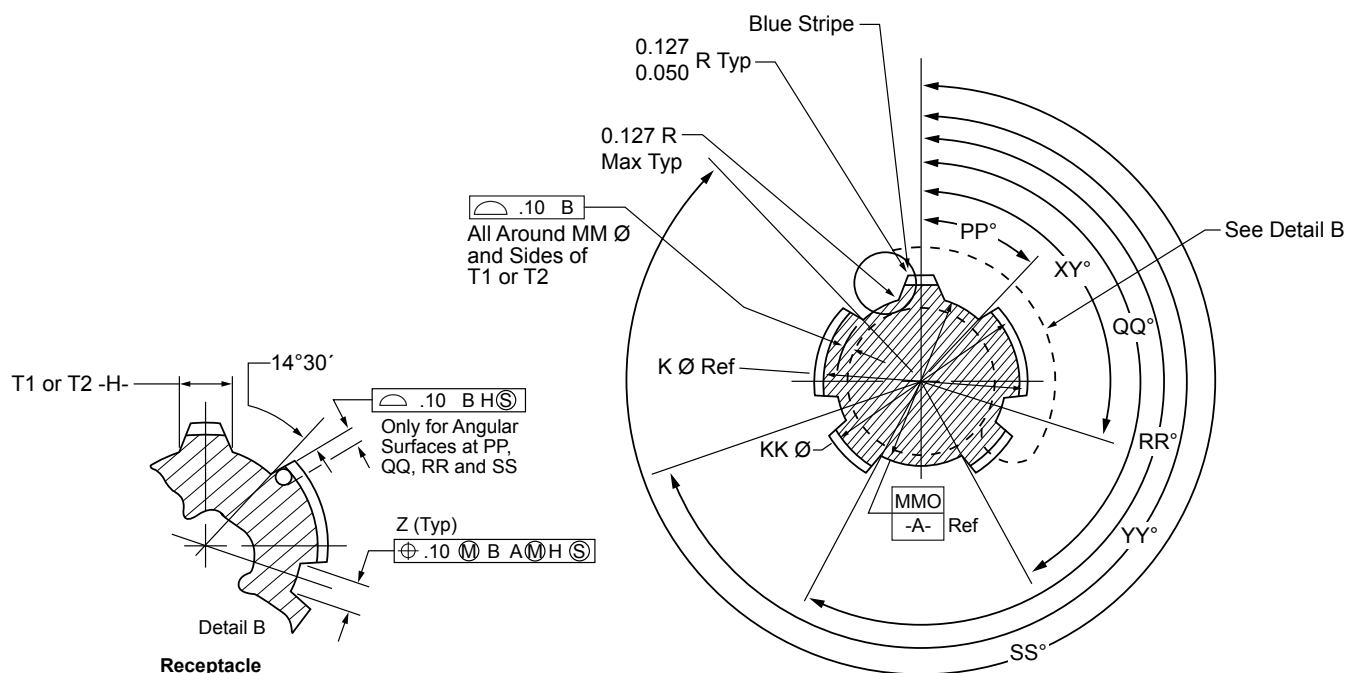


Plugs

SERIES III ALTERNATE KEY POLARIZATION

Shell Size	Key and Keyway Arrangement Identification Letter	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
9	N	105	140	215	265
	A	102	132	248	320
	B	80	118	230	12
	C	35	140	205	275
	D	64	155	234	304
11 13 and 15	E	91	131	197	240
	N	95	141	208	236
	A	13	156	182	292
	B	90	145	195	252
	C	53	156	220	255
17 and 19	D	119	146	176	298
	E	51	141	184	242
	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
21 23 and 25	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

B



SERIES IV ALTERNATE KEY POLARIZATION

Shell Size Code	Receptacle Main Key and Keyway Polarization								Main Key BSC	
	Shell Size	MM Dia BSC	PP°	QQ°	RR°	SS°	Z	Z ²	Socket Contact T1	Pin Contact T2
B	11	13.09	44°28'	151°6'	208°54'	315°32'	1.83	2.46	1.90	2.78
C	13	16.51	44°25'	150°31'	209°29'	315°35'	1.52	2.16	1.94	2.85
D	15	19.69	44°33'	150°24'	209°36'	315°27'	2.34	3.23	2.43	3.36
E	17	22.89	44°36'	150°22'	209°38'	315°24'	2.03	2.92	2.45	3.40
F	19	25.79	44°33'	150°27'	209°33'	315°27'	2.85	3.99	2.96	3.91
G	21	28.96	44°34'	150°23'	209°37'	315°26'	2.54	3.68	2.99	3.94
H	23	32.14	44°34'	150°20'	209°40'	315°26'	3.35	4.75	3.50	4.46
J	25	35.31	44°42'	150°22'	209°388'	315°18'	3.04	4.45	3.53	4.49

Dimensions are in Millimeters

SERIES IV ALTERNATE KEY POLARIZATION

	N	A	B	C	D	K	L	M	R	U
X° XX°	110°	100°	90°	80°	70°	120°	120°	120°	120°	0°
Y° YY°	250°	260°	270°	280°	290°	255°	265°	275°	285°	0°

SERIES 77

FULL NELSON

Heat Shrink Boots

Outstanding Environmental and Mechanical Protection

*"Think he'll ever break that hold?
Nope. He's got him in a Full Nelson!"*



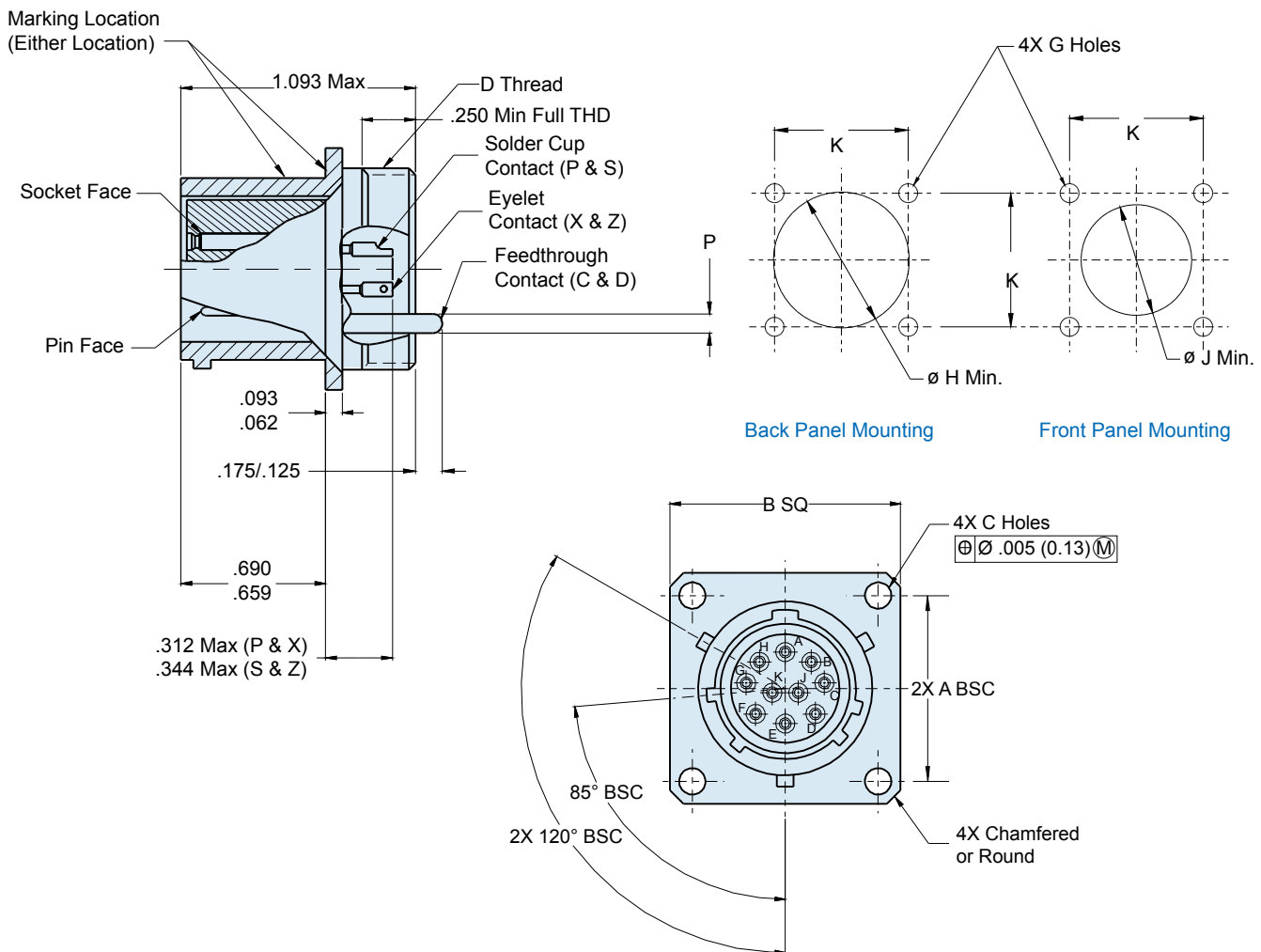
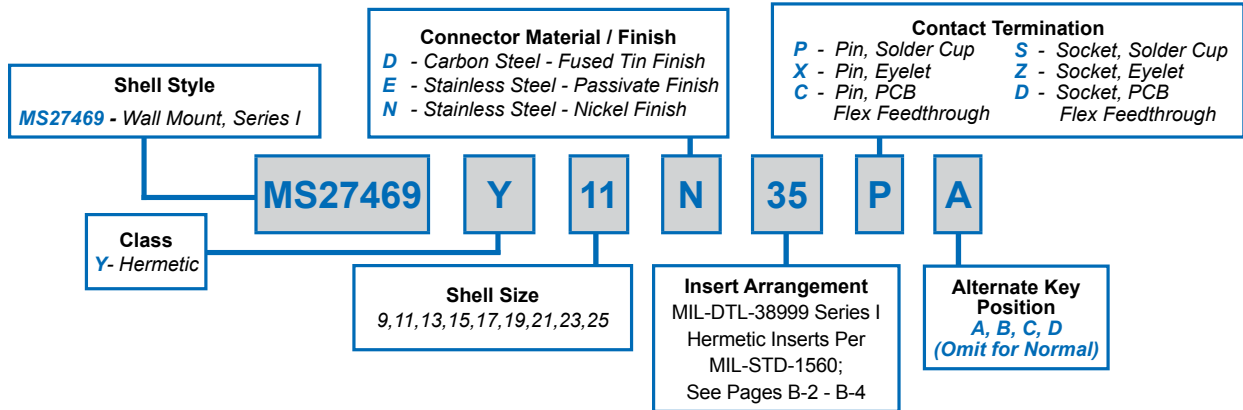
Nothing conjures up the image of an unbreakable hold like a Standing Full Nelson. Properly applied, this classic Greco-Roman wrestling move is simply unbeatable. We'd like to think the same holds true for our Series 77 *Full Nelson* Environmental Shrink Boots. Properly applied, Series 77 boots provide a dependable, leak-proof seal for interconnect cable assemblies. Optional adhesive coatings on the inside of the boot provide a watertight, high-

strength bond to the cable jacket and the connector or adapter. And the Glenair shape-memory boot material formula works every time. So if you're worried about sealing effectiveness, if you want long-lasting environmental protection, if you want an ingress prevention solution that won't lose its grip after years and years of service, get a Series 77 *Full Nelson*—the environmental shrink boot with the iron grip of a championship wrestler.



MS27469
Wall Mount Hermetic Receptacle
MIL-DTL-38999 Series I

How To Order: *MS*

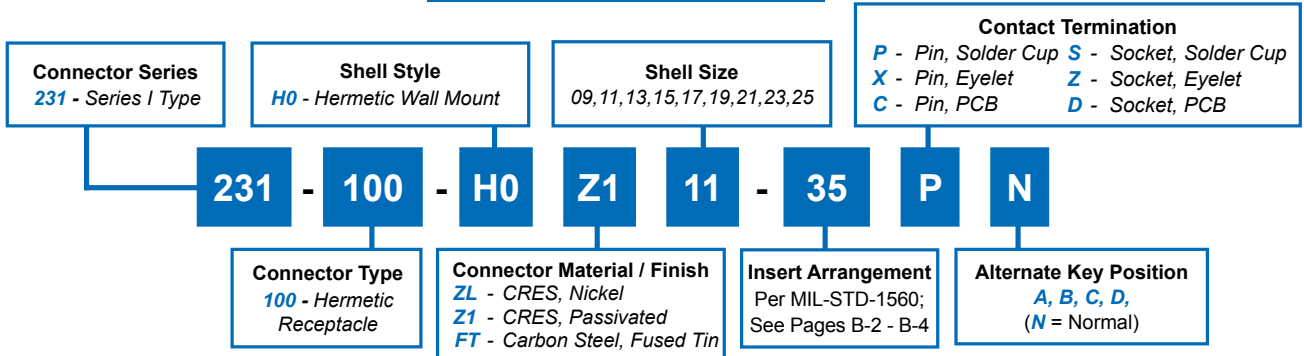


231-100-H0 Wall Mount Hermetic Receptacle MIL-DTL-38999 Series I Type



MIL-DTL
38999 Type

How To Order: Commercial



B

TABLE I: CONNECTOR DIMENSIONS

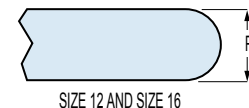
SHELL SIZE	A BSC	B SQ ±.016(0.4)	ø C HOLES .123(3.1)	D THREADS
9/09	.719(18.3)	.938(23.8)	.133(3.4) .123(3.1)	.6875-24 UNEF-2A
11	.812(20.6)	1.031(26.2)	.133(3.4) .123(3.1)	.8125-20 UNEF-2A
13	.906(23.0)	1.125(28.6)	.133(3.4) .123(3.1)	.9375-20 UNEF-2A
15	.969(24.6)	1.219(31.0)	.133(3.4) .123(3.1)	1.0625-18 UNEF-2A
17	1.062(27.0)	1.312(33.3)	.133(3.4) .123(3.1)	1.1875-18 UNEF-2A
19	1.156(29.4)	1.438(36.5)	.133(3.4) .123(3.1)	1.3125-18 UNEF-2A
21	1.250(31.8)	1.562(39.7)	.133(3.4) .123(3.1)	1.4375-10 UNEF-2A
23	1.375(34.9)	1.688(42.9)	.157(4.0) .142(3.6)	1.5625-18 UNEF-2A
25	1.500(38.1)	1.812(46.0)	.157(4.0) .142(3.6)	1.6875-18 UNEF-2A

HERMETIC LEAK RATE MOD CODES

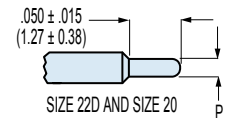
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16



SIZE 22D AND SIZE 20

Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

TABLE I (CONTINUED):
CONNECTOR DIMENSIONS

SHELL SIZE	ø G HOLES ±.005(0.1)	ø H MIN	ø J MIN	K ±.005(0.1)
9/09	.128(3.3)	.656(16.7)	.697(17.7)	.719(18.3)
11	.128(3.3)	.796(20.2)	.822(20.9)	.812(20.6)
13	.128(3.3)	.921(23.4)	.947(24.1)	.906(23.0)
15	.128(3.3)	1.047(26.6)	1.072(27.2)	.968(24.6)
17	.128(3.3)	1.218(30.9)	1.197(30.4)	1.062(27.0)
19	.128(3.3)	1.296(32.9)	1.322(33.6)	1.156(29.4)
21	.128(3.3)	1.421(36.1)	1.447(36.8)	1.250(31.8)
23	.154(3.9)	1.546(39.3)	1.572(39.9)	1.375(34.9)
25	.154(3.9)	1.672(42.5)	1.697(43.1)	1.500(38.1)

WIRE ACCOMODATION

Contact Size	Wire Guage
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

How To Order: MS

Shell Style

MS27470 - Jam Nut Mount, Series I

Connector Material / Finish

D - Carbon Steel - Fused Tin Finish
E - Stainless Steel - Passivate Finish
N - Stainless Steel - Nickel Finish

Contact Termination

P - Pin, Solder Cup **S** - Socket, Solder Cup
X - Pin, Eyelet **Z** - Socket, Eyelet
C - Pin, PCB **D** - Socket, PCB
Flex Feedthrough Flex Feedthrough

Class
Y - Hermetic

MS27470

Y

11

N

35

P

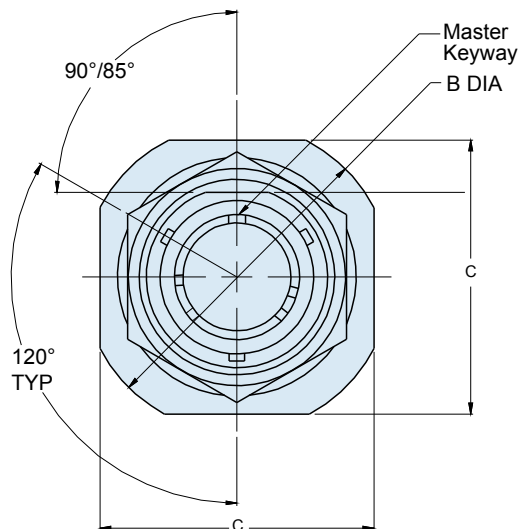
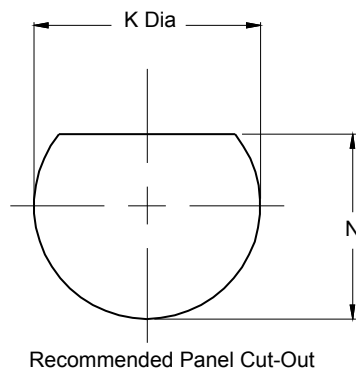
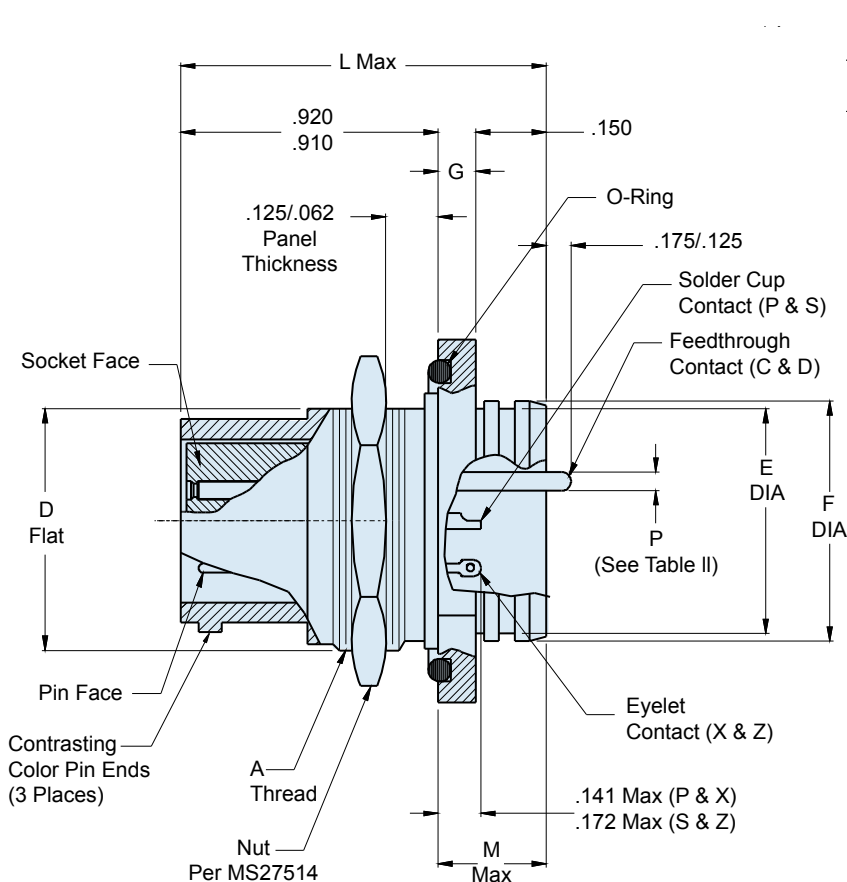
A

Shell Size

9, 11, 13, 15, 17, 19, 21, 23, 25

Insert Arrangement
MIL-DTL-38999 Series I
Hermetic Inserts Per
MIL-STD-1560;
See Pages B-2 - B-4

**Alternate Key
Position**
A, B, C, D
(Omit for Normal)



231-100-H7 Jam Nut Mount Hermetic Receptacle MIL-DTL-38999 Series I Type



MIL-DTL
38999 Type

How To Order: Commercial

Connector Series 231 - Series I Type	Shell Style H7 - Hermetic Jam Nut Mount	Shell Size 09,11,13,15,17,19,21,23,25	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
231	100	H7	Z1	11
Connector Type 100 - Hermetic Receptacle		Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated FT - Carbon Steel, Fused Tin	Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4	Alternate Key Position A, B, C, D, (N = Normal)
		35	P	N

B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA ±.016(0.4)	C ±.016(0.4)	D FLAT ±.005(0.1)	E DIA ±.011(0.3)	F DIA ±.005(0.1)
9/09	.6875-24 UNEF	1.188(30.2)	1.062(27.0)	.65(16.5)	.602(15.3)	.648(16.5)
11	.8125-20 UNEF	1.375(34.9)	1.25(31.8)	.75(19.1)	.726(18.4)	.772(19.6)
13	1.000-20 UNEF	1.5(38.1)	1.375(34.9)	.937(23.8)	.852(21.6)	.898(22.8)
15	1.125-18 UNEF	1.625(41.3)	1.5(38.1)	1.061(26.9)	.978(24.8)	1.024(26.0)
17	1.250-18 UNEF	1.75(44.5)	1.625(41.3)	1.186(30.1)	1.102(28.0)	1.148(29.2)
19	1.375-18 UNEF	1.938(49.2)	1.812(46.0)	1.311(33.3)	1.228(31.2)	1.274(32.4)
21	1.500-18 UNEF	2.062(52.4)	1.938(49.2)	1.436(36.5)	1.352(34.3)	1.398(35.5)
23	1.625-18 UNEF	2.188(55.6)	2.062(52.4)	1.561(39.6)	1.478(37.5)	1.524(38.7)
25	1.750-18 UNS	2.312(58.7)	2.188(55.6)	1.686(42.8)	1.602(40.7)	1.648(41.9)

TABLE I (CONTINUED): CONNECTOR DIMENSIONS

SHELL SIZE	G ±.016(0.4)	K DIA ±.005 (0.1)	L MAX	M MAX	N ± .005 (0.1)
9/09	.109 (2.8)	.693 (17.60)	1.200 (30.5)	.280 (7.1)	.657 (16.70)
11	.109 (2.8)	.825 (20.96)	1.200 (30.5)	.280 (7.1)	.771 (19.59)
13	.109 (2.8)	1.010 (25.65)	1.200 (30.5)	.280 (7.1)	.955 (24.26)
15	.109 (2.8)	1.135 (28.83)	1.200 (30.5)	.280 (7.1)	1.085 (27.56)
17	.109 (2.8)	1.260 (32.01)	1.200 (30.5)	.280 (7.1)	1.210 (30.73)
19	.140 (3.6)	1.385 (35.18)	1.231 (31.3)	.311 (7.9)	1.335 (33.91)
21	.140 (3.6)	1.510 (38.35)	1.231 (31.3)	.311 (7.9)	1.460 (37.08)
23	.140 (3.6)	1.635 (41.53)	1.231 (31.3)	.311 (7.9)	1.585 (40.26)
25	.140 (3.6)	1.760 (44.70)	1.231 (31.3)	.311 (7.9)	1.710 (43.43)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

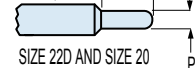
TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16

.050 ± .015
(1.27 ± 0.38)



SIZE 22D AND SIZE 20

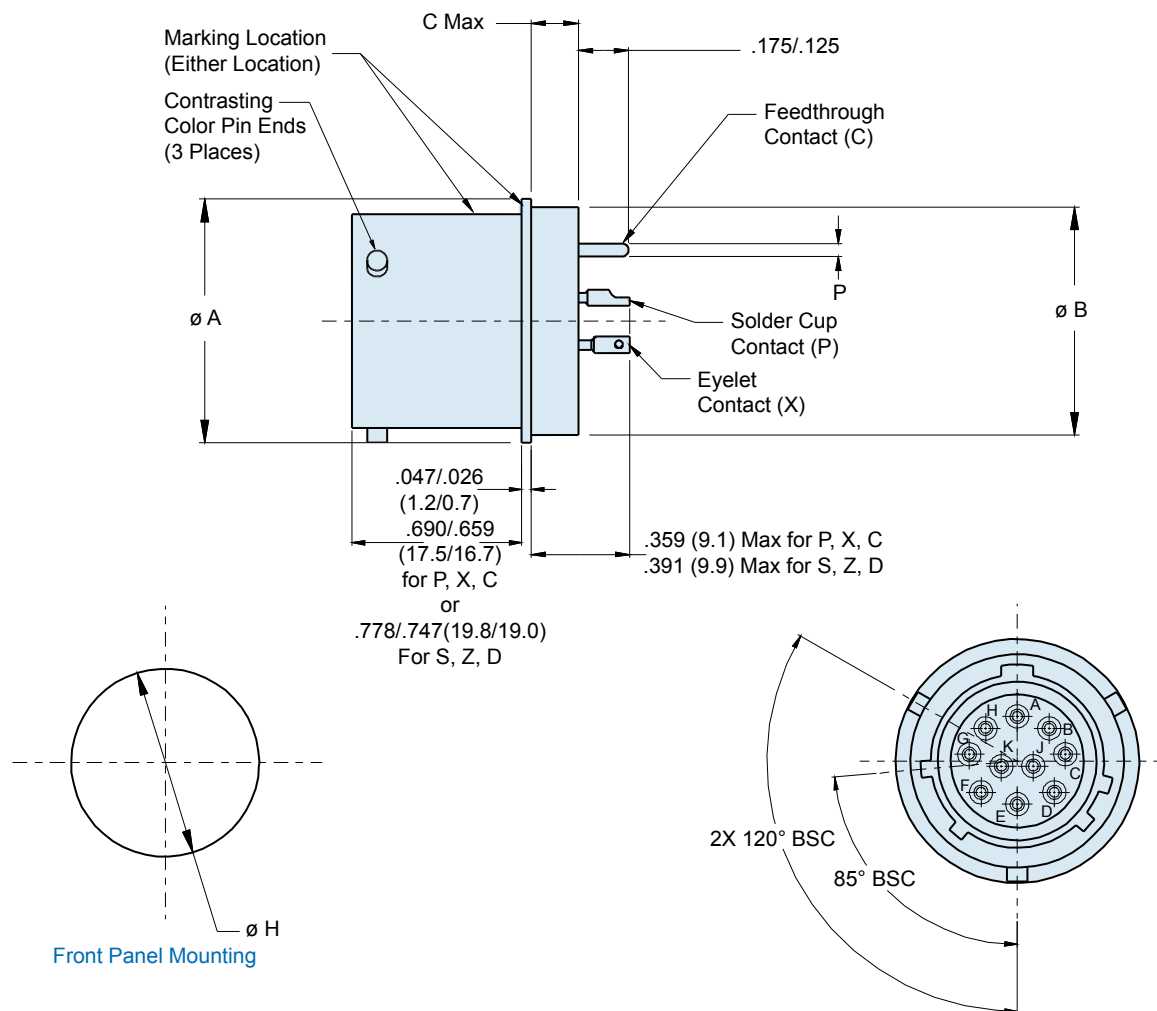
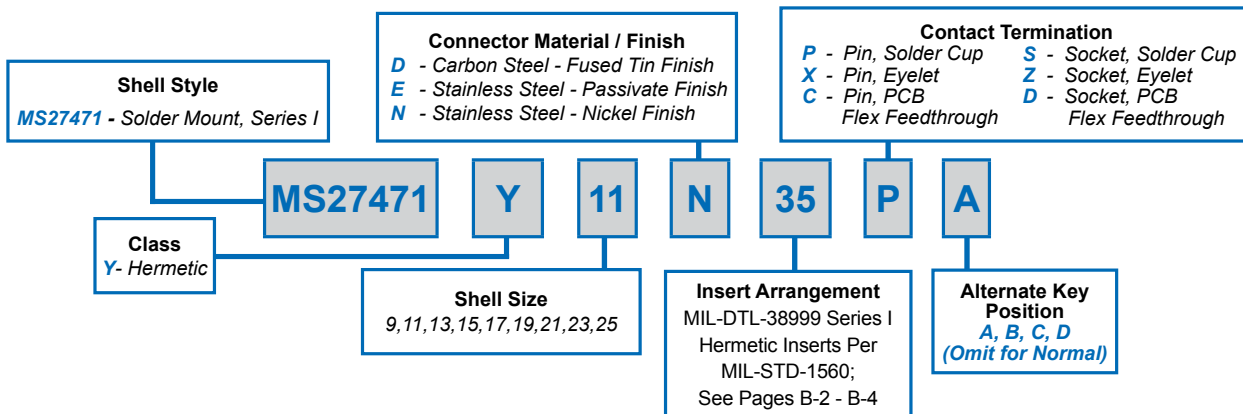
Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

MS27471

Solder Mount Hermetic Receptacle

MIL-DTL-38999 Series I

How To Order: MS



231-100-H5 Solder Mount Hermetic Receptacle MIL-DTL-38999 Series I Type



MIL-DTL
38999 Type

How To Order: Commercial

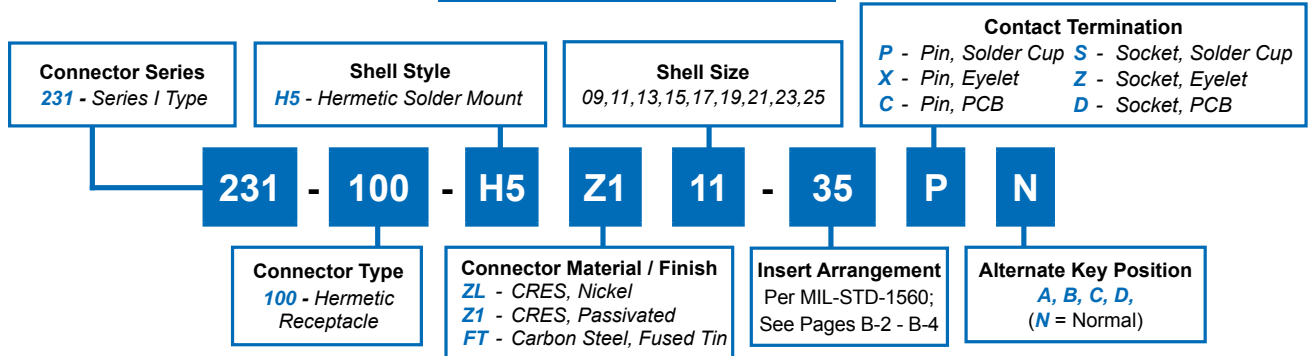


TABLE I: CONNECTOR DIMENSIONS

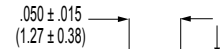
SHELL SIZE	ø A ±.016(0.4)	ø B	C MAX	ø H ±.005(0.1)
9/09	.750(19.1)	.673(17.1) .667(16.9)	.187(4.7)	.680(17.3)
11	.844(21.4)	.782(19.9) .776(19.7)		.789(20.0)
13	.969(24.6)	.907(23.0) .901(22.9)		.914(23.2)
15	1.094(27.8)	1.032(26.2) 1.027(26.1)		1.038(26.4)
17	1.218(30.9)	1.157(29.4) 1.151(29.2)		1.164(29.6)
19	1.312(33.3)	1.251(31.8) 1.245(31.6)		1.258(32.0)
21	1.438(36.5)	1.376(35.0) 1.370(34.8)		1.383(35.1)
23	1.563(39.7)	1.501(38.1) 1.495(38.0)	.218(5.5)	1.508(38.3)
25	1.688(42.9)	1.626(41.3) 1.620(41.1)		1.643(41.7)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16



SIZE 22D AND SIZE 20

Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

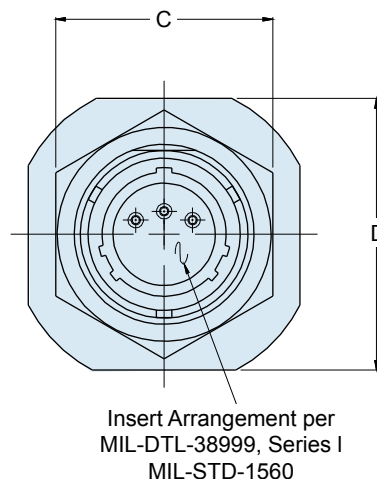
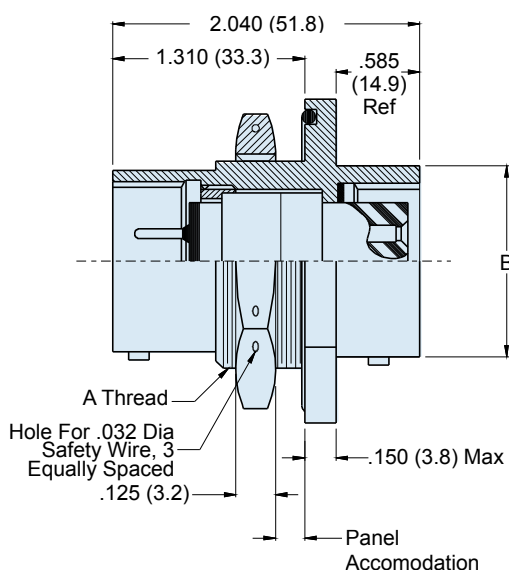
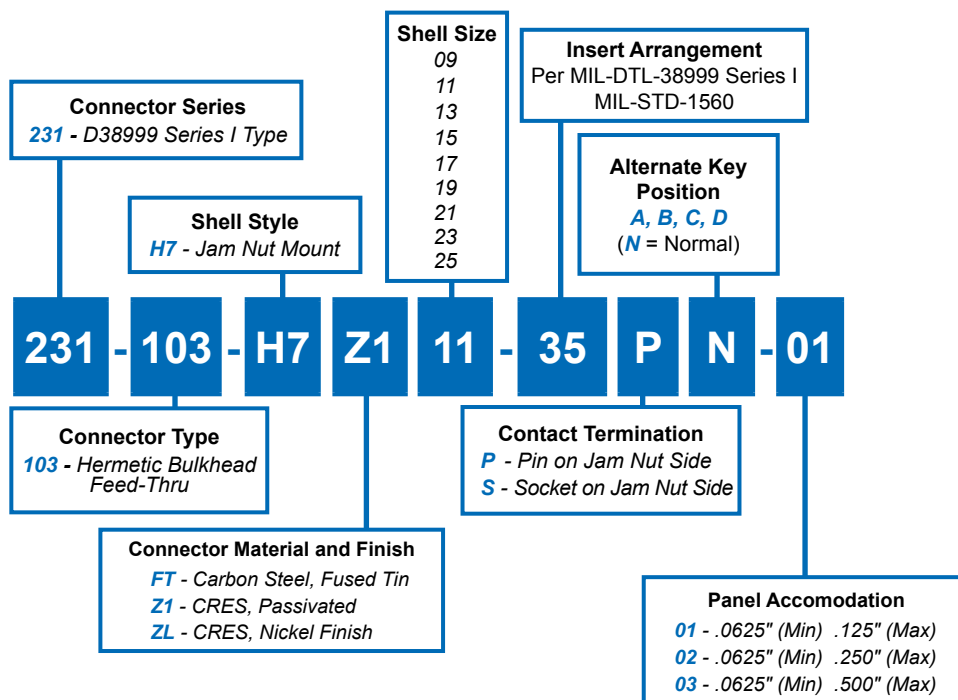
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

B



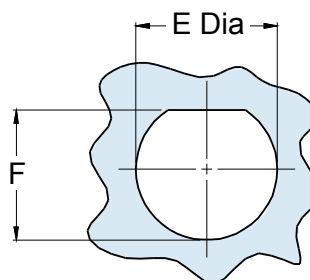
231-103-H7
Jam Nut Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999 Series I Type



MIL-DTL
38999 Type

B

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



Recommended Panel Cut-Out

TABLE I: CONNECTOR DIMENSIONS						
SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005 (0.1)	F +.000 -.005 (0-0.1)
09	.688-24 UNEF	.573(14.6)	.875(22.2)	1.062(27.0)	.693 (17.60)	.657 (16.70)
11	0.812-20 UNEF	.701(17.8)	1.000(25.4)	1.250(31.8)	.825 (20.96)	.771 (19.59)
13	1.000-20 UNEF	.851(21.6)	1.188(30.2)	1.375(34.9)	1.010 (25.65)	.955 (24.26)
15	1.125-18 UNEF	.976(24.8)	1.312(33.3)	1.500(38.1)	1.135 (28.83)	1.085 (27.56)
17	1.250-18 UNEF	1.101(28.0)	1.438(36.5)	1.625(41.3)	1.260 (32.01)	1.210 (30.73)
19	1.375-18 UNEF	1.208(30.7)	1.562(39.7)	1.812(46.0)	1.385 (35.18)	1.335 (33.91)
21	1.500-18 UNEF	1.333(33.9)	1.688(42.9)	1.938(49.2)	1.510 (38.35)	1.460 (37.08)
23	1.625-18 UNEF	1.458(37.0)	1.812(46.0)	2.062(52.4)	1.635 (41.53)	1.585 (40.26)
25	1.750-18 UNS	1.583(40.2)	2.000(50.8)	2.188(55.6)	1.760 (44.70)	1.710 (43.43)

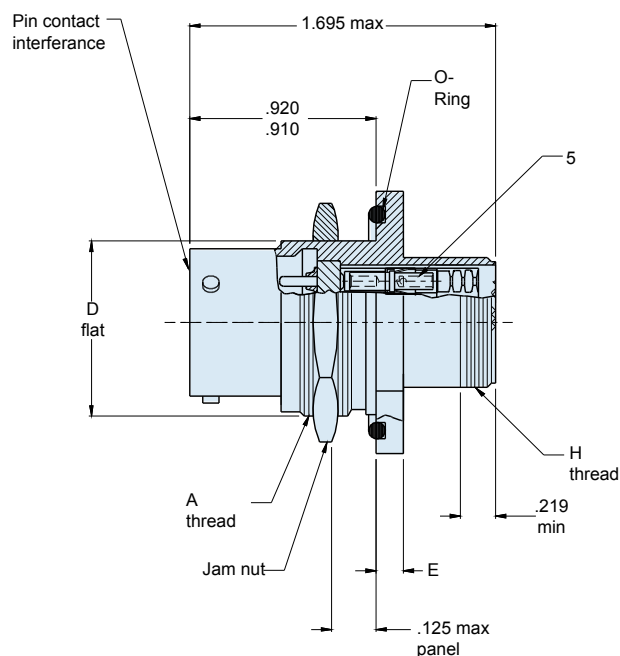
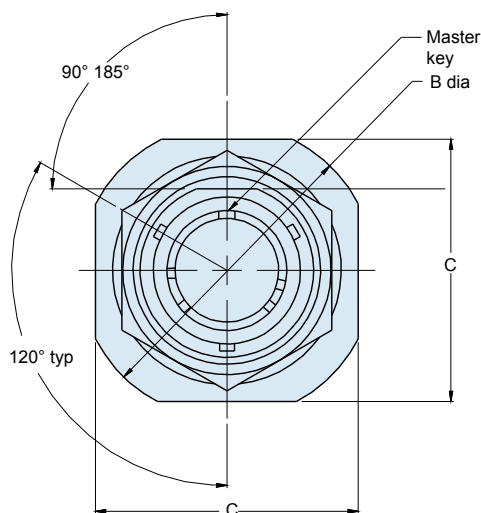
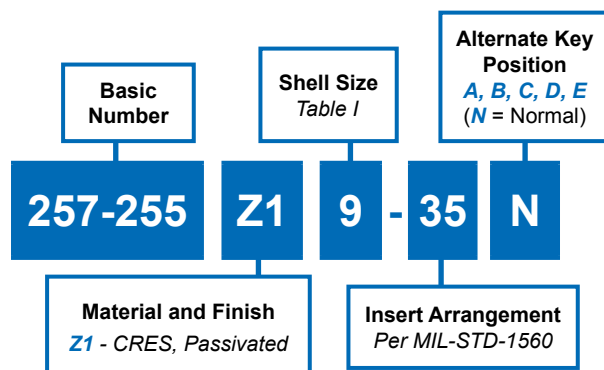
APPLICATION NOTES

- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Material/finish:
Shell, nut – CRES/passivated, carbon steel/fused tin or CRES/nickel per QQ-N-290.
- Contacts – Gold Plated. Pin: alloy 52; Skt.: copper alloy
Insulator – fused vitreous glass/N.A.
Seals – fluorosilicone rubber/N.A.
Metric dimensions (mm) are indicated in parentheses.

257-255

Jam Nut Mount Hermetic Receptacle with Crimp Removable Socket Contacts, MIL-DTL-38999 Series I Type

B



APPLICATION NOTES

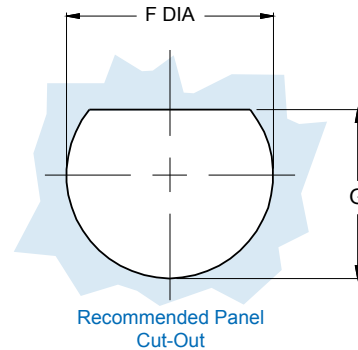
- Assembly identified with manufacturer's name and part number, space permitting.
- Insert arrangements in accordance with MIL-STD-1560.
- Glenair 257-255 receptacle connector is designed to mate with any QPL manufacturer's MIL-DTL-38999 Series I plug connector having the same insert arrangement & polarization.
- Material/finish:
Shell, jam nut—CRES/passivated
- Pin contacts—nickel-iron alloy 52/gold
Socket contacts—copper alloy/gold
Insulator—fused vitreous glass/N.A.
Insulators—high grade rigid dielectric/ N.A.
Seals—pure fluorosilicone rubber/ N.A.
- Supplied crimp removal socket contacts conform to M39029/57
- Metric Dimensions (mm) are indicated in parentheses.

257-255
Jam Nut Mount Hermetic Receptacle
 with Crimp Removable Socket Contacts,
 MIL-DTL-38999 Series I Type



MIL-DTL
38999 Type

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



B

TABLE I: CONNECTOR DIMENSIONS				
SHELL SIZE	A THREAD CLASS 2A	B DIA ±.016(0.4)	C FLATS ±.016(0.4)	D FLAT ±.005(0.1)
9	.6875-24 UNEF	1.188(30.2)	1.062(27.0)	.650(16.5)
11	.8125-20 UNEF	1.375(34.9)	1.250(31.8)	.750(19.1)
13	1.000-20 UNEF	1.500(38.1)	1.375(34.9)	.937(23.8)
15	1.125-18 UNEF	1.625(41.3)	1.500(38.1)	1.061(26.9)
17	1.250-18 UNEF	1.750(44.5)	1.625(41.3)	1.186(30.1)
19	1.375-18 UNEF	1.938(49.2)	1.812(46.0)	1.311(33.3)
21	1.500-18 UNEF	2.062(52.4)	1.938(49.2)	1.436(36.5)
23	1.625-18 UNEF	2.188(55.6)	2.062(52.4)	1.561(39.6)
25	1.750-18 UNS	2.312(58.7)	2.188(55.6)	1.686(42.8)

TABLE I (CONTINUED): CONNECTOR DIMENSIONS				
SHELL SIZE	E DIA ±.016(0.4)	F DIA ±.005 (0.1)	G ±.005 (0.1)	H THREAD CLASS 2A
9	.109(2.8)	.693 (17.60)	.657 (16.70)	.4375-28 UNEF
11	.109(2.8)	.825 (20.96)	.771 (19.59)	.5625-24 UNEF
13	.109(2.8)	1.010 (25.65)	.955 (24.26)	.6875-24 UNEF
15	.109(2.8)	1.135 (28.83)	1.085 (27.56)	.8125-20 UNEF
17	.140(3.6)	1.260 (32.01)	1.210 (30.73)	.9375-20 UNEF
19	.140(3.6)	1.385 (35.18)	1.335 (33.91)	1.0625-18 UNEF
21	.140(3.6)	1.510 (38.35)	1.460 (37.08)	1.1875-18 UNEF
23	.140(3.6)	1.635 (41.53)	1.585 (40.26)	1.3125-18 UNEF
25	.140(3.6)	1.760 (44.70)	1.710 (43.43)	1.4375-18 UNEF

MS27475

Wall Mount Hermetic Receptacle

MIL-DTL-38999 Series II

How To Order: MS

Shell Style
MS27475 - Wall Mount, Series II

Connector Material / Finish
D - Carbon Steel - Fused Tin Finish
E - Stainless Steel - Passivate Finish
N - Stainless Steel - Nickel Finish

Contact Termination
P - Pin, Solder Cup S - Socket, Solder Cup
X - Pin, Eyelet Z - Socket, Eyelet
C - Pin, PCB D - Socket, PCB
Flex Feedthrough Flex Feedthrough

Class
Y - Hermetic

MS27475

Y

10

N

35

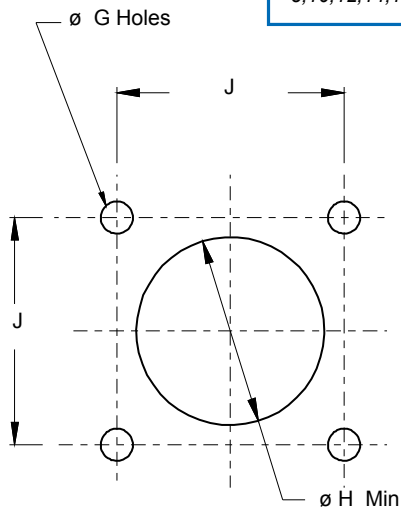
P

A

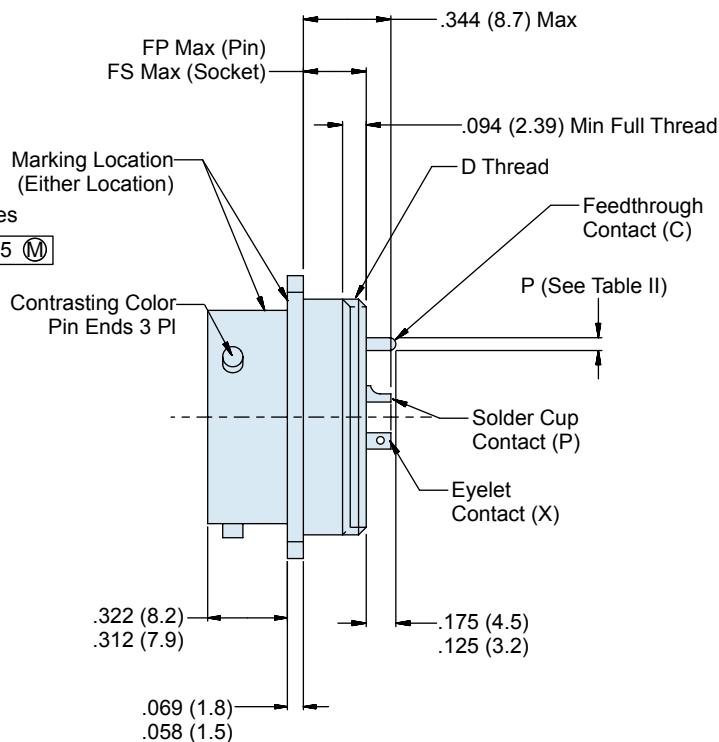
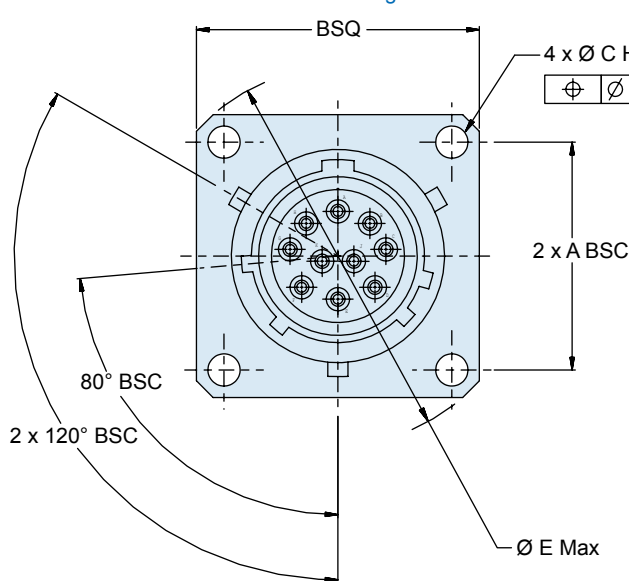
Shell Size
8, 10, 12, 14, 16, 18, 20, 22, 24

Insert Arrangement
MIL-DTL-38999 Series II
Hermetic Inserts Per
MIL-STD-1560;
See Pages B-2 - B4

**Alternate Key
Position**
A, B, C, D
(Omit for Normal)



Front Panel
Mounting

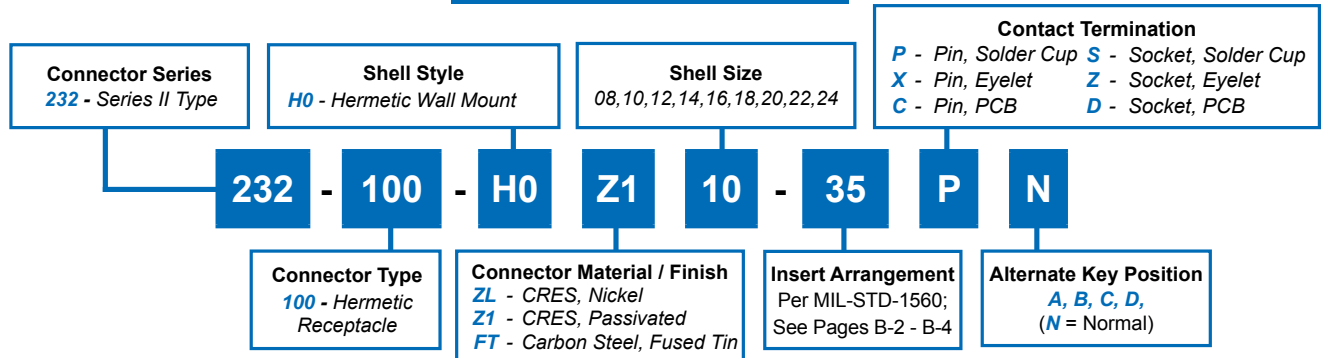


232-100-H0 Wall Mount Hermetic Receptacle MIL-DTL-38999 Series II Type



MIL-DTL
38999 Type

How To Order: Commercial



B

TABLE I: CONNECTOR DIMENSIONS

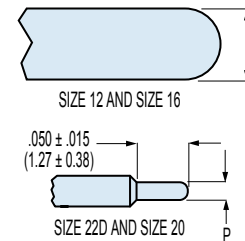
SHELL SIZE	A BSC	B SQ MAX	ø C HOLES	D Threads (UNEF-2A)	ø E MAX	FP MAX	FS MAX
8/08	.594(15.1)	.828(21.0)	.130(3.3) .115(2.9)	.5625-24	1.078(27.4)	.250 (6.35)	.375 (9.5)
10	.719(18.3)	.954(24.2)		.6875-24	1.256(31.9)		
12	.812(20.6)	1.047(26.6)		.8125-20	1.391(35.3)		
14	.906(23.0)	1.141(29.0)		.9375-20	1.516(38.5)		
16	.969(24.6)	1.234(31.3)		1.0625-18	1.641(41.7)		
18	1.062(27.0)	1.328(33.7)		1.1875-18	1.766(44.9)		
20	1.156(29.4)	1.453(36.9)		1.3125-18	1.891(48.0)		
22	1.250(31.8)	1.578(40.1)	.157(4.0) .142(3.6)	1.4375-10	2.016(51.2)	.375 (9.53)	.406 (10.3)
24	1.375(34.9)	1.703(43.3)		1.5625-18	2.204(56.0)		

TABLE I (CONTINUED):
CONNECTOR DIMENSIONS

SHELL SIZE	ø G HOLES	ø H MIN	ø J BSC
8	.133(3.4) .123(3.1)	.570(14.5)	.594(15.1)
10		.690(17.5)	.719(18.3)
12		.820(20.8)	.812(20.6)
14		.940(23.9)	.906(23.0)
16		1.070(27.2)	.969(24.6)
18		1.190(30.2)	1.062(27.0)
20		1.320(33.5)	1.156(29.4)
22	.159(4.0)	1.440(36.6)	1.250(31.8)
24	.149(3.8)	1.570(39.9)	1.375(34.9)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

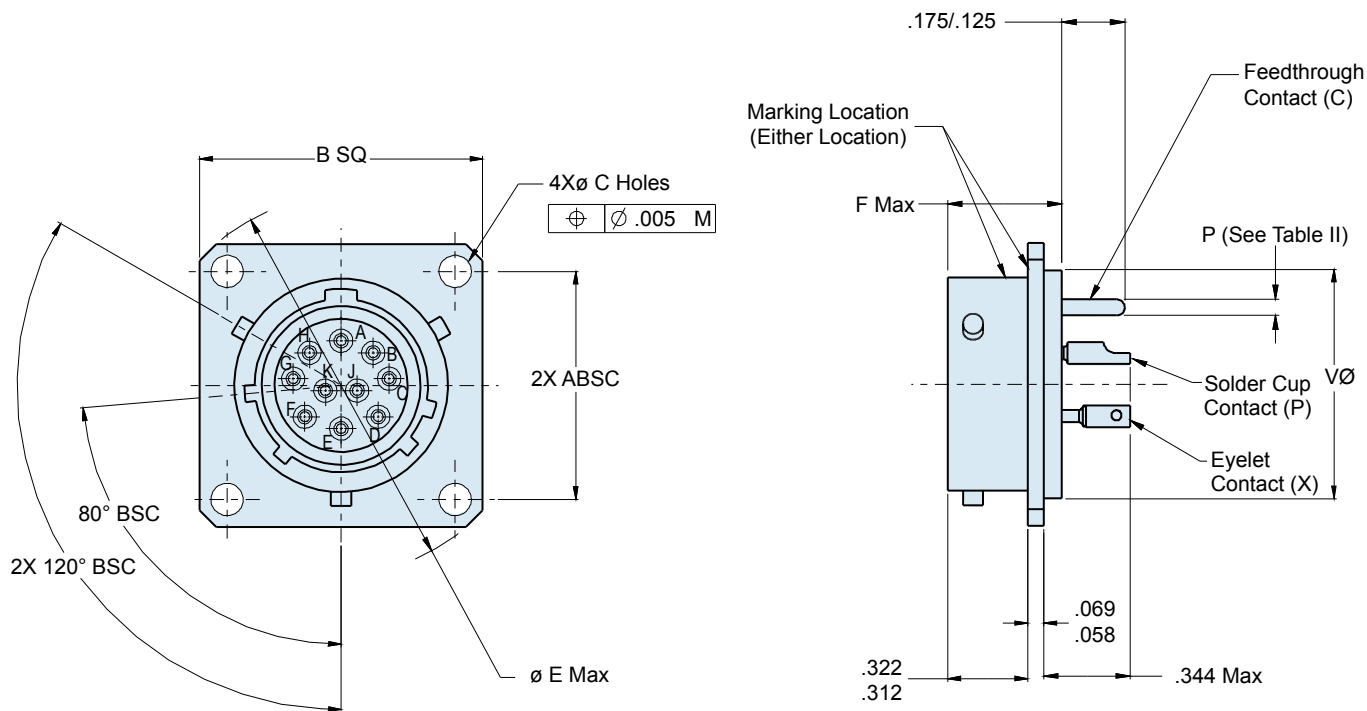
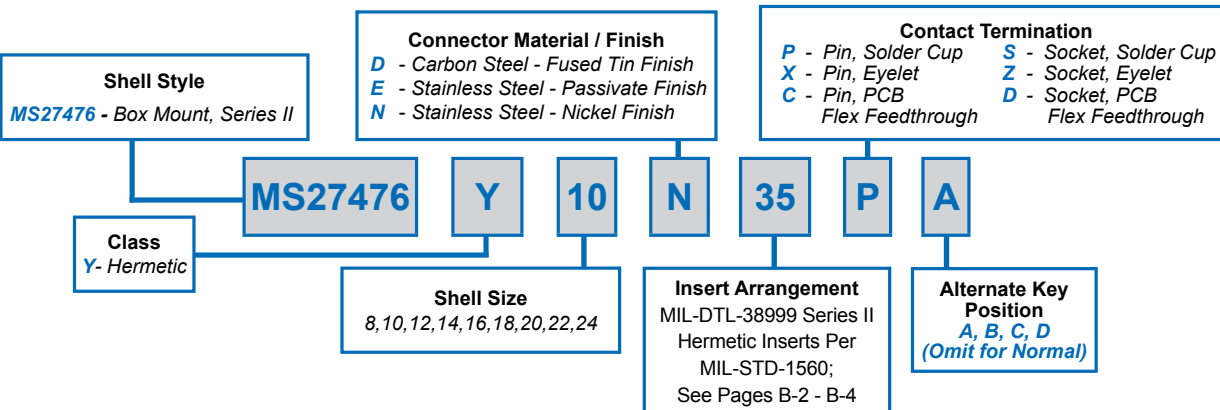
Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

MS27476 Box Mount Hermetic Receptacle MIL-DTL-38999 Series II

How To Order: MS

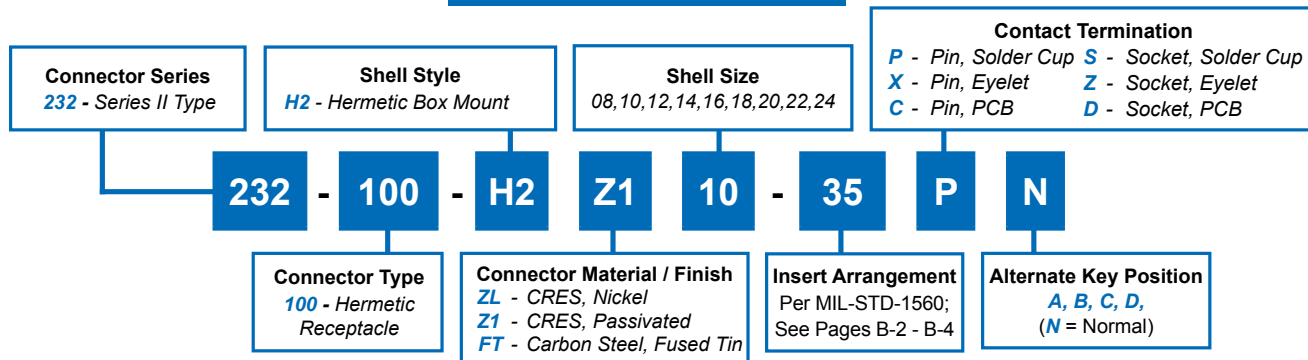


232-100-H2 Box Mount Hermetic Receptacle MIL-DTL-38999 Series II Type

Glenair

MIL-DTL
38999 Type

How To Order: Commercial



B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A BSC	B SQ MAX	Ø C HOLES	Ø E MAX	F MAX	V Diameter
8/08	.594(15.1)	.828(21.0)	.130(3.3) .115(2.9)	1.078(27.4)	.453(11.5)	.562(14.3)
10	.719(18.3)	.954(24.2)		1.266(32.2)		.672(17.1)
12	.812(20.6)	1.047(26.6)		1.391(35.3)		.781(19.8)
14	.906(23.0)	1.141(29.0)		1.516(38.5)		.906(23.0)
16	.969(24.6)	1.234(31.3)		1.641(41.7)		1.031(26.2)
18	1.062(27.0)	1.328(33.7)		1.766(44.9)		1.156(29.4)
20	1.156(29.4)	1.453(36.9)		1.891(48.0)		1.250(31.8)
22	1.250(31.8)	1.578(40.1)		2.016(51.2)		1.375(34.9)
24	1.375(34.9)	1.703(43.3)	.157(4.0) .142(3.6)	2.204(56.0)	.484(12.3)	1.500(38.1)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D

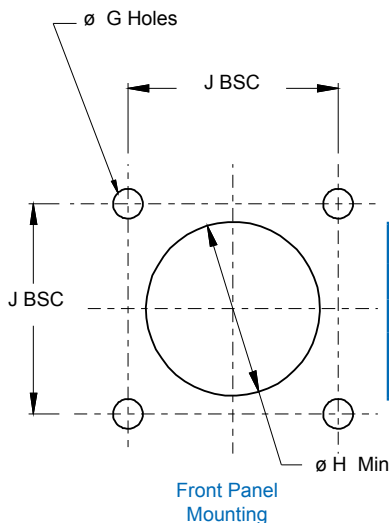
SIZE 12 AND SIZE 16

SIZE 22 AND SIZE 20

Contact Size	Ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

TABLE I (CONTINUED):
CONNECTOR DIMENSIONS

SHELL SIZE	Ø G HOLES	Ø H MIN	Ø J BSC
8/08	.133(3.4) .123(3.1)	.570(14.5)	.594(15.1)
10		.690(17.5)	.719(18.3)
12		.820(20.8)	.812(20.6)
14		.940(23.9)	.906(23.0)
16		1.070(27.2)	.969(24.6)
18		1.190(30.2)	1.062(27.0)
20		1.320(33.5)	1.156(29.4)
22		1.440(36.6)	1.250(31.8)
24	.159(4.0) .149(3.8)	1.570(39.9)	1.375(34.9)



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

MS27477

Jam Nut Mount Hermetic Receptacle

MIL-DTL-38999 Series II

How To Order: MS

Shell Style

MS27477 - Jam Nut Mount, Series II

Connector Material / Finish

D - Carbon Steel - Fused Tin Finish
E - Stainless Steel - Passivate Finish
N - Stainless Steel - Nickel Finish

Contact Termination

P - Pin, Solder Cup **S** - Socket, Solder Cup
X - Pin, Eyelet **Z** - Socket, Eyelet
C - Pin, PCB **D** - Socket, PCB
 Flex Feedthrough Flex Feedthrough

Class
Y - Hermetic

MS27477

Y

10

N

35

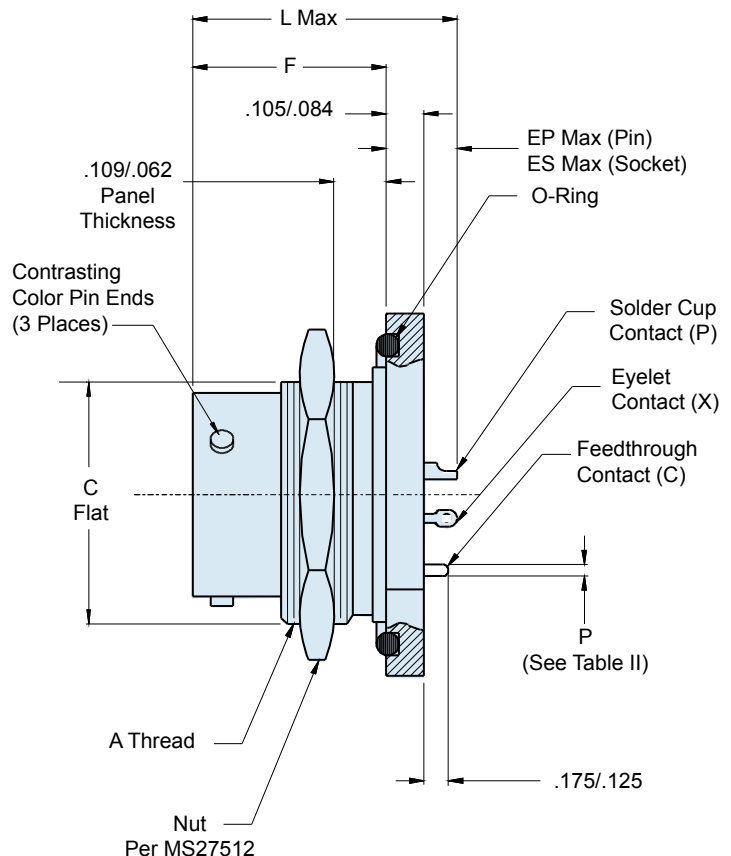
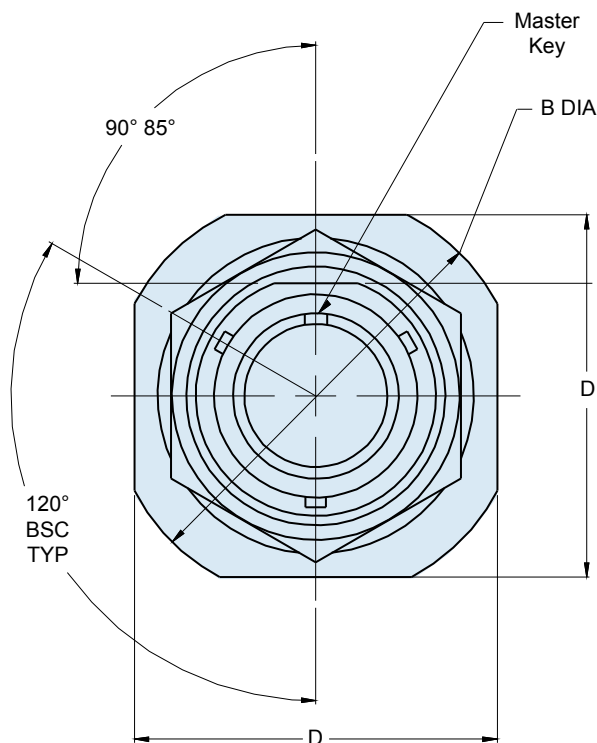
P

A

Shell Size
 8, 10, 12, 14, 16, 18, 20, 22, 24

Insert Arrangement
 MIL-DTL-38999 Series II
 Hermetic Inserts Per
 MIL-STD-1560;
 See Pages B-2 - B-4

Alternate Key Position
A, B, C, D
(Omit for Normal)

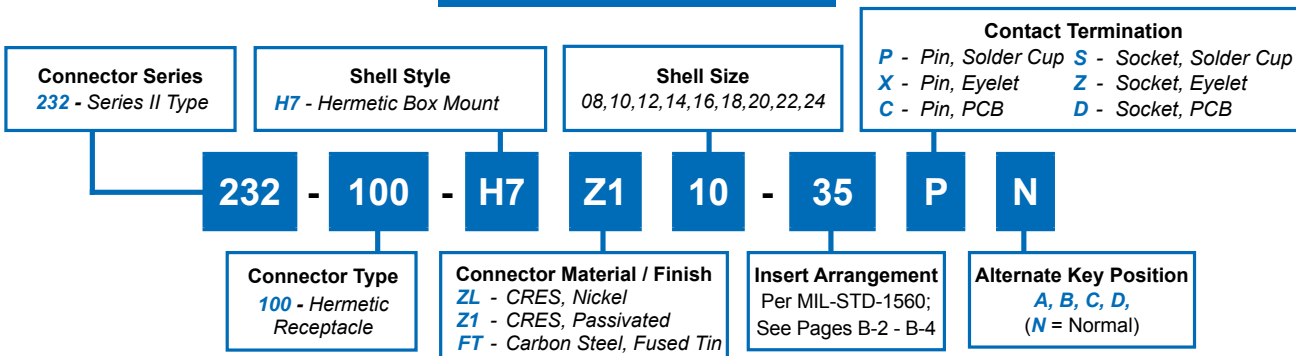


232-100-H7 Jam Nut Mount Hermetic Receptacle MIL-DTL-38999 Series II Type



MIL-DTL
38999 Type

How To Order: Commercial



B

WIRE ACCOMODATION	
Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

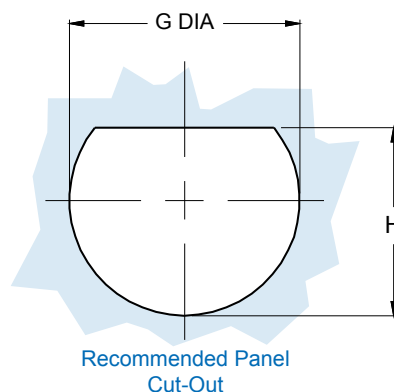


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA ±.016(0.4)	C FLAT ±.004(0.1)	D A/F ±.016(0.4)
8/08	.875-20 UNEF	1.375(34.9)	.815(20.7)	1.25(31.8)
10	1.000-20 UNEF	1.5(38.1)	.939(23.9)	1.375(34.9)
12	1.125-18 UNEF	1.625(41.3)	1.063(27.0)	1.5(38.1)
14	1.250-18 UNEF	1.75(44.5)	1.188(30.2)	1.625(41.3)
16	1.375-18 UNEF	1.938(49.2)	1.318(33.5)	1.781(45.2)
18	1.500-18 UNEF	2.016(51.2)	1.438(36.5)	1.890(48.0)
20	1.625-18 UNEF	2.141(54.4)	1.563(39.7)	2.016(51.2)
22	1.750-18 UNS	2.265(57.5)	1.688(42.9)	2.140(54.4)
24	1.875-16 UN	2.39(60.7)	1.813(46.1)	2.265(57.5)

TABLE I (CONTINUED): CONNECTOR DIMENSIONS

SHELL SIZE	EP MAX	ES MAX	F ±.005(0.1)	G DIA ±.005(0.1)	H ±.005(0.1)	L MAX
8/08	.281 (7.1)	.359 (9.1)	.438(11.1)	.885(22.48)	.830(21.08)	.724(18.4)
10	.281 (7.1)	.359 (9.1)	.438(11.1)	1.010(25.65)	.955(24.26)	.724(18.4)
12	.281 (7.1)	.359 (9.1)	.438(11.1)	1.135(28.83)	1.085(27.56)	.724(18.4)
14	.281 (7.1)	.359 (9.1)	.438(11.1)	1.260(32.01)	1.210(30.73)	.724(18.4)
16	.281 (7.1)	.359 (9.1)	.438(11.1)	1.385(35.18)	1.335(33.91)	.724(18.4)
18	.281 (7.1)	.359 (9.1)	.438(11.1)	1.510(38.35)	1.460(37.08)	.724(18.4)
20	.250 (6.4)	.344 (8.7)	.464(11.8)	1.635(41.53)	1.585(40.26)	.719(18.3)
22	.250 (6.4)	.344 (8.7)	.464(11.8)	1.760(44.70)	1.709(43.42)	.719(18.3)
24	.250 (6.4)	.344 (8.7)	.464(11.8)	1.885(47.88)	1.835(46.61)	.719(18.3)

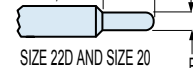
TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16

.050 ± .015
(1.27 ± 0.38)



SIZE 22D AND SIZE 20

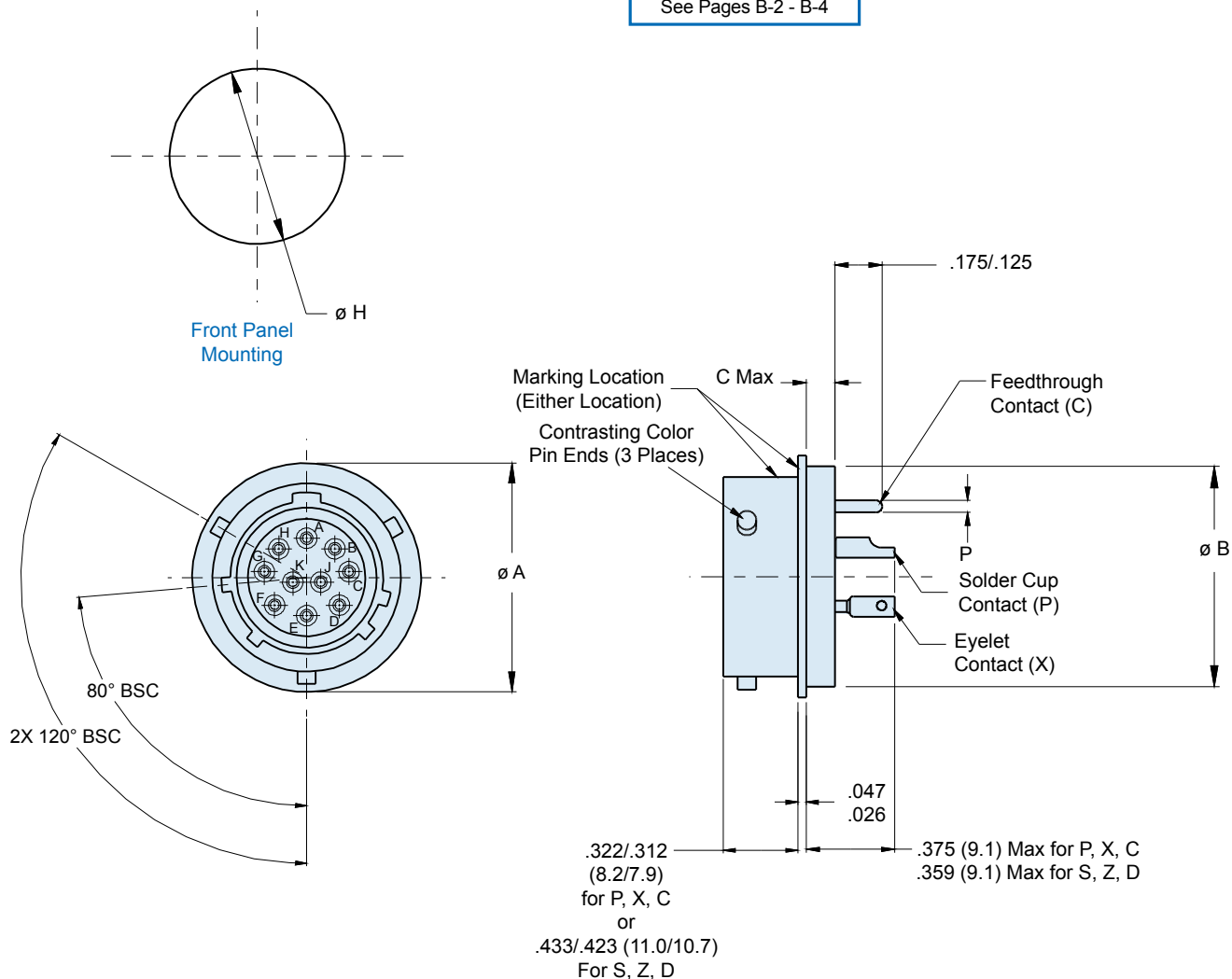
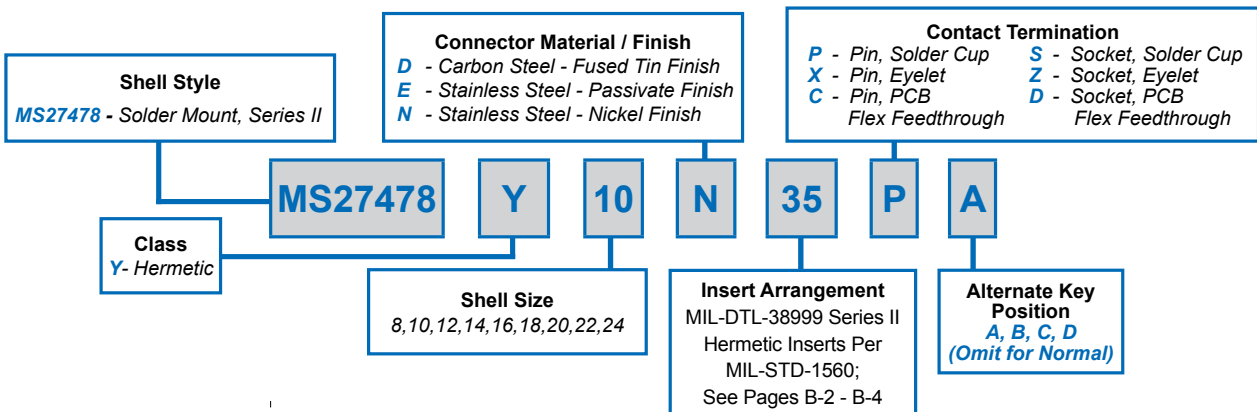
Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

MS27478

Solder Mount Hermetic Receptacle

MIL-DTL-38999 Series II

How To Order: MS



232-100-H5 Solder Mount Hermetic Receptacle MIL-DTL-38999 Series II Type



MIL-DTL
38999 Type

How To Order: *Commercial*

Connector Series 232 - Series II Type	Shell Style H5 - Hermetic Solder Mount	Shell Size 08, 10, 12, 14, 16, 18, 20, 22, 24	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
232	- 100	- H5	Z1	10
Connector Type 100 - Hermetic Receptacle		Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated FT - Carbon Steel, Fused Tin	Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4	Alternate Key Position A, B, C, D, (N = Normal)
		- 35	P	N

B

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS				
SHELL SIZE	ø A ± .011 (0.3)	ø B	C MAX	ø H ±.005 (0.1)
8/08	.681 (17.3)	.563 (14.3) .557 (14.1)	.125 (3.2)	.570 (14.5)
10	.797 (20.2)	.673 (17.1) .667 (16.9)		.680 (17.3)
12	.906 (23.0)	.782 (19.9) .776 (19.7)		.789 (20.0)
14	1.031 (26.2)	.907 (23.0) .901 (22.9)		.914 (23.2)
16	1.156 (29.4)	1.032 (26.2) 1.027 (26.1)		1.039 (26.4)
18	1.281 (32.5)	1.157 (29.4) 1.151 (29.2)		1.164 (29.6)
20	1.375 (34.9)	1.251 (31.8) 1.245 (31.6)		1.258 (32.0)
22	1.500 (38.1)	1.376 (35.0) 1.370 (34.8)	.156 (4.0)	1.383 (35.1)
24	1.625 (41.3)	1.501 (38.1) 1.495 (38.0)		1.508 (38.3)

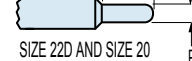
TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16

.050 ± .015
(1.27 ± 0.38)



SIZE 22D AND SIZE 20

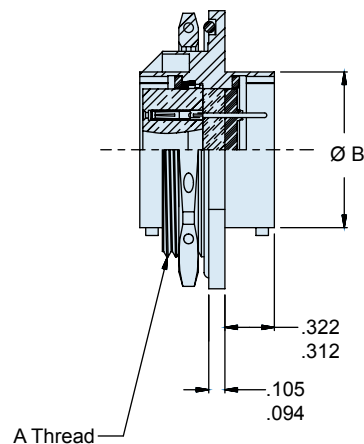
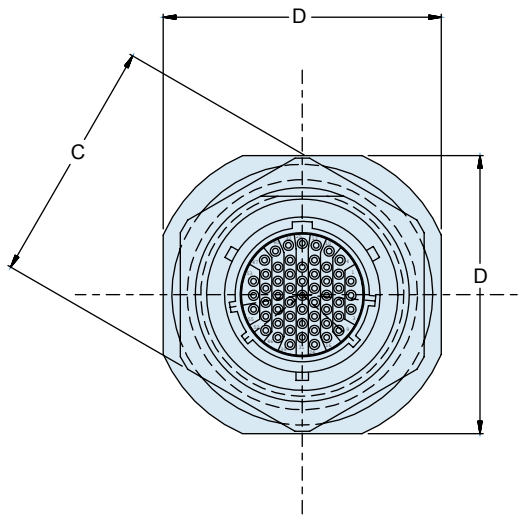
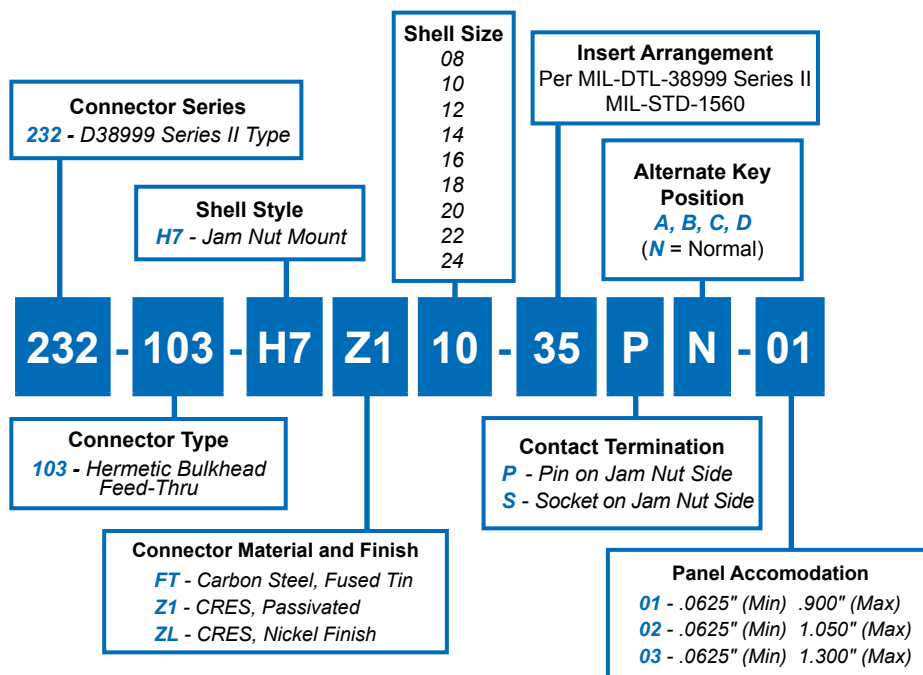
Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

232-103-H7 Jam Nut Mount Hermetic Bulkhead Feed-Thru MIL-DTL-38999 Series II Type

B



232-103-H7
Jam Nut Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999 Series II Type

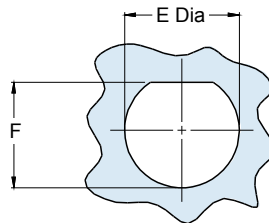


MIL-DTL
38999 Type

B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005(0.1)	F +.000-.005 (0-0.1)
08	.875-20 UNEF	.474 (12.0)	1.062 (27.0)	1.250 (31.8)	.885 (22.48)	.830 (21.1)
10	1.000-20 UNEF	.591 (15.0)	1.188 (30.2)	1.375 (34.9)	1.010 (25.65)	.955 (24.3)
12	1.125-18 UNEF	.751 (19.1)	1.312 (33.3)	1.500 (38.1)	1.135 (28.83)	1.085 (27.6)
14	1.250-18 UNEF	.876 (22.3)	1.438 (36.5)	1.625 (41.3)	1.260 (32.01)	1.210 (30.7)
16	1.375-18 UNEF	1.001 (25.4)	1.562 (39.7)	1.781 (45.2)	1.385 (35.18)	1.335 (33.9)
18	1.500-18 UNEF	1.126 (28.6)	1.688 (42.9)	1.890 (48.0)	1.510 (38.35)	1.460 (37.1)
20	1.625-18 UNEF	1.251 (31.8)	1.812 (46.0)	2.016 (51.2)	1.635 (41.53)	1.585 (40.3)
22	1.750-18 UNS	1.376 (35.0)	2.000 (50.8)	2.140 (54.4)	1.760 (44.70)	1.710 (43.4)
24	1.875-16 UN	1.501 (38.1)	2.125 (54.0)	2.265 (57.5)	1.885 (47.88)	1.835 (46.6)

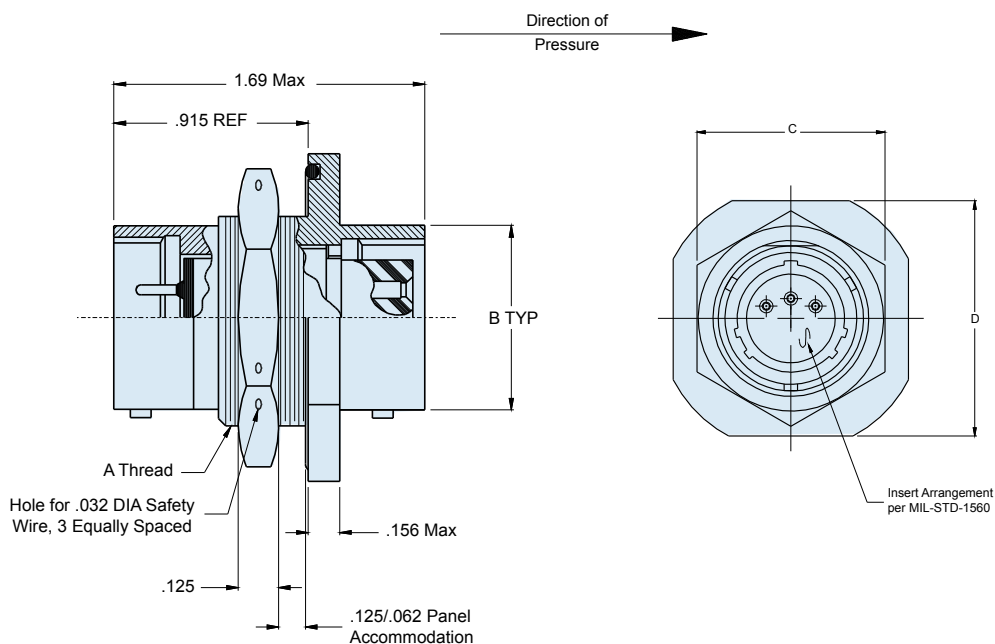
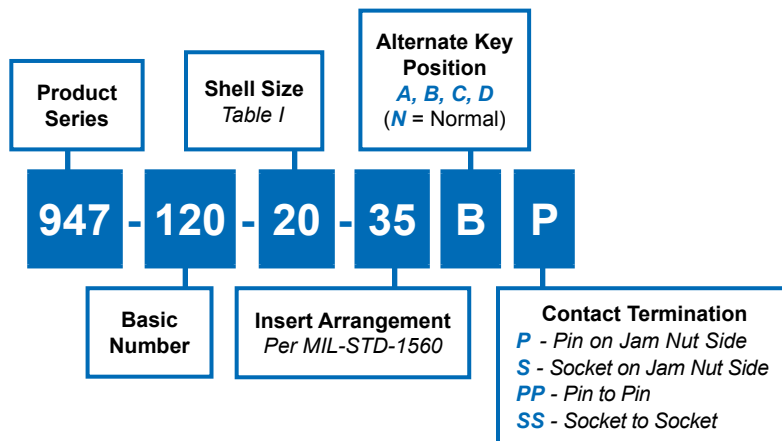


Recommended Panel Cut-Out

APPLICATION NOTES

- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1×10^{-7} cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Material/finish:
Shell, nut – CRES/passivated, carbon steel/fused tin or CRES/nickel per QQ-N-290.
- Contacts – Gold Plated. Pin: alloy 52; Skt.: copper alloy
Insulator – fused vitreous glass/N.A.
Seals – fluorosilicone rubber/N.A.

B



947-120
Jam Nut Mount Hermetic Bulkhead Feed-Thru
.062/.125ⁱⁿ Panel
MIL-DTL-38999 Series II Type

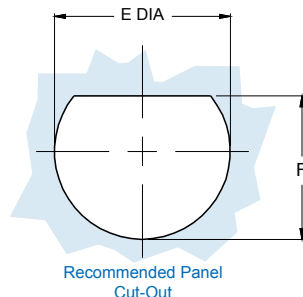


MIL-DTL
38999 Type

B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005(0.1)	F +.000-.005 (0-0.1)
08	.875-20 UNEF	.474(12.0)	1.062(27.0)	1.250(31.8)	.885(22.48)	.830(21.1)
10	1.000-20 UNEF	.591(15.0)	1.188(30.2)	1.375(34.9)	1.010(25.65)	.955(24.3)
12	1.125-18 UNEF	.751(19.1)	1.312(33.3)	1.500(38.1)	1.135(28.83)	1.085(27.6)
14	1.250-18 UNEF	.876(22.3)	1.438(36.5)	1.625(41.3)	1.260(32.01)	1.210(30.7)
16	1.375-18 UNEF	1.001(25.4)	1.562(39.7)	1.781(45.2)	1.385(35.18)	1.335(33.9)
18	1.500-18 UNEF	1.126(28.6)	1.688(42.9)	1.890(48.0)	1.510(38.35)	1.460(37.1)
20	1.625-18 UNEF	1.251(31.8)	1.812(46.0)	2.016(51.2)	1.635(41.53)	1.585(40.3)
22	1.750-18 UNS	1.376(35.0)	2.000(50.8)	2.140(54.4)	1.760(44.70)	1.710(43.4)
24	1.875-16 UN	1.501(38.1)	2.125(54.0)	2.265(57.5)	1.885(47.88)	1.835(46.6)



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-686A	1×10^{-10} cc's Helium per second
-686B	1×10^{-8} cc's Helium per second
-686C	1×10^{-6} cc's Helium per second

APPLICATION NOTES

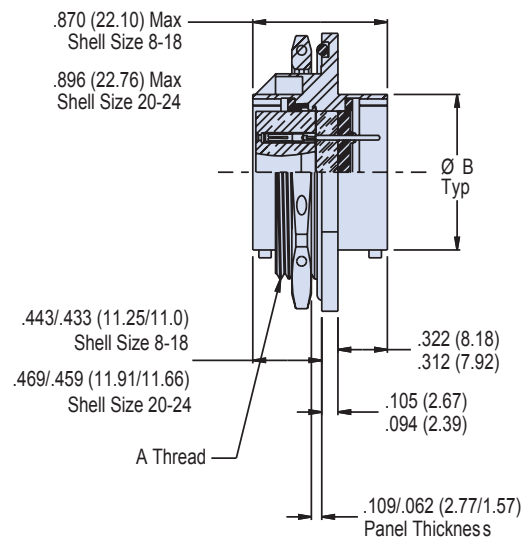
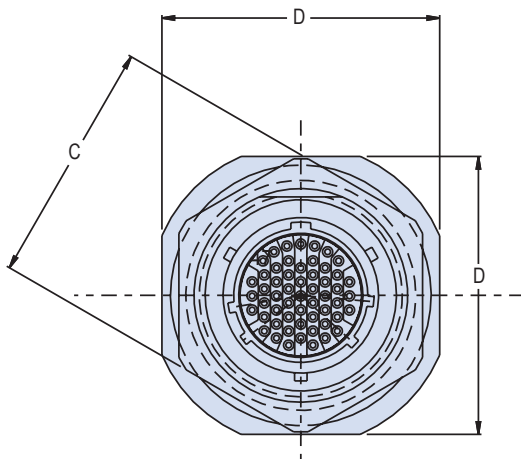
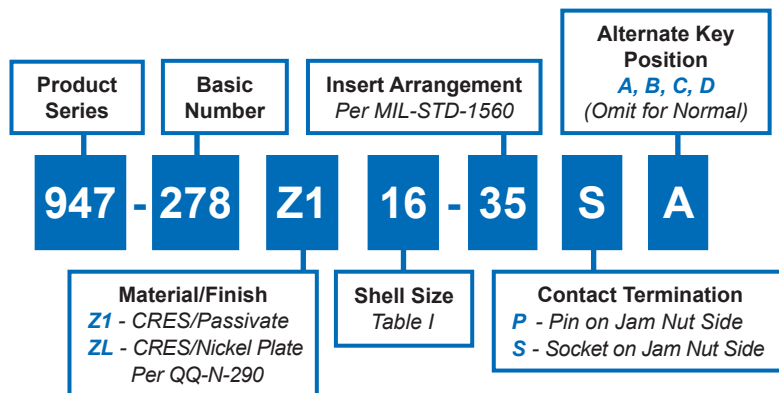
- Assembly identified with manufacturer's name and part number, space permitting.
- For pin/pin or socket/socket, symmetrical layouts only consult factory for available insert arrangements).
- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1×10^{-7} cc/sec at one atmosphere.
- Not for use in liquid atmosphere.
- Material/Finish:
 Shell, lock ring, jam nut, bayonet pins—stainless steel/passivate
 Contacts—copper alloy/gold plate and alloy 52/gold plate
 Insulators—high-grade rigid dielectric/N.A. and full glass
 Seals - silicone/ N.A.
- Metric Dimensions (mm) are indicated in parentheses.

947-278

Jam Nut Mount Hermetic Bulkhead Feed-Thru

MIL-DTL-38999 Series II Type (MS27477Y)

B



947-278
Jam Nut Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999 Series II Type (MS27477Y)

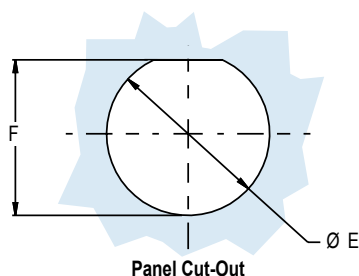


MIL-DTL
38999 Type

B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005(0.1)	F +.000-.005 (0-0.1)
08	11/16-24 UNEF	.474(12.0)	1.062(27.0)	1.250(31.8)	.890 (22.6)	.825 (21.0)
10	13/16-20 UNEF	.591(15.0)	1.188(30.2)	1.375(34.9)	1.015 (25.8)	.950 (24.1)
12	1-20 UNEF	.751(19.1)	1.312(33.3)	1.500(38.1)	1.140 (29.0)	1.080 (27.4)
14	1 1/8-18 UNEF	.876(22.3)	1.438(36.5)	1.625(41.3)	1.265 (32.1)	1.205 (30.6)
16	1 1/4-18 UNEF	1.001(25.4)	1.562(39.7)	1.781(45.2)	1.390 (35.3)	1.330 (33.8)
18	1 3/8-18 UNEF	1.126(28.6)	1.608(40.8)	1.890(48.0)	1.515 (38.5)	1.455 (37.0)
20	1 1/2-18 UNEF	1.251(31.8)	1.812(46.0)	2.016(51.2)	1.640 (41.7)	1.580 (40.1)
22	1 5/8-18 UNEF	1.376(35.0)	2.000(50.8)	2.140(54.4)	1.765 (44.8)	1.704 (43.3)
24	1 3/4-18 UNS	1.501(38.1)	2.125(54.0)	2.265(57.5)	1.890 (48.0)	1.830 (46.5)



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc Helium per second
-585B	1 x 10 ⁻⁹ cc Helium per second
-585C	1 x 10 ⁻⁸ cc Helium per second

APPLICATION NOTES

- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair's 947-278 will mate with any QPL manufacturer's plug having the same shell size, contact arrangement and opposite contact gender.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere.
- Metric Dimensions (mm) are indicated in parentheses.
- Material/Finish:
 Shell and jam nut - CRES/passivate or CRES/Nickel plate
 Contacts, pin - nickel alloy/gold plate
 Contacts, socket - copper alloy/gold plate
 Bayonets - CRES/passivate
 Insulator, pins - full glass/N.A.
 Insulator - sockets - rigid dielectric/N.A.
 Seals - Fluorosilicone blend/N.A.

D38999/21

Box Mount Hermetic Receptacle

MIL-DTL-38999 Series III

How To Order: MS

Basic Specification
D38999

Connector Material / Finish
N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement
Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position
A, B, C, D, E
(N = Normal)

D38999

/21

Y

B

35

P

N

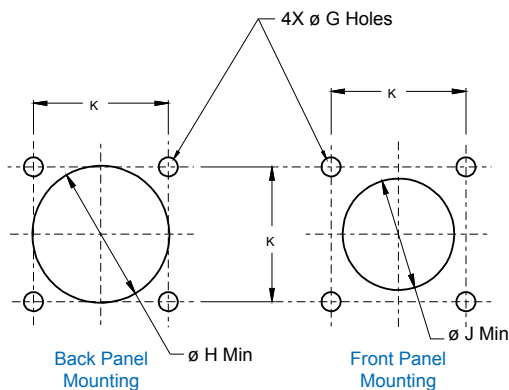
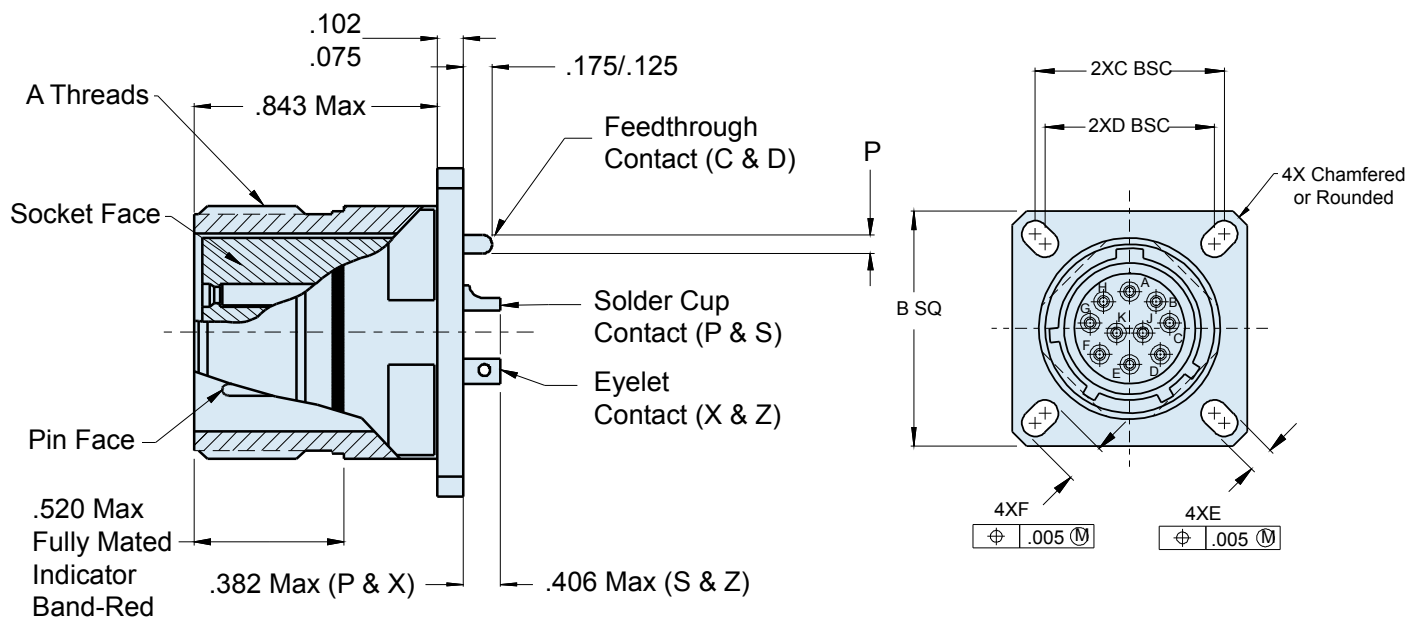
Shell Style
/21 - Box Mount

Shell Size

A - 9 F - 19
B - 11 G - 21
C - 13 H - 23
D - 15 J - 25
E - 17

Contact Termination

P - Pin, Solder Cup S - Socket, Solder Cup
X - Pin, Eyelet Z - Socket, Eyelet
C - Pin, PCB D - Socket, PCB
Flex Feedthrough Flex Feedthrough

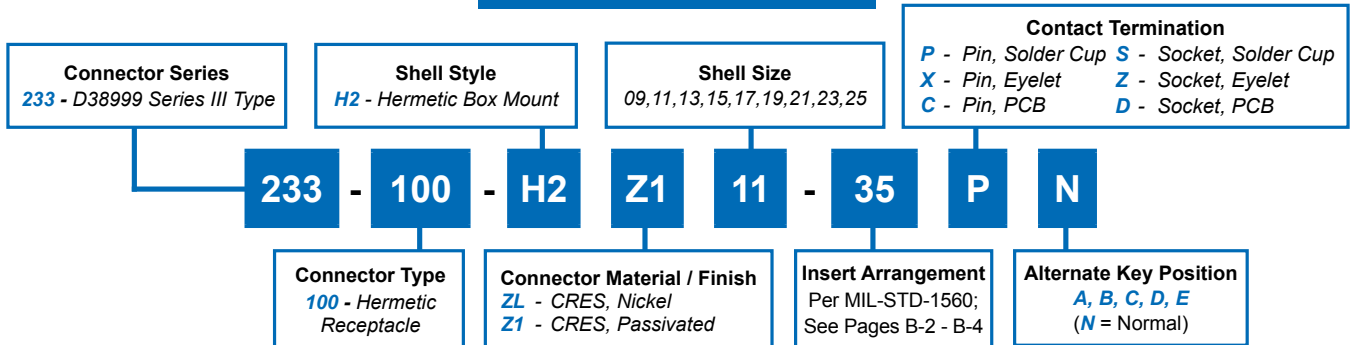


233-100-H2 Box Mount Hermetic Receptacle MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

How To Order: Commercial



B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	A THREAD	B SQ ±.012(0.3)	C BSC	D BSC	E ±.008(0.2)	F ±.008(0.2)
A	9/09	.6250-.1P-.3L-TS-2A	.937(23.8)	.719(18.3)	.594(15.1)	.128(3.3)	.216(5.5)
B	11	.7500-.1P-.3L-TS-2A	1.031(26.2)	.812(20.6)	.719(18.3)	.128(3.3)	.194(4.9)
C	13	.8750-.1P-.3L-TS-2A	1.126(28.6)	.906(23.0)	.812(20.6)	.128(3.3)	.194(4.9)
D	15	1.0000-.1P-.3L-TS-2A	1.220(31.0)	.969(24.6)	.906(23.0)	.128(3.3)	.194(4.9)
E	17	1.1875-.1P-.3L-TS-2A	1.311(33.3)	1.062(27.0)	.969(24.6)	.128(3.3)	.194(4.9)
F	19	1.2500-.1P-.3L-TS-2A	1.437(36.5)	1.156(29.4)	1.062(27.0)	.128(3.3)	.194(4.9)
G	21	1.3750-.1P-.3L-TS-2A	1.563(39.7)	1.250(31.8)	1.156(29.4)	.128(3.3)	.194(4.9)
H	23	1.5000-.1P-.3L-TS-2A	1.689(42.9)	1.375(34.9)	1.250(31.8)	.154(3.9)	.242(6.1)
J	25	1.6250-.1P-.3L-TS-2A	1.811(46.0)	1.500(38.1)	1.375(34.9)	.154(3.9)	.242(6.1)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

TABLE I (CONTINUED): CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	Ø G HOLES ±.005(0.1)	Ø H MIN	Ø J MIN	K ±.005(0.1)
A	9/09	.128(3.3)	.656(16.7)	.516(13.1)	.719(18.3)
B	11	.128(3.3)	.781(19.8)	.625(15.9)	.812(20.6)
C	13	.128(3.3)	.921(23.4)	.750(19.1)	.906(23.0)
D	15	.128(3.3)	1.047(26.6)	.906(23.0)	.968(24.6)
E	17	.128(3.3)	1.218(30.9)	1.016(25.8)	1.062(27.0)
F	19	.128(3.3)	1.296(32.9)	1.142(35.9)	1.156(29.4)
G	21	.128(3.3)	1.421(36.1)	1.266(32.2)	1.250(31.8)
H	23	.154(3.9)	1.546(39.3)	1.375(34.9)	1.375(34.9)
J	25	.154(3.9)	1.672(42.5)	1.484(37.7)	1.500(38.1)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS CONTACT STYLE C AND D



SIZE 12 AND SIZE 16

.050 ± .015
(1.27 ± 0.38)

SIZE 22D AND SIZE 20

Contact Size	Ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

D38999/23

Jam Nut Mount Hermetic Receptacle

MIL-DTL-38999 Series III

How To Order: MS

Basic Specification
D38999

Connector Material / Finish
N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement
Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position
A, B, C, D, E
(N = Normal)

D38999

/23

Y

B

35

P

N

Shell Style

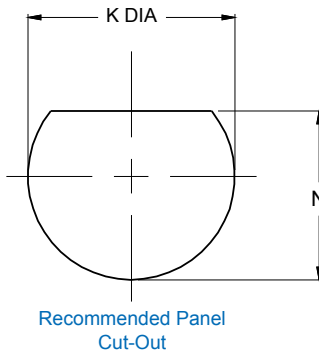
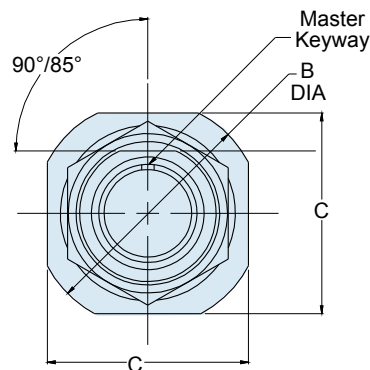
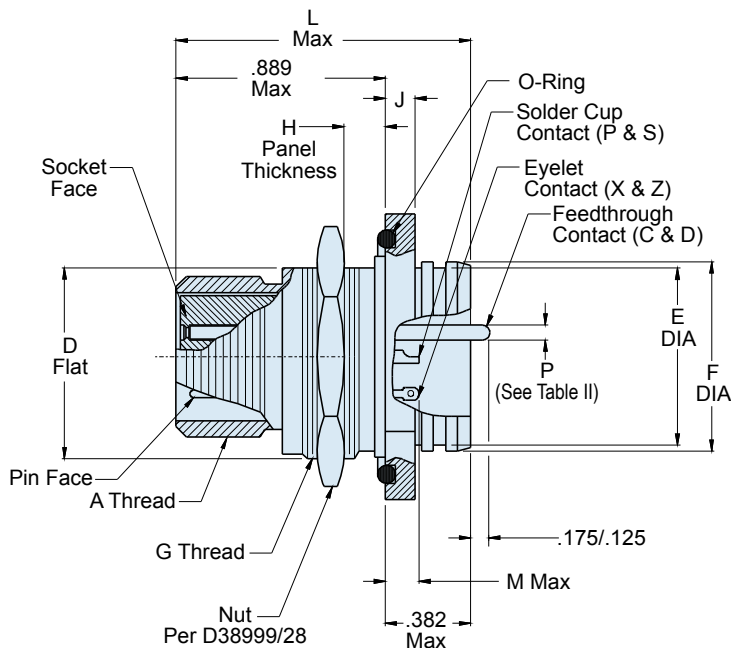
/23 - Jam Nut Mount

Shell Size

A - 9 F - 19
B - 11 G - 21
C - 13 H - 23
D - 15 J - 25
E - 17

Contact Termination

P - Pin, Solder Cup S - Socket, Solder Cup
X - Pin, Eyelet Z - Socket, Eyelet
C - Pin, PCB D - Socket, PCB
Flex Feedthrough Flex Feedthrough



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-685A	1 x 10 ⁻¹⁰ cc's Helium per second
-685B	1 x 10 ⁻⁸ cc's Helium per second
-685C	1 x 10 ⁻⁶ cc's Helium per second

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



SIZE 12 AND SIZE 16



SIZE 22D AND SIZE 20

Contact Size	Ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

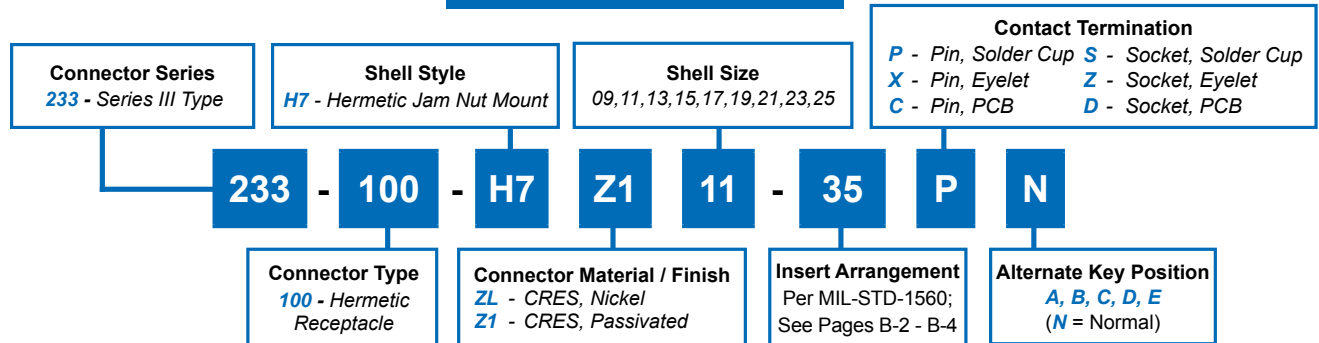
Contact Size	Wire Guage
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

233-100-H7
Jam Nut Mount Hermetic Receptacle
MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

How To Order: Commercial



B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	A THREAD -0.1P-0.03L-TS	B DIA	C A/F ±.015(0.4)	D FLAT ±.005(0.1)	E DIA ±.012(0.3)	F DIA	G THREAD ISO METRIC	H ±.032(0.8)
A	9/09	0.625	1.200(30.5) 1.178(29.9)	1.063(27.0)	.650(16.5)	.603(15.3)	.653(16.6) .642(16.3)	M17 X 1.0-6g	.094(2.4)
B	11	0.750	1.385(35.2) 1.363(34.6)	1.252(31.8)	.750(19.1)	.725(18.4)	.775(19.7) .764(19.4)	M20 X 1.0-6g	.094(2.4)
C	13	0.875	1.511(38.4) 1.489(37.8)	1.374(34.9)	.937(23.8)	.851(21.6)	.905(23.0) .894(22.7)	M25 X 1.0-6g	.094(2.4)
D	15	1.000	1.637(41.6) 1.615(41.0)	1.500(38.1)	1.061(26.9)	.977(24.8)	1.031(26.2) 1.020(25.9)	M28 X 1.0-6g	.094(2.4)
E	17	1.187	1.763(44.8) 1.741(44.2)	1.626(41.3)	1.186(30.1)	1.103(28.0)	1.153(29.3) 1.142(29.0)	M32 X 1.0-6g	.094(2.4)
F	19	1.250	1.948(49.5) 1.926(48.9)	1.811(46.0)	1.311(33.3)	1.229(31.2)	1.278(32.5) 1.268(32.2)	M35 X 1.0-6g	.094(2.4)
G	21	1.375	2.074(52.7) 2.051(52.1)	1.937(49.2)	1.436(36.5)	1.351(34.3)	1.405(35.7) 1.394(35.4)	M38 X 1.0-6g	.094(2.4)
H	23	1.500	2.200(55.9) 2.177(55.3)	2.063(52.4)	1.561(39.6)	1.477(37.5)	1.531(38.9) 1.520(38.6)	M41 X 1.0-6g	.094(2.4)
J	25	1.625	2.322(59.0) 2.300(58.4)	2.189(55.6)	1.686(42.8)	1.603(40.7)	1.653(42.0) 1.642(41.7)	M44 X 1.0-6g	.094(2.4)

TABLE I: (Continued) CONNECTOR DIMENSIONS

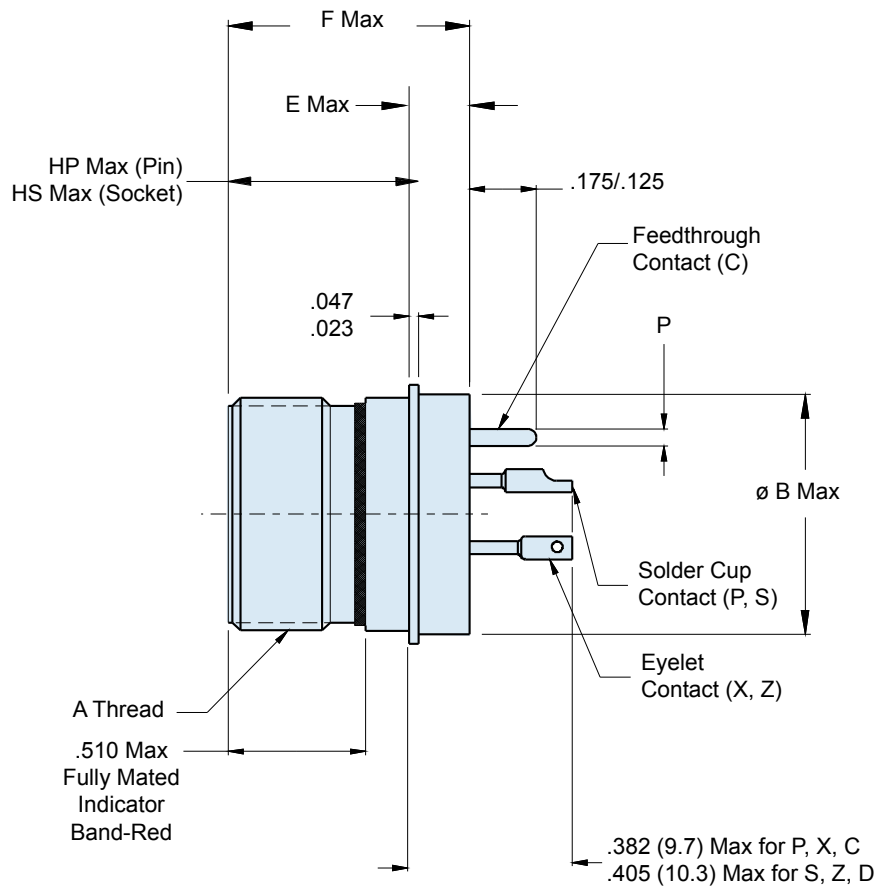
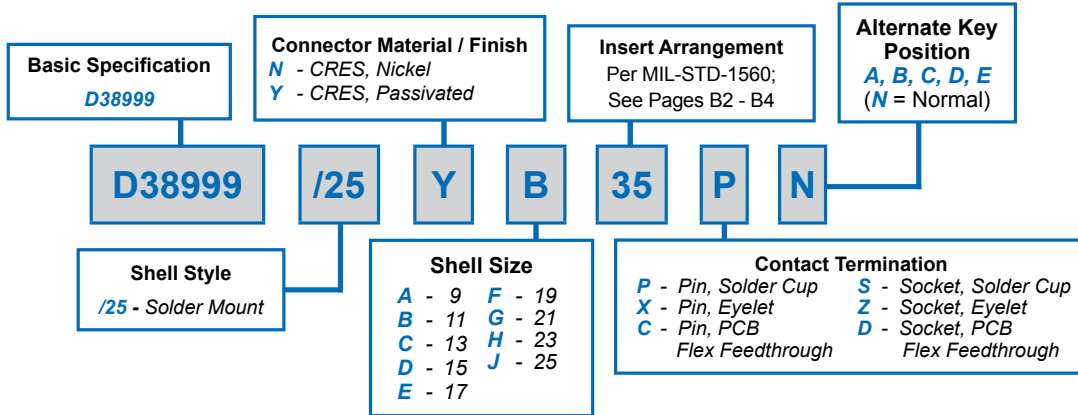
J ±.008(0.2)	K DIA ±.005 (0.1)	L MAX	M MAX		N ±.005 (0.1)
			P&X	S&Z	
.106(2.7)	.703/.693 (17.86/17.60)	1.149(29.2)	.208(5.3)	.232(5.9)	.657/.655 (16.69/16.70)
.106(2.7)	.835/.825 (20.96/20.96)	1.149(29.2)	.208(5.3)	.232(5.9)	.771/.769 (19.58/19.53)
.106(2.7)	1.020/1.010 (25.65/25.65)	1.153(29.3)	.200(5.1)	.224(5.7)	.955/.953 (24.26/24.21)
.106(2.7)	1.145/1.135 (28.83/28.83)	1.153(29.3)	.200(5.1)	.224(5.7)	1.085/1.083 (27.56/27.51)
.106(2.7)	1.270/1.260 (32.01/32.00)	1.153(29.3)	.200(5.1)	.224(5.7)	1.210/1.208 (30.73/30.68)
.138(3.5)	1.395/1.385 (35.43/35.18)	1.185(30.1)	.200(5.1)	.224(5.7)	1.335/1.333 (33.91/33.86)
.138(3.5)	1.520/1.510 (38.60/38.35)	1.185(30.1)	.200(5.1)	.224(5.7)	1.460/1.458 (37.08/37.03)
.138(3.5)	1.645/1.635 (41.78/41.53)	1.185(30.1)	.200(5.1)	.224(5.7)	1.585/1.583 (40.26/40.21)
.138(3.5)	1.770/1.760 (44.96/44.70)	1.185(30.1)	.200(5.1)	.224(5.7)	1.710/1.708 (43.43/43.38)

D38999/25

Solder Mount Hermetic Receptacle

MIL-DTL-38999 Series III

How To Order: MS



233-100-H5 Solder Mount Hermetic Receptacle MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

How To Order: Commercial

Connector Series 233 - Series III Type	Shell Style H5 - Hermetic Solder Mount	Shell Size 09, 11, 13, 15, 17, 19, 21, 23, 25	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
233	- 100	- H5	Z1	11 - 35
Connector Type 100 - Hermetic Receptacle		Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated		Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4
				Alternate Key Position A, B, C, D, E (N = Normal)

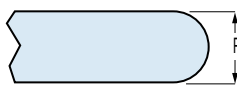
B

TABLE I: CONNECTOR DIMENSIONS

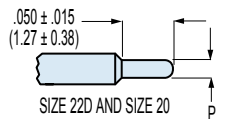
SHELL SIZE CODE	SHELL SIZE	A THREAD	ø B MAX	ø C MAX	ø D ±.005(0.1)	E MAX	F MAX	HP MAX	HS MAX
A	9/09	.6250-.1P-.3L-TS-2A	.673(17.1)	.764(19.4)	.680(17.3)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
B	11	.7500-.1P-.3L-TS-2A	.783(19.9)	.858(21.8)	.789(20.0)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
C	13	.8750-.1P-.3L-TS-2A	.909(23.1)	.980(24.9)	.914(23.2)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
D	15	1.0000-.1P-.3L-TS-2A	1.031(26.2)	1.106(28.1)	1.038(26.4)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
E	17	1.1875-.1P-.3L-TS-2A	1.157(29.4)	1.232(31.3)	1.164(29.6)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
F	19	1.2500-.1P-.3L-TS-2A	1.252(31.8)	1.323(33.6)	1.258(32.0)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
G	21	1.3750-.1P-.3L-TS-2A	1.378(35.0)	1.449(36.8)	1.383(35.1)	.201(5.1)	.937(23.8)	.677(17.2)	.764(19.4)
H	23	1.5000-.1P-.3L-TS-2A	1.504(38.2)	1.575(40.0)	1.508(38.3)	.232(5.9)	.969(24.6)	.677(17.2)	.764(19.4)
J	25	1.6250-.1P-.3L-TS-2A	1.626(41.3)	1.701(43.2)	1.643(41.7)	.232(5.9)	.969(24.6)	.677(17.2)	.764(19.4)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D

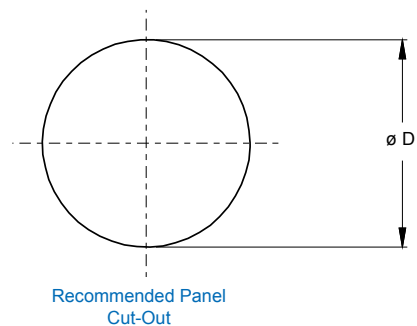
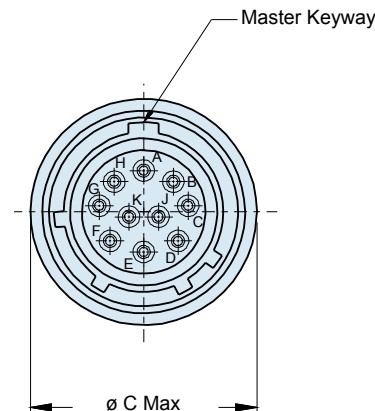


SIZE 12 AND SIZE 16



SIZE 22D AND SIZE 20

Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)



WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

HERMETIC LEAK RATE MOD CODES

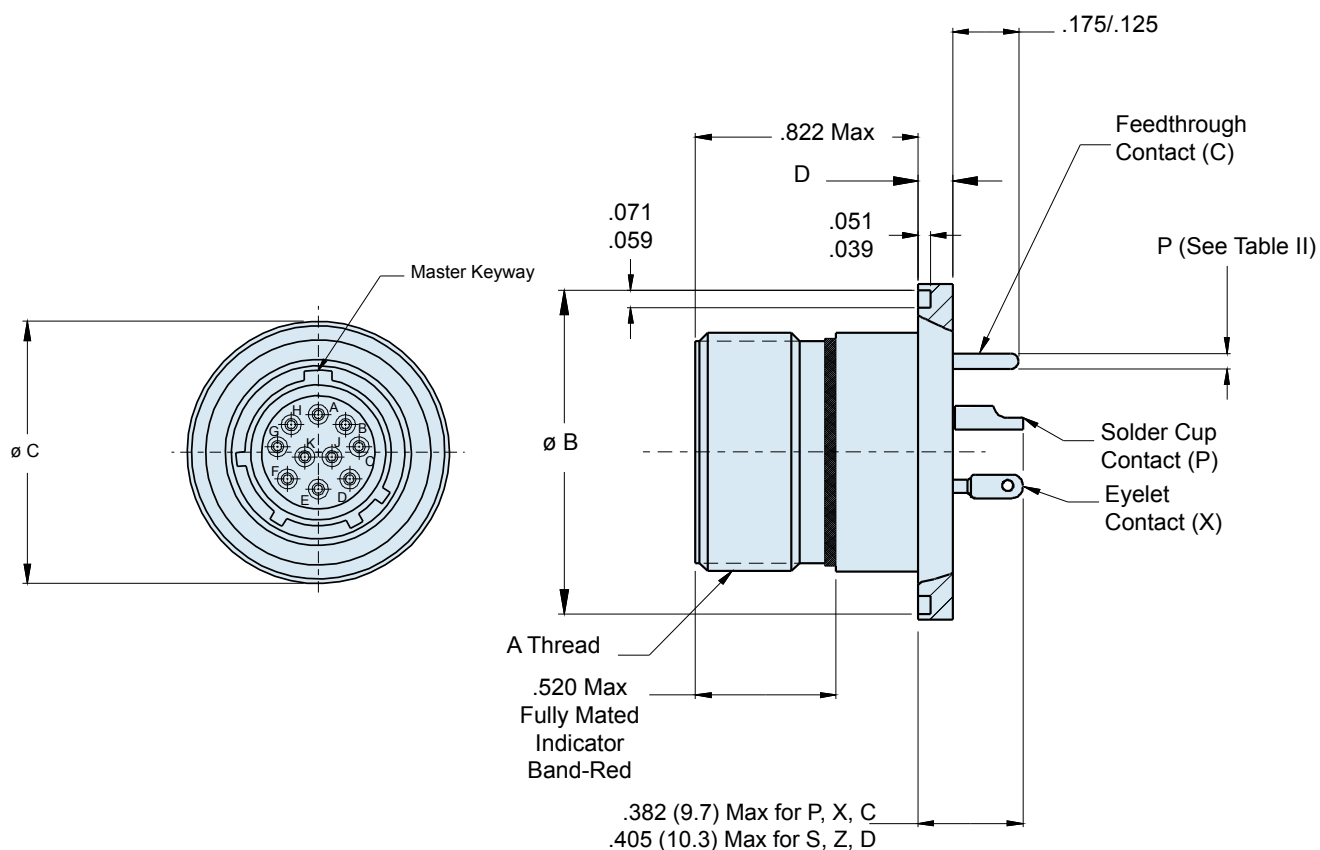
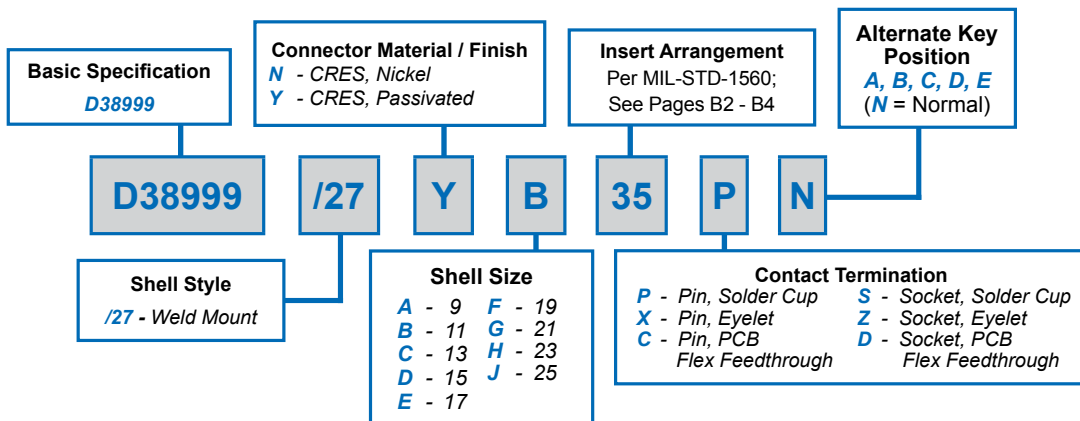
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

D38999/27

Weld Mount Hermetic Receptacle

MIL-DTL-38999 Series III

How To Order: MS



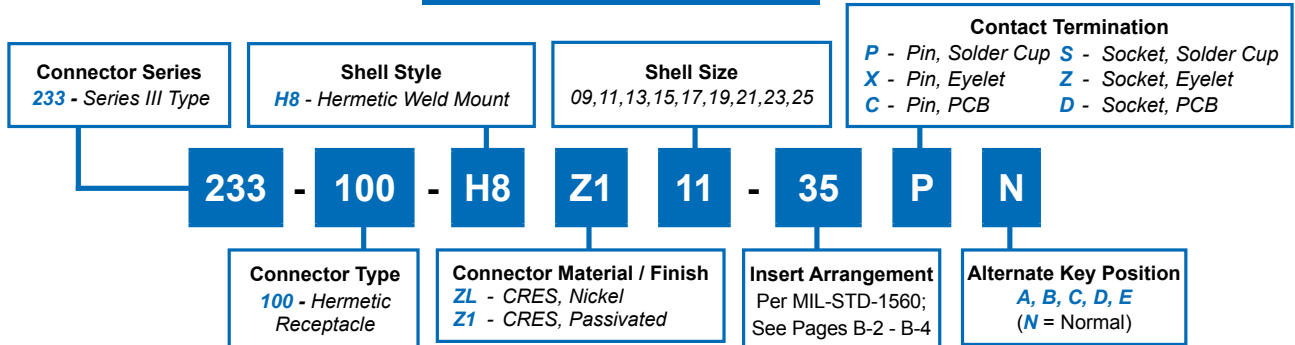
Consult Factory for Recommended Panel Cutout Dimensions

233-100-H8 Weld Mount Hermetic Receptacle MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

How To Order: Commercial



B

HERMETIC LEAK RATE MOD CODES

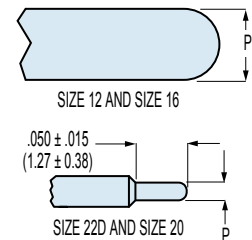
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	A THREAD	Ø B	Ø C	Ø D
A	9/09	.6250-.1P-.3L-TS-2A	.941 (23.9) .929 (23.6)	.984 (25.0) .972 (24.7)	.134 (3.4) .118 (3.0)
B	11	.7500-.1P-.3L-TS-2A	1.063 (27.0) 1.051 (27.0)	1.106 (28.1) 1.094 (27.8)	.134 (3.4) .118 (3.0)
C	13	.8750-.1P-.3L-TS-2A	1.189 (30.2) 1.177 (28.9)	1.232 (31.3) 1.220 (31.0)	.134 (3.4) .118 (3.0)
D	15	1.0000-.1P-.3L-TS-2A	1.315 (33.4) 1.303 (33.1)	1.358 (34.5) 1.346 (34.2)	.134 (3.4) .118 (3.0)
E	17	1.1875-.1P-.3L-TS-2A	1.402 (35.6) 1.390 (35.3)	1.445 (36.7) 1.433 (36.4)	.134 (3.4) .118 (3.0)
F	19	1.2500-.1P-.3L-TS-2A	1.547 (39.3) 1.535 (39.0)	1.591 (40.4) 1.579 (40.1)	.134 (3.4) .118 (3.0)
G	21	1.3750-.1P-.3L-TS-2A	1.689 (42.9) 1.677 (42.6)	1.732 (44.0) 1.720 (43.7)	.134 (3.4) .118 (3.0)
H	23	1.5000-.1P-.3L-TS-2A	1.854 (47.1) 1.842 (46.8)	1.898 (48.2) 1.886 (47.4)	.165 (4.2) .149 (3.8)
J	25	1.6250-.1P-.3L-TS-2A	1.941 (49.3) 1.929 (49.0)	1.984 (50.4) 1.972 (50.1)	.165 (4.2) .149 (3.8)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS CONTACT STYLE C AND D



Contact Size	Ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

233-103-H7

Jam Nut Mount Hermetic Bulkhead Feed-Thru

MIL-DTL-38999 Series III Type

Connector Series

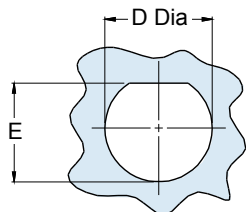
233 - D38999 Series III Type

Shell Style

H7 - Jam Nut Mount

Shell Size09
11
13
15
17
19
21
23
25**Insert Arrangement**Per MIL-DTL-38999 Series III
MIL-STD-1560**Alternate Key Position**A, B, C, D, E
(N = Normal)**233 - 103 - H7 Z1 11 - 35 P N - 01****Connector Type**

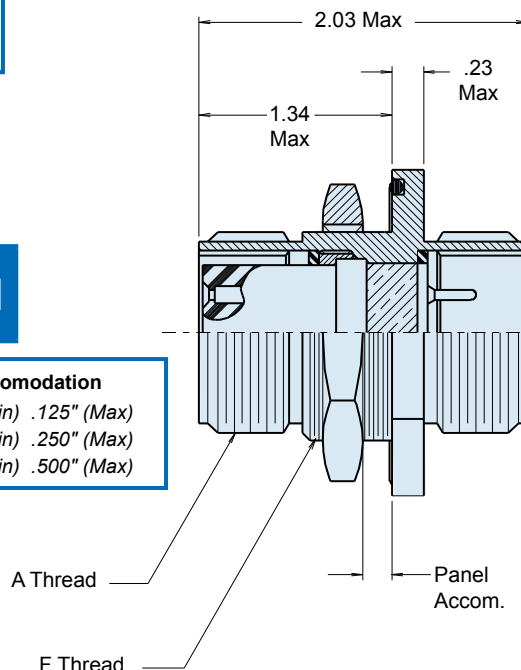
103 - Hermetic Bulkhead Feed-Thru

Connector Material and FinishZ1 - CRES, Passivated
ZL - CRES, Nickel Finish**Panel Accommodation**01 - .0625" (Min) .125" (Max)
02 - .0625" (Min) .250" (Max)
03 - .0625" (Min) .500" (Max)**Contact Termination**P - Pin on Jam Nut Side
S - Socket on Jam Nut Side

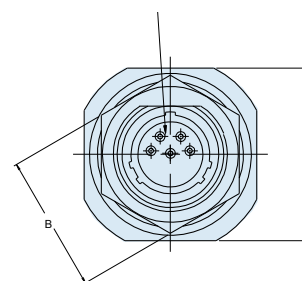
Recommended Panel Cut-Out

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

**TABLE I: CONNECTOR DIMENSIONS**

SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B DIA	C	D DIA	E DIM	F THREAD METRIC
09	.6250	1.189 (30.20)	1.063 (27.00)	.693 (17.60)	.657 (16.70)	M17 x 1.0-6g
11	.7500	1.375 (34.93)	1.252 (31.80)	.825 (20.96)	.771 (19.59)	M20 x 1.0-6g
13	.8750	1.500 (38.10)	1.374 (34.90)	1.010 (25.65)	.955 (24.26)	M25 x 1.0-6g
15	1.0000	1.626 (41.30)	1.500 (38.10)	1.135 (28.83)	1.085 (27.56)	M28 x 1.0-6g
17	1.1875	1.752 (44.50)	1.626 (41.30)	1.260 (32.01)	1.210 (30.73)	M32 x 1.0-6g
19	1.2500	1.937 (49.20)	1.811 (46.00)	1.385 (35.18)	1.335 (33.91)	M35 x 1.0-6g
21	1.3750	2.063 (52.40)	1.937 (49.20)	1.510 (38.35)	1.460 (37.08)	M38 x 1.0-6g
23	1.5000	2.189 (55.60)	2.063 (52.40)	1.635 (41.53)	1.585 (40.26)	M41 x 1.0-6g
25	1.6250	2.311 (58.70)	2.189 (55.60)	1.760 (44.70)	1.710 (43.43)	M44 x 1.0-6g

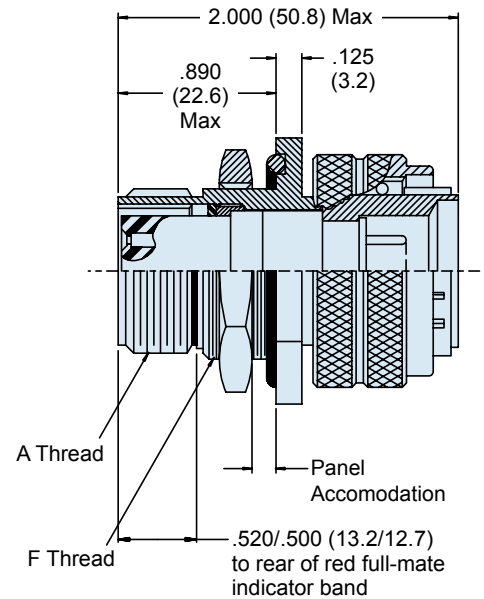
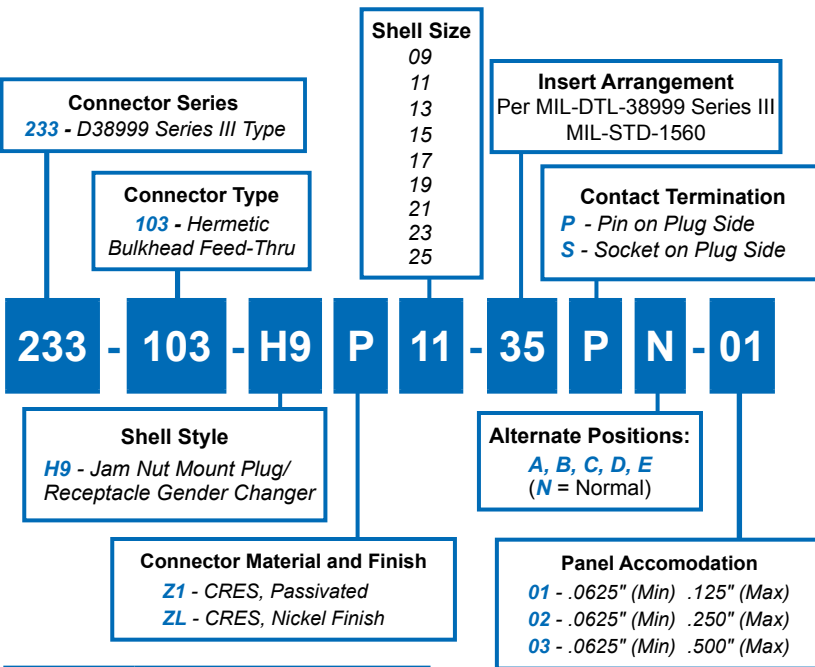
Insert Arrangement per
MIL-DTL-38999 Series III
MIL-STD-1560**APPLICATION NOTES**

- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Material/finish:
Shell, nut - CRES/passivated, carbon steel/fused tin or CRES/nickel per QQ-N-290.
- Contacts - Gold Plated. Pin: alloy 52; Skt.: copper alloy
Insulator - fused vitreous glass/N.A.
Seals - fluorosilicone rubber/N.A.
Metric dimensions (mm) are indicated in parentheses.

233-103-H9 Jam Nut Mount Hermetic Plug/Receptacle Bulkhead Feed-Thru for MIL-DTL-38999 Series III Type

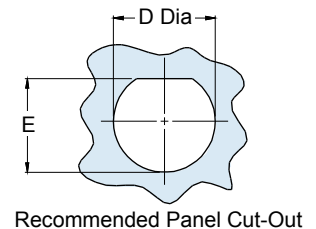
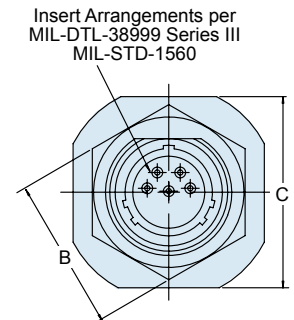


MIL-DTL
38999 Type



HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

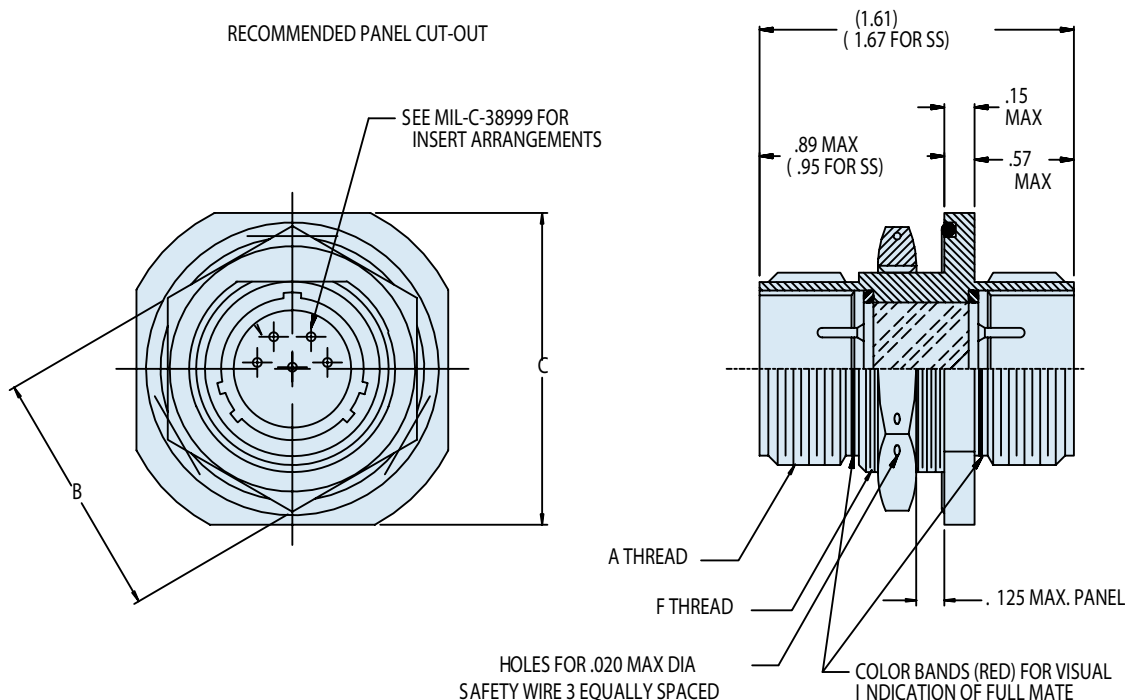
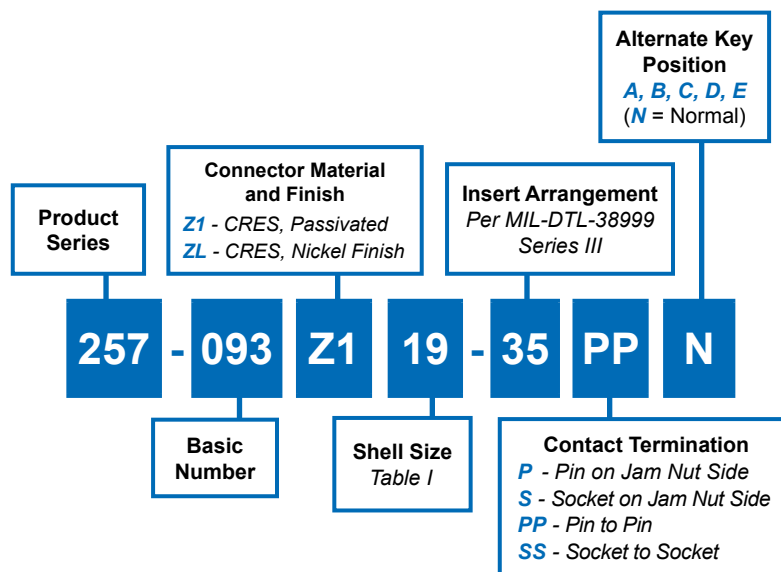
TABLE I: CONNECTOR DIMENSIONS						
SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B DIM	C DIM MAX	D DIA	E DIA	F THREAD x1-6g-0.100R
9	.6250	.945(24.0)	1.090(27.7)	.693 (17.60)	.657 (16.70)	M17
11	.7500	1.063(27.0)	1.280(32.5)	.825 (20.96)	.771 (19.59)	M20
13	.8750	1.260(32.0)	1.400(35.6)	1.010 (25.65)	.955 (24.26)	M25
15	1.0000	1.417(36.0)	1.530(38.9)	1.135 (28.83)	1.085 (27.56)	M28
17	1.1875	1.457(37.0)	1.660(42.2)	1.260 (32.01)	1.210 (30.73)	M32
19	1.2500	1.614(41.0)	1.840(46.7)	1.385 (35.18)	1.335 (33.91)	M35
21	1.3750	1.811(46.0)	1.970(50.5)	1.510 (38.35)	1.460 (37.08)	M38
23	1.5000	1.968(50.0)	2.090(53.1)	1.635 (41.53)	1.585 (40.26)	M41
25	1.6250	2.017(51.2)	2.210(56.1)	1.760 (44.70)	1.710 (43.43)	M44



APPLICATION NOTES

- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Material/finish:
Shell, nut - CRES/passivated, carbon steel/fused tin or CRES/nickel per QQ-N-290.
- Contacts - Gold Plated. Pin: alloy 52; Skt.: copper alloy
Insulator - fused vitreous glass/N.A.
Seals - fluorosilicone rubber/N.A.

B



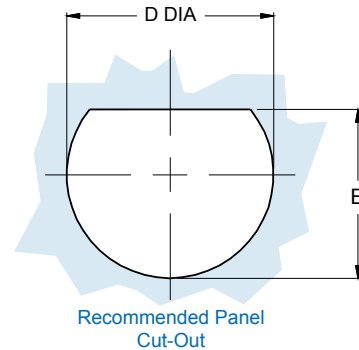
257-093
Jam Nut Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



B

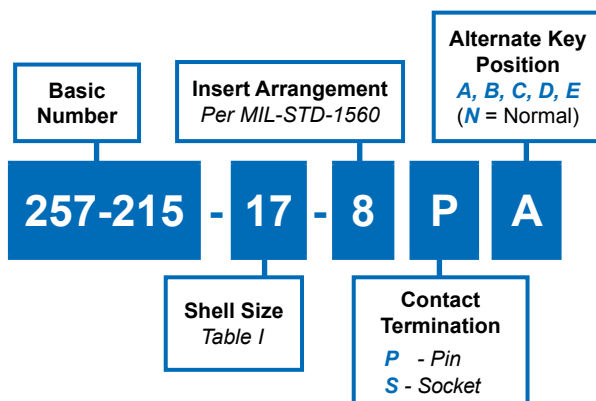
TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B DIM	C DIM MAX	D DIA	E DIM	F THREAD CLASS 2A
9	0.625	.875(22.2)	1.09(27.7)	.693 (17.60)	.657 (16.70)	11/16-24 UNEF
11	0.750	1.000(25.4)	1.28(32.5)	.825 (20.96)	.771 (19.59)	13/16-20 UNEF
13	0.875	1.250(31.8)	1.40(35.6)	1.010 (25.65)	.955 (24.26)	1-20 UNEF
15	1.000	1.375(34.9)	1.53(38.9)	1.135 (28.83)	1.085 (27.56)	1 1/8-18 UNEF
17	1.187	1.500(38.1)	1.66(42.2)	1.260 (32.01)	1.210 (30.73)	1 1/4-18 UNEF
19	1.250	1.625(41.3)	1.84(46.7)	1.385 (35.18)	1.335 (33.91)	1 3/8-18 UNEF
21	1.375	1.750(44.5)	1.97(50.5)	1.510 (38.35)	1.460 (37.08)	1 1/2-18 UNEF
23	1.500	1.875(47.6)	2.09(53.1)	1.635 (41.53)	1.585 (40.26)	1 5/8-18 UNEF
25	1.625	2.000(50.8)	2.21(56.1)	1.760 (44.70)	1.710 (43.43)	1 3/4-18 UNEF

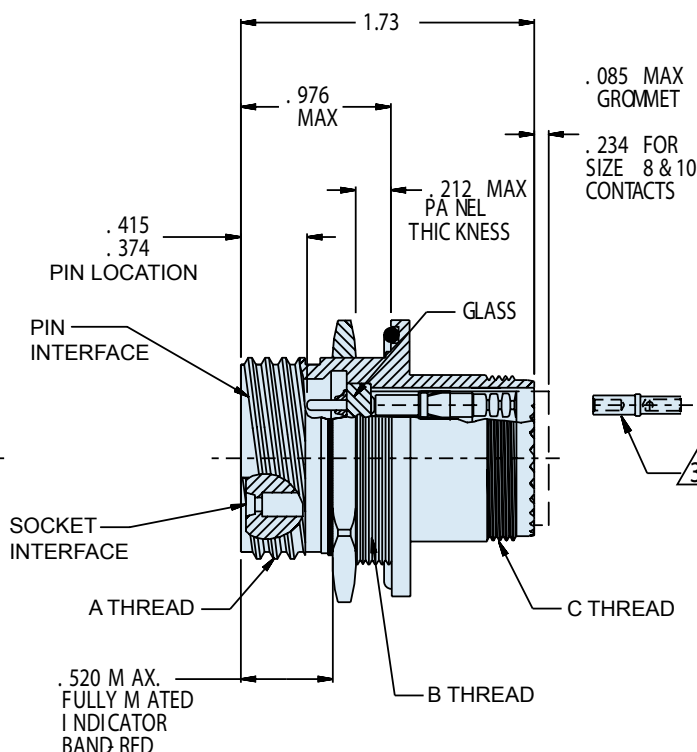
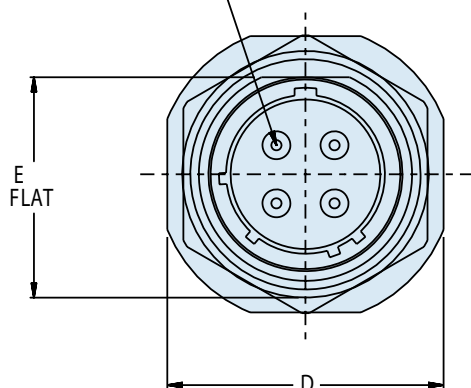
APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
- For pin/pin and socket/socket, symmetrical layouts only, consult factory for available insert arrangements.
- Electrical safety limits must be established by user, peak voltage, switching surge, transient, etc. should be used to determine the safety of the application.
- Material/Finish:
 Shell, lock ring, jam nut—stainless steel/passivate
 Contacts—alloy 52/gold plate
 Sockets—copper alloy/gold plate
 Hermetic Insulator—full glass/N.A.
 Socket Insulator—rigid dielectric/N.A.
 Seals—fluorosilicone/ N.A.
 Hermeticity -1x10⁻⁷ cc/second
- Metric dimensions (mm) are indicated in parentheses.

B



INSERT ARRANGEMENT
PER MIL-STD-1560



257-215
Jam Nut Mount Hermetic Receptacles
with Crimp Removable Socket Contacts
MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

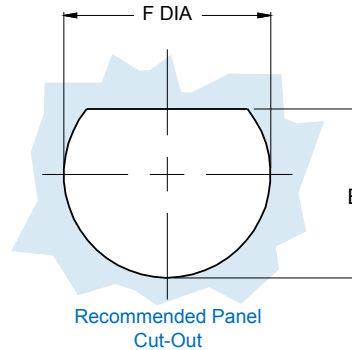
B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	CODE	A THREAD 0.1 P-0.3L-TS-2A	B THREAD	C THREAD	D ± .016	E +.004 (0.1) -.006 (0.15)	F DIA ±.005 (0.1)
9	A	0.625	M17X1-6g 0.100R	M12X1-6g 0.100R	1.062	.657 (16.70)	.693 (17.60)
11	B	0.750	M20X1-6g 0.100R	M15X1-6g 0.100R	1.252	.771 (19.59)	.825 (20.96)
13	C	0.875	M25X1-6g 0.100R	M18X1-6g 0.100R	1.374	.955 (24.26)	1.010 (25.65)
15	D	1.000	M28X1-6g 0.100R	M22X1-6g 0.100R	1.500	1.085 (27.56)	1.135 (28.83)
17	E	1.187	M32X1-6g 0.100R	M25X1-6g 0.100R	1.626	1.210 (30.73)	1.260 (32.01)
19	F	1.250	M35X1-6g 0.100R	M28X1-6g 0.100R	1.811	1.335 (33.91)	1.385 (35.18)
21	G	1.375	M38X1-6g 0.100R	M31X1-6g 0.100R	1.937	1.460 (37.08)	1.510 (38.35)
23	H	1.500	M41X1-6g 0.100R	M34X1-6g 0.100R	2.063	1.585 (40.26)	1.635 (41.53)
25	J	1.625	M44X1-6g 0.100R	M37X1-6g 0.100R	2.190	1.710 (43.43)	1.760 (44.70)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



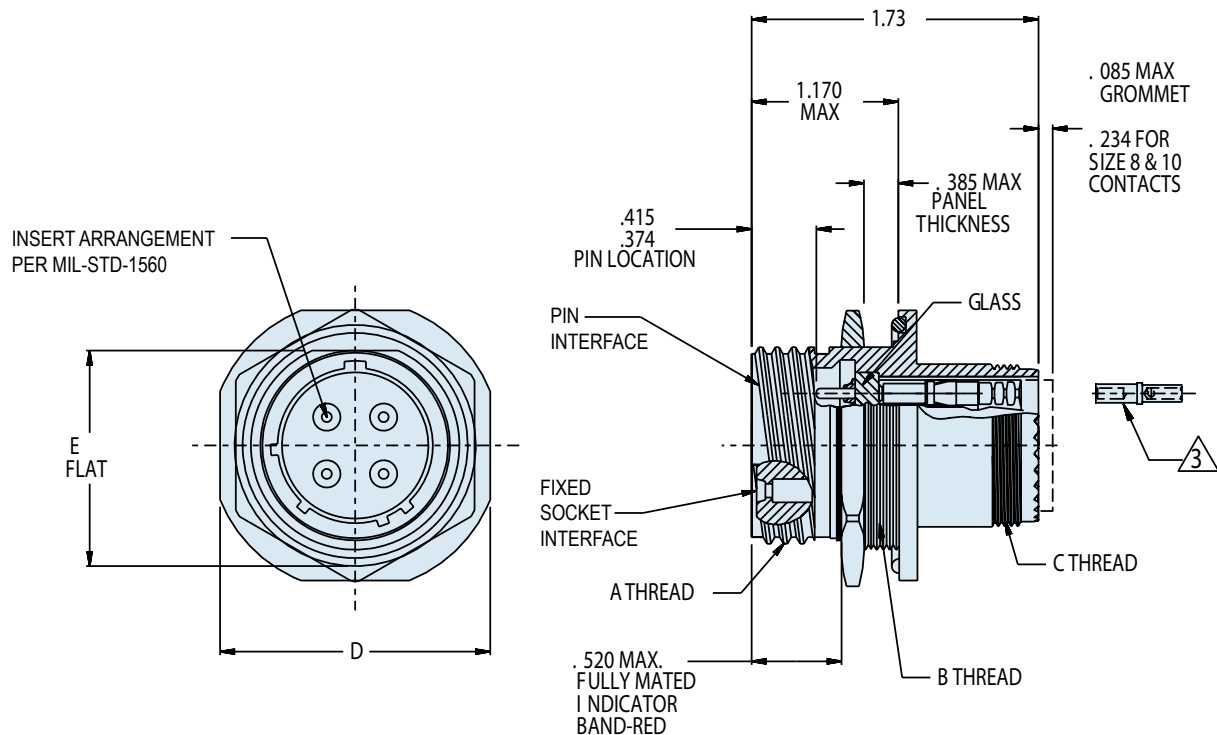
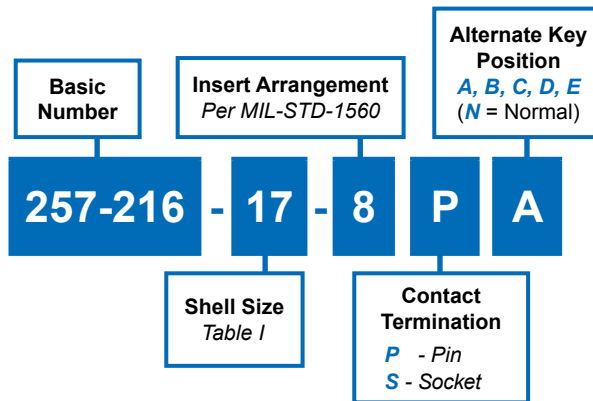
APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
- Material/Finish:
 Shell, lock ring, jam nut—stainless steel/passivate
 Contacts—alloy 52/gold plate
 Sockets—copper alloy/gold plate
 Hermetic Insulator—full glass/N.A.
 Socket Insulator—rigid dielectric/N.A.
 Seals—fluorosilicone/ N.A.
 Hermeticity—1x10⁻⁷ cc/second
- Crimp removable socket contacts to conform to MIL-C-39029/57-358, size 16, MIL-C-39029/57-357 size 20 and MIL-C-39029/57-354 size 22D (supplied loose)
- Metric dimensions (mm) are indicated in parentheses.



257-216 Jam Nut Mount Hermetic Receptacles with Crimp Removable Socket Contacts MIL-DTL-38999 Series III Type

B



257-216
Jam Nut Mount Hermetic Receptacles
with Crimp Removable Socket Contacts
MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

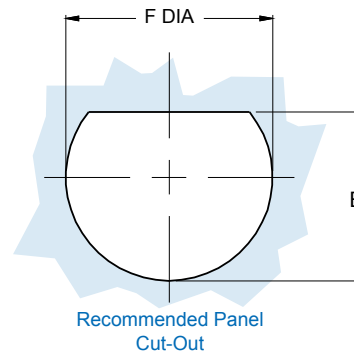
B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	CODE	A THREAD 0.1 P-0.3L-TS-2A	B THREAD	C THREAD	D ± .016	E +.004 (0.1) -.006 (0.15)	F DIA ± .005 (0.1)
9	A	0.625	M17X1-6g 0.100R	M12X1-6g 0.100R	1.062	.657 (16.70)	.693 (17.60)
11	B	0.750	M20X1-6g 0.100R	M15X1-6g 0.100R	1.252	.771 (19.59)	.825 (20.96)
13	C	0.875	M25X1-6g 0.100R	M18X1-6g 0.100R	1.374	.955 (24.26)	1.010 (25.65)
15	D	1.000	M28X1-6g 0.100R	M22X1-6g 0.100R	1.500	1.085 (27.56)	1.135 (28.83)
17	E	1.187	M32X1-6g 0.100R	M25X1-6g 0.100R	1.626	1.210 (30.73)	1.260 (32.01)
19	F	1.250	M35X1-6g 0.100R	M28X1-6g 0.100R	1.811	1.335 (33.91)	1.385 (35.18)
21	G	1.375	M38X1-6g 0.100R	M31X1-6g 0.100R	1.937	1.460 (37.08)	1.510 (38.35)
23	H	1.500	M41X1-6g 0.100R	M34X1-6g 0.100R	2.063	1.585 (40.26)	1.635 (41.53)
25	J	1.625	M44X1-6g 0.100R	M37X1-6g 0.100R	2.190	1.710 (43.43)	1.760 (44.70)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

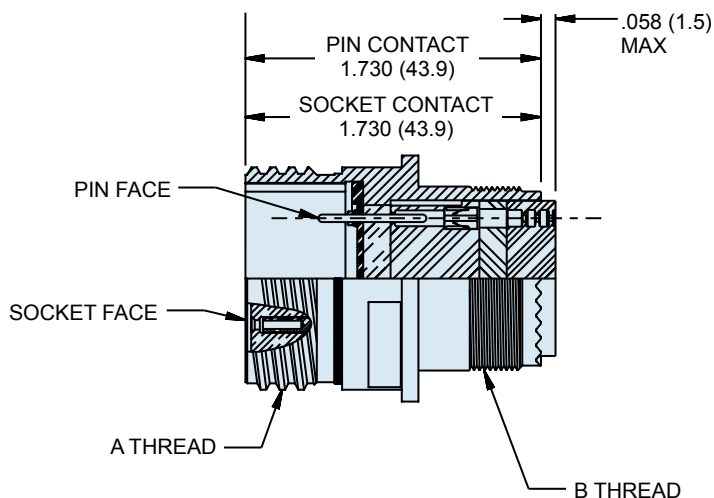
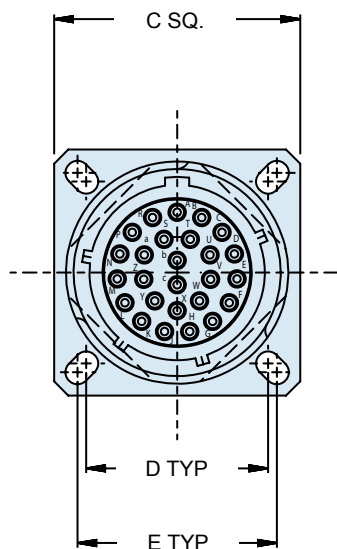
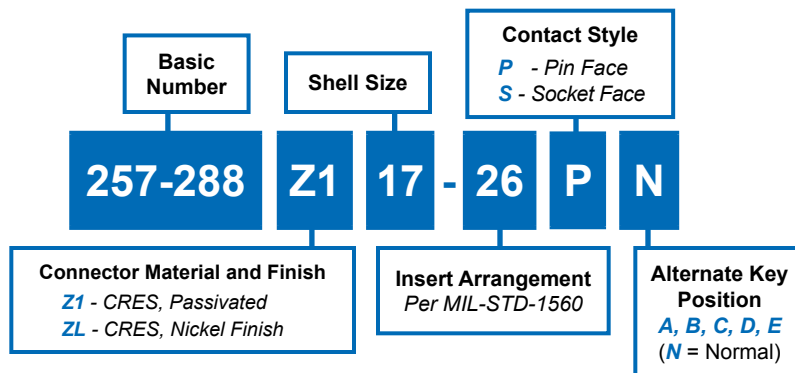


APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
 Material/Finish:
 Shell, lock ring, jam nut—CRES/passivated
 Contacts—alloy 52/gold plate
 Sockets—copper alloy/gold plate
 Hermetic Insulator—fused vitreous glass/N.A.
 Socket Insulator—high grade rigid dielectric/N.A.
 Seals—fluorosilicone/ N.A.
 Hermeticity—1x10⁻⁷ cc/second
- Crimp removable socket contacts to conform to MIL-C-39029/57-358, size 16, MIL-C-39029/57-357 size 20 and MIL-C-39029/57-354 size 22D (supplied loose)
- Metric dimensions (mm) are indicated in parentheses.

257-288
Box Mount Hermetic Receptacle
with Crimp Removable Socket Contacts
MIL-DTL-38999 Series III Type

B



257-288
Box Mount Hermetic Receptacle
with Crimp Removable Socket Contacts
MIL-DTL-38999 Series III Type



MIL-DTL
38999 Type

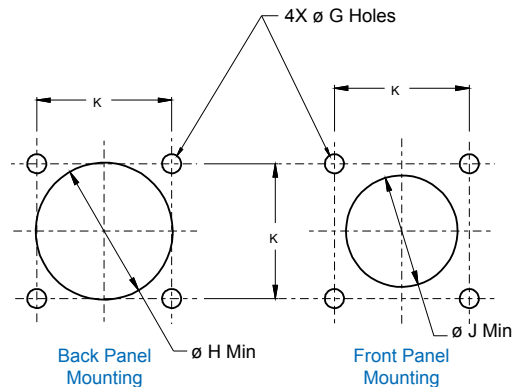
B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	CODE	A THREAD 0.1 P-0.3L-TS-2A	B THREAD	C FLANGE	D BASIC	E BASIC	K DIA ±.005(0.1)	N ±.005(0.1)
9	A	0.625	M12X1-6g 0.100R	.949/.925	.594	.719	.705(17.9)	.665(16.9)
11	B	0.750	M15X1-6g 0.100R	1.043/1.020	.719	.812	.827(21.0)	.764(19.4)
13	C	0.875	M18X1-6g 0.100R	1.138/1.114	.812	.906	1.012(25.7)	.950(24.1)
15	D	1.000	M22X1-6g 0.100R	1.232/1.209	.906	.969	1.139(28.9)	1.079(27.4)
17	E	1.187	M25X1-6g 0.100R	1.323/1.299	.969	1.062	1.266(32.2)	1.203(30.6)
19	F	1.250	M28X1-6g 0.100R	1.449/1.425	1.062	1.156	1.389(35.3)	1.328(33.7)
21	G	1.375	M31X1-6g 0.100R	1.575/1.551	1.156	1.250	1.512(38.4)	1.454(36.9)
23	H	1.500	M34X1-6g 0.100R	1.701/1.677	1.250	1.375	1.639(41.6)	1.575(40.0)
25	J	1.625	M37X1-6g 0.100R	1.823/1.799	1.375	1.500	1.764(44.8)	1.704(43.3)

HERMETIC LEAK RATE MOD CODES

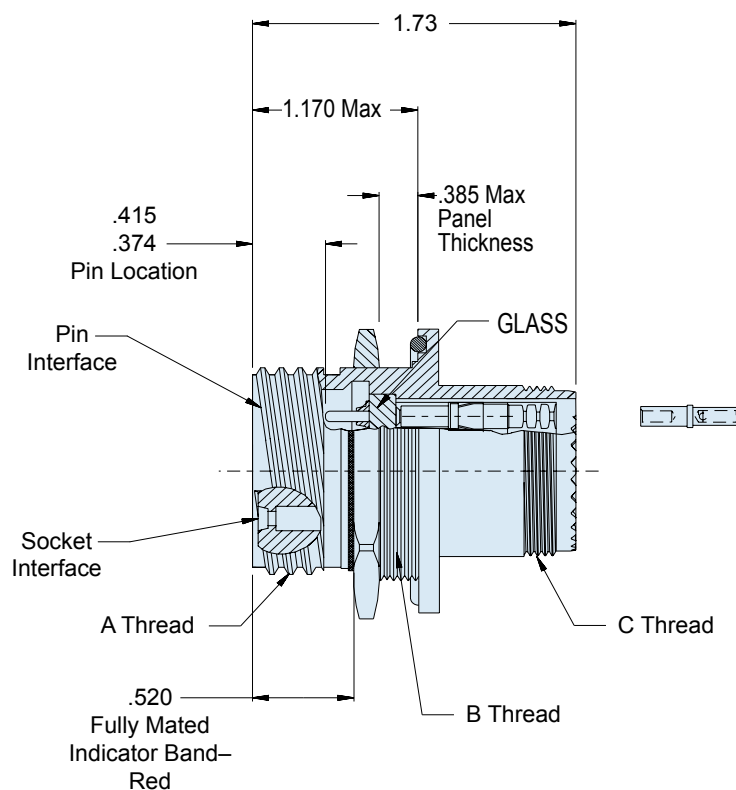
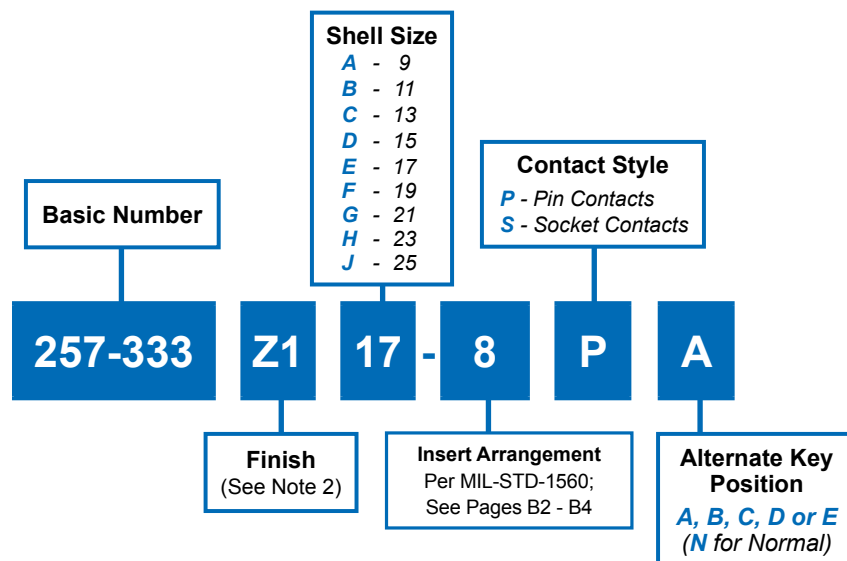
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



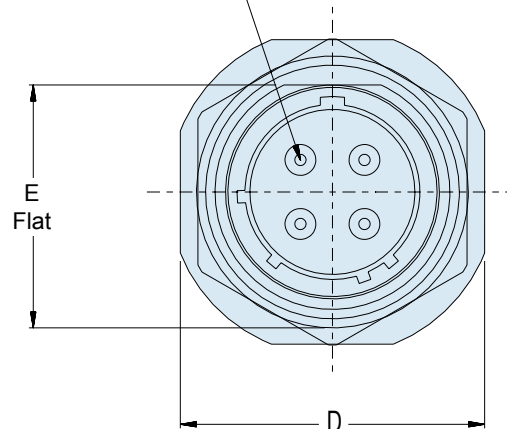
APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
- Material/Finish:
 Shell, lock ring, jam nut—CRES/passivated
 Contacts—alloy 52/gold plate
 Sockets—copper alloy/gold plate
 Hermetic Insulator—fused vitreous glass/N.A.
 Socket Insulator—high grade rigid dielectric/N.A.
 Seals—fluorosilicone/ N.A.
- Crimp removable socket contacts to conform to MIL-C-39029/57-358, size 16, MIL-C-39029/57-357 size 20 and MIL-C-39029/57-354 size 22D (supplied loose)
- Metric dimensions (mm) are indicated in parentheses.

B



Insert Arrangement
Per MIL-STD-1560



257-333
Hermetic Jam Nut Receptacle
with Crimp Removable Socket Contacts
MIL-DTL-38999 Series III Type

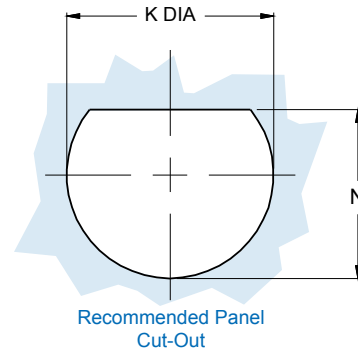


MIL-DTL
38999 Type

B

**TABLE I (CONTINUED):
CUT-OUT DIMENSIONS**

SHELL SIZE	K DIA ± .005 (0.1)	N ± .005 (0.1)
A	.693 (17.60)	.657 (16.70)
B	.825 (20.96)	.771 (19.59)
C	1.010 (25.65)	.955 (24.26)
D	1.135 (28.83)	1.085 (27.56)
E	1.260 (32.01)	1.210 (30.73)
F	1.385 (35.18)	1.335 (33.91)
G	1.510 (38.35)	1.460 (37.08)
H	1.635 (41.53)	1.585 (40.26)
J	1.760 (44.70)	1.710 (43.43)



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

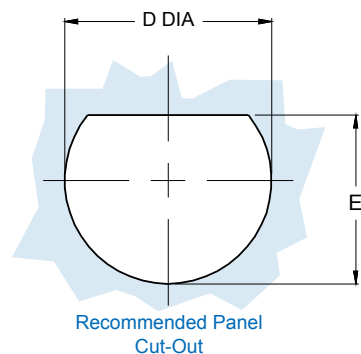
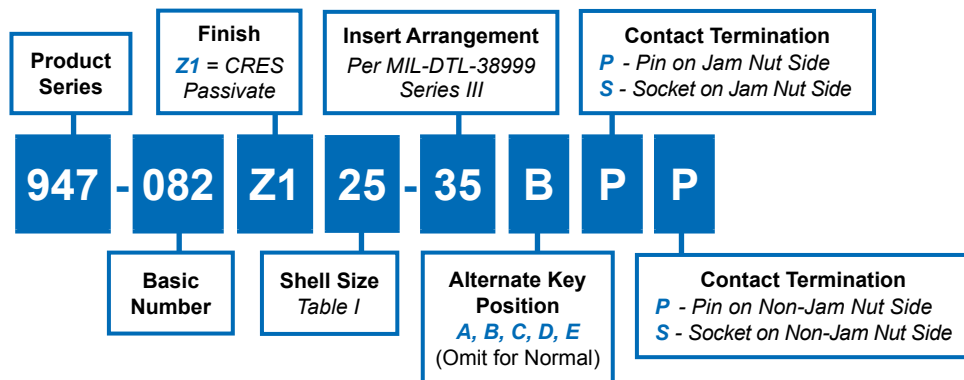
TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	SHELL SIZE CODE	A THREAD	B THREAD	C THREAD	D +/- .016 (MM)	E +/- .004-.006 (MM)
9	A	.6250-.1P.3L-TS-2A	M17x1-6g 0.100R	M12x1-6g 0.100R	1.062 (2.70)	0.651 (1.65)
11	B	.7500-.1P.3L-TS-2A	M20x1-6g 0.100R	M15x1-6g 0.100R	1.252 (3.18)	0.751 (1.91)
13	C	.8750-.1P.3L-TS-2A	M25x1-6g 0.100R	M18x1-6g 0.100R	1.374 (3.49)	0.938 (2.38)
15	D	1.000-.1P.3L-TS-2A	M28x1-6g 0.100R	M22x1-6g 0.100R	1.500 (3.81)	1.062 (2.70)
17	E	1.1875-.1P.3L-TS-2A	M32x1-6g 0.100R	M25x1-6g 0.100R	1.626 (4.13)	1.187 (3.01)
19	F	1.250-.1P.3L-TS-2A	M35x1-6g 0.100R	M28x1-6g 0.100R	1.811 (4.60)	1.312 (3.33)
21	G	1.375-.1P.3L-TS-2A	M38x1-6g 0.100R	M31x1-6g 0.100R	1.937 (4.92)	1.437 (3.65)
23	H	1.500-.1P.3L-TS-2A	M41x1-6g 0.100R	M34x1-6g 0.100R	2.063 (5.24)	1.562 (3.97)
25	J	1.625-.1P.3L-TS-2A	M44x1-6g 0.100R	M37x1-6g 0.100R	2.189 (5.56)	1.687 (4.28)

APPLICATION NOTES

- Assembly to be identified with Glenair's name and part number and date code, space permitting.
- Material/finishes:
 Shell Receptacle, Jam Nut – CRES Passivated (Z1), CRES/NI (Z1)
 Pin Contact – alloy 52 / gold plated
 Socket Contact – copper alloy / gold plated
 Insulator – fused vitreous glass / N.A.
 Insulators – high grade rigid dielectric
 Seals—fluorosilicone / N.A.
 Hermeticity— 1x10⁻⁷ cc/second
- Crimp removable socket contacts to conform to:
 MIL-C-39029/57-358 – size 16;
 MIL-C-39029/57-357 – size 20;
 and MIL-C-39029/57-354 – size 22D (supplied loose)
 Supply 1 extra contact for each size used.

B



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

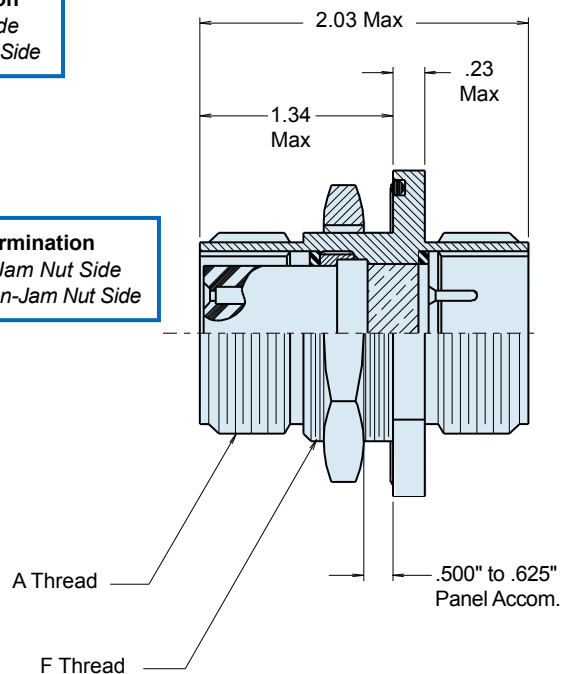
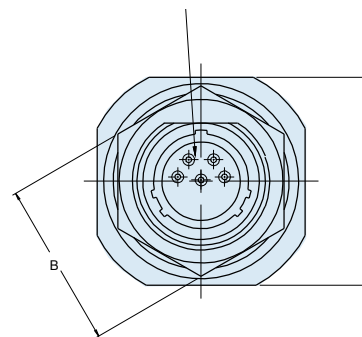


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B DIM	C DIM MAX	D DIA	E DIM	F THREAD 1-6g 0.100R
09	.6250	.875(22.2)	1.090(27.7)	.693 (17.60)	.657 (16.70)	M17
11	.7500	1.000(25.4)	1.280(32.5)	.825 (20.96)	.771 (19.59)	M20
13	.8750	1.250(31.8)	1.400(35.6)	1.010 (25.80)	.955 (24.26)	M25
15	1.0000	1.375(34.9)	1.530(38.9)	1.135 (25.65)	1.085 (27.56)	M28
17	1.1875	1.500(38.1)	1.660(42.2)	1.260 (28.83)	1.210 (30.73)	M32
19	1.2500	1.625(41.3)	1.840(46.7)	1.385 (32.01)	1.335 (33.91)	M35
21	1.3750	1.750(44.5)	1.970(50.5)	1.510 (35.18)	1.460 (37.08)	M38
23	1.5000	1.875(47.6)	2.090(53.1)	1.635 (41.53)	1.585 (40.26)	M41
25	1.6250	2.000(50.8)	2.210(56.1)	1.760 (44.70)	1.710 (43.43)	M44

 Insert Arrangement per
 MIL-DTL-38999 Series III
 MIL-STD-1560


APPLICATION NOTES

- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Material/finish:
Shell, nut – CRES/passivated, carbon steel/fused tin or CRES/nickel per QQ-N-290.
- Contacts – Gold Plated. Pin: alloy 52; Skt.: copper alloy
Insulator – fused vitreous glass/N.A.
Seals – fluorosilicone rubber/N.A.

Metric dimensions (mm) are indicated in parentheses.

947-115
Jam Nut Mount Hermetic Bulkhead Feed-Thru
.250/.500^{inch} Panel
MIL-DTL-38999 Series III Type



**MIL-DTL
38999 Type**

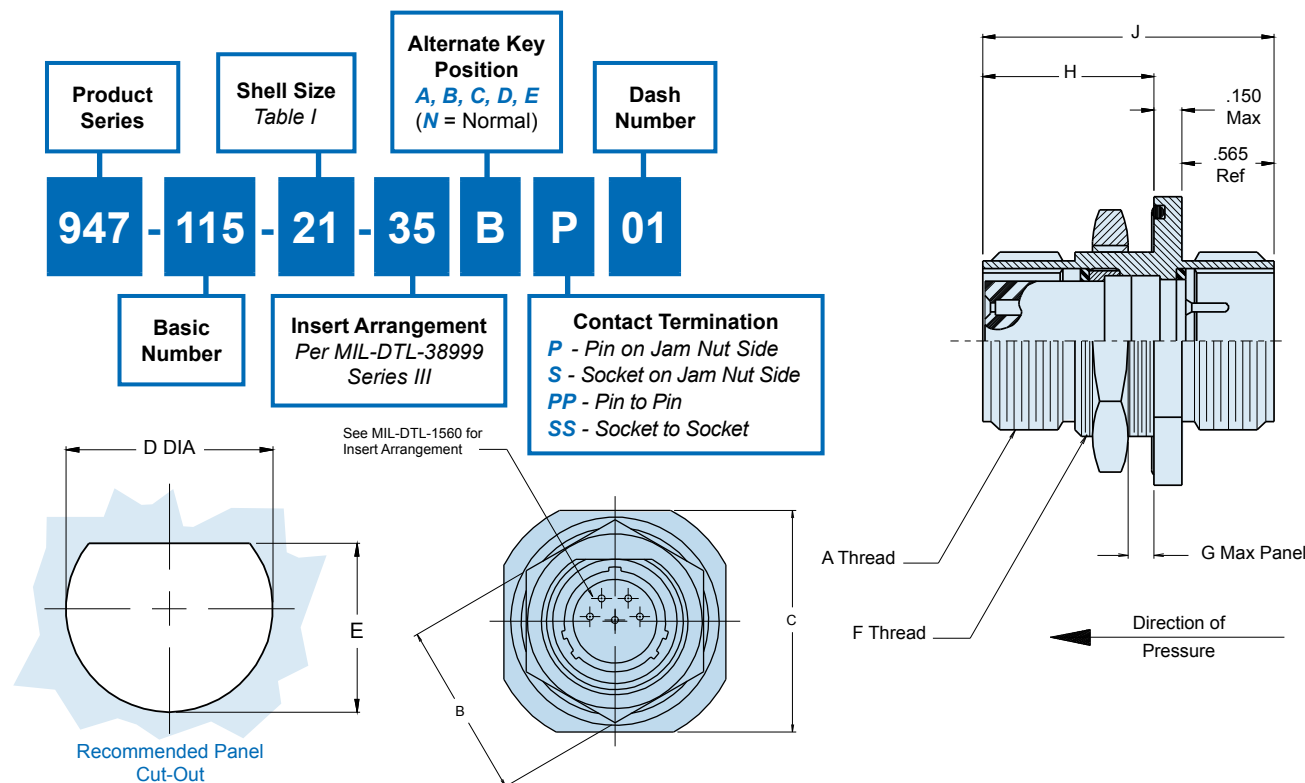


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B DIM	C DIM MAX	D DIA	E DIM	F THREAD x1-6g-0.100R
9	0.625	.875(22.2)	1.09(27.7)	.693 (17.60)	.657 (16.70)	M17
11	0.750	1.000(25.4)	1.28(32.5)	.825 (20.96)	.771 (19.59)	M20
13	0.875	1.250(31.8)	1.40(35.6)	1.010 (25.80)	.955 (24.26)	M25
15	1.000	1.375(34.9)	1.53(38.9)	1.135 (25.65)	1.085 (27.56)	M28
17	1.187	1.500(38.1)	1.66(42.2)	1.260 (28.83)	1.210 (30.73)	M32
19	1.250	1.625(41.3)	1.84(46.7)	1.385 (32.01)	1.335 (33.91)	M35
21	1.375	1.750(44.5)	1.97(50.5)	1.510 (35.18)	1.460 (37.08)	M38
23	1.500	1.875(47.6)	2.09(53.1)	1.635 (41.53)	1.585 (40.26)	M41
25	1.625	2.000(50.8)	2.21(56.1)	1.760 (44.70)	1.710 (43.43)	M44

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

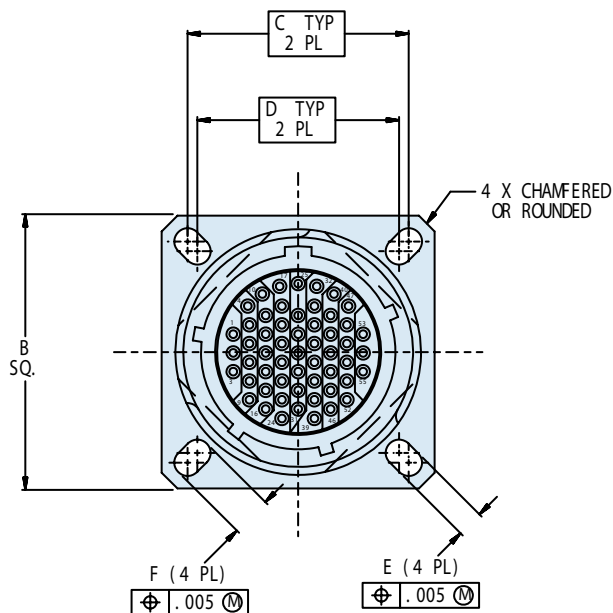
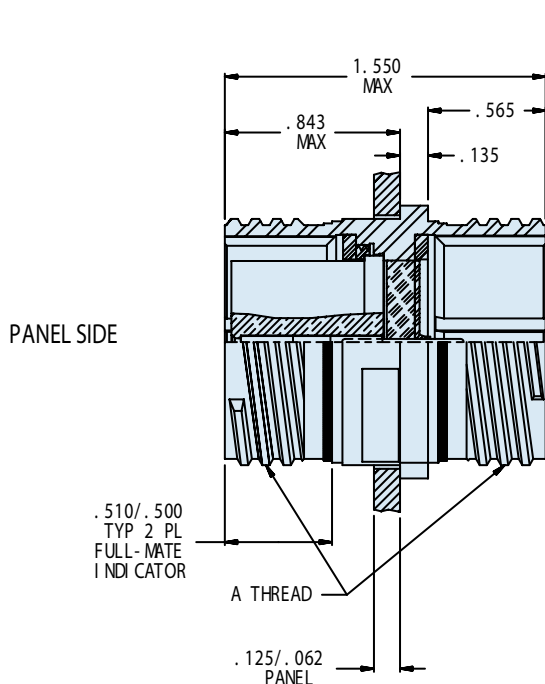
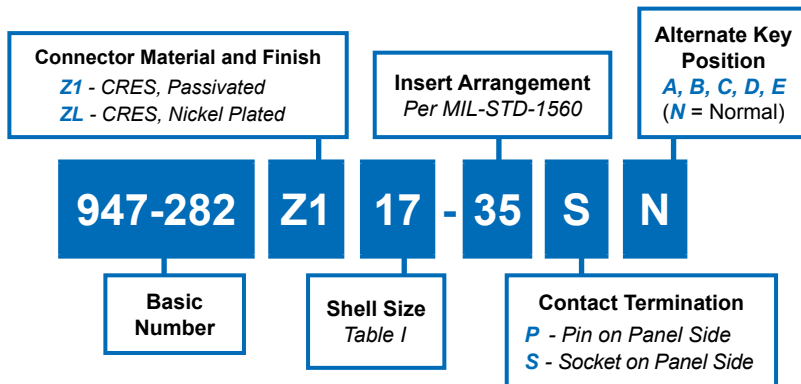
TABLE III: PANEL THICKNESS

DASH NO	G MAX	H MAX	J MAX
01	.250(6.4)	1.08(27.4)	1.79(45.5)
02	.500(12.7)	1.33(33.8)	2.04(51.8)

APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
- For pin/pin and skt/skt, symmetrical layouts only, consult factory for available insert arrangements.
- Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Electrical safety limits must be established by user, peak voltage, switching surge, transient, etc. should be used to determine the safety of the application.
- Material/finish:
Shell, lock ring, jam nut—stainless steel/passivate
Contacts—copper alloy/gold plate and alloy 52/gold plate
Insulators—high-grade rigid dielectric/N.A. and full glass.
Seals—fluorosilicone/ N.A.
- Metric dimensions (mm) are indicated in parentheses.

B



947-282
Flange Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999/21 Series III Type



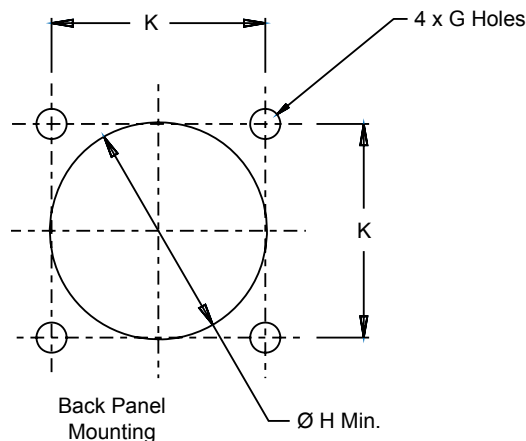
MIL-DTL
38999 Type

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD 0.1 P-0.3L-TS-2	B SQ.	C BASIC	D BASIC	E	F	Ø H MIN.	Ø G HOLES	K
9	0.625	.949 .925	.719	.594	.136 .120	.224 .208	.656	.133 .123	.724 .714
11	0.750	1.043 1.019	.812	.719		.202 .186	.781		.817 .807
13	0.875	1.138 1.114	.906	.812		.202 .186	.921		.911 .901
15	1.000	1.232 1.208	.969	.906		.181 .165	1.047		.973 .963
17	1.187	1.323 1.299	1.062	.969		.202 .186	1.218		1.067 1.057
19	1.250	1.449 1.425	1.156	1.062		.202 .186	1.296		1.161 1.151
21	1.375	1.575 1.551	1.250	1.156		.202 .186	1.421		1.255 1.245
23	1.500	1.701 1.677	1.375	1.250	.162 .146	.250 .234	1.546	.159 .149	1.380 1.370
25	1.625	1.823 1.799	1.500	1.375		.250 .234	1.672		1.505 1.495

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



APPLICATION NOTES

- Assembly identified with manufacturer's name and PN, space permitting.
- Material/Finish:
 Shell, lock ring, jam nut—CRES/passivate or CRES/nickel plate
 Pin Contacts—nickel iron alloy/gold plate
 Socket Contacts—copper alloy/gold plate
 Insulator, Hermetic—vitreous glass/N.A.
 Insulator, Socket—rigid dielectric/N.A.
 Socket Insulator—high grade rigid dielectric/N.A.
 Seals—fluorosilicone blend/ N.A.
- Electrical safety limits must be established by user, peak voltage, switching surge, transient, etc. Should be used to determine the safety application.
- Hermeticity <1 x 10⁻⁷ cc He/sec at 1 ATM differential
- Glenair 947-282 will mate with any QPL manufacturers D38999 series III plugs of same shell size, broach position, and opposite contact gender.
- Metric dimensions (mm) are indicated in parentheses.

D38999/41

Box Mount Hermetic Receptacle

MIL-DTL-38999 Series IV

How To Order: *MS*

Basic Specification

D38999

Connector Material / Finish

N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement

Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position

A, B, C, D, K, L, M, R, U
(**N** = Normal)

D38999

/41

Y

B

35

P

N

Shell Style

/41 - Box Mount

Shell Size

B - 11 **F** - 19
C - 13 **G** - 21
D - 15 **H** - 23
E - 17 **J** - 25

Contact Termination

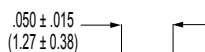
P - Pin, Solder Cup **S** - Socket, Solder Cup
X - Pin, Eyelet **Z** - Socket, Eyelet
C - Pin, PCB **D** - Socket, PCB
Flex Feedthrough Flex Feedthrough

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS CONTACT STYLE C AND D



SIZE 12 AND SIZE 16

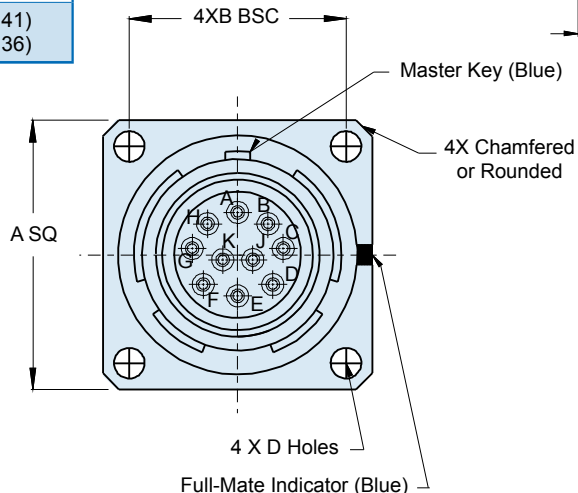
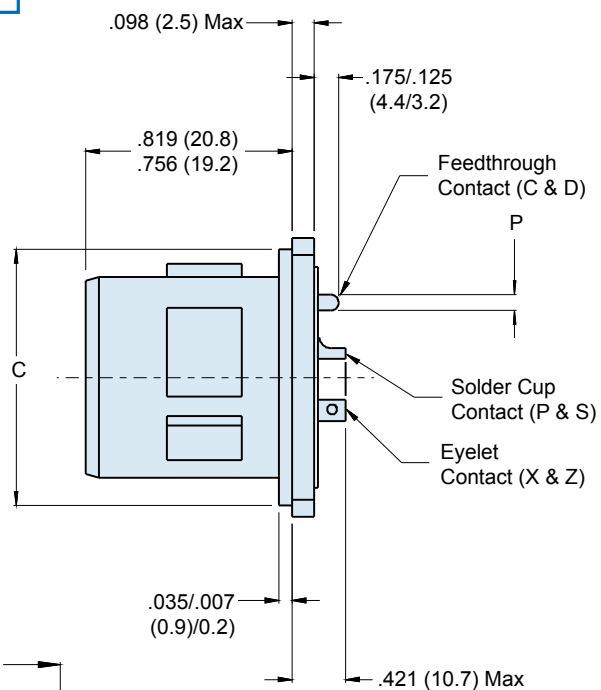


SIZE 22D AND SIZE 20

Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14



234-100-H2 Box Mount Hermetic Receptacle MIL-DTL-38999 Series IV Type



MIL-DTL
38999 Type

How To Order: Commercial

Connector Series 234 - Series IV Type	Shell Style H2 - Hermetic Box Mount	Shell Size 11, 13, 15, 17, 19, 21, 23, 25	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
234	- 100	- H2	Z1	11 - 35
Connector Type 100 - Hermetic Receptacle	Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated	Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4	Alternate Key Position A, B, C, D, K, L, M, R, U (N = Normal)	
			P	N

B

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

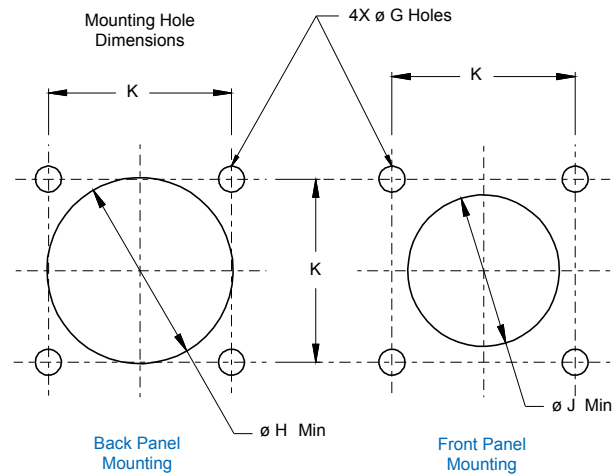


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	A SQ	B BSC	C DIA	D DIA	øG HOLES ±.005(0.1)	ø H MIN	ø J MIN	K ±.005(0.1)
B	11	1.051(26.7) 1.008(25.6)	.812(20.6)	.793(20.1) .778(19.8)	.138(3.5) .122(3.1)	.128(3.3)	.781(19.8)	.625(15.9)	.812(20.6)
C	13	1.145(29.1) 1.102(28.0)	.906(23.0)	.919(23.3) .904(23.0)	.138(3.5) .122(3.1)	.128(3.3)	.921(23.4)	.750(19.1)	.906(23.0)
D	15	1.240(31.5) 1.197(30.4)	.969(24.6)	1.044(26.5) 1.029(26.1)	.138(3.5) .122(3.1)	.128(3.3)	1.047(26.6)	.906(23.0)	.968(24.6)
E	17	1.334(33.9) 1.291(32.8)	1.062(27.0)	1.170(29.7) 1.155(29.3)	.138(3.5) .122(3.1)	.128(3.3)	1.218(30.9)	1.016(25.8)	1.062(27.0)
F	19	1.460(37.1) 1.417(36.0)	1.156(29.4)	1.294(32.9) 1.279(32.5)	.138(3.5) .122(3.1)	.128(3.3)	1.296(32.9)	1.142(29.0)	1.156(29.4)
G	21	1.583(40.2) 1.539(39.1)	1.250(31.8)	1.419(36.0) 1.404(35.7)	.138(3.5) .122(3.1)	.128(3.3)	1.421(36.1)	1.266(32.2)	1.250(31.8)
H	23	1.709(43.4) 1.665(42.3)	1.375(34.9)	1.544(39.2) 1.529(38.8)	.157(4.0) .142(3.6)	.154(3.9)	1.546(39.3)	1.375(34.9)	1.375(34.9)
J	25	1.835(46.6) 1.791(45.5)	1.500(38.1)	1.670(42.4) 1.654(42.0)	.157(4.0) .142(3.6)	.154(3.9)	1.672(42.5)	1.484(37.7)	1.500(38.1)

D38999/43

Jam Nut Mount Hermetic Receptacle

MIL-DTL-38999 Series IV

How To Order: MS

Basic Specification

D38999

Connector Material / Finish

N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement

Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position

A, B, C, D, K, L, M, R, U
(**N** = Normal)

D38999

/43

Y

B

35

P

N

Shell Style

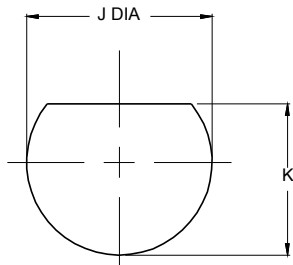
/43 - Jam Nut Mount

Shell Size

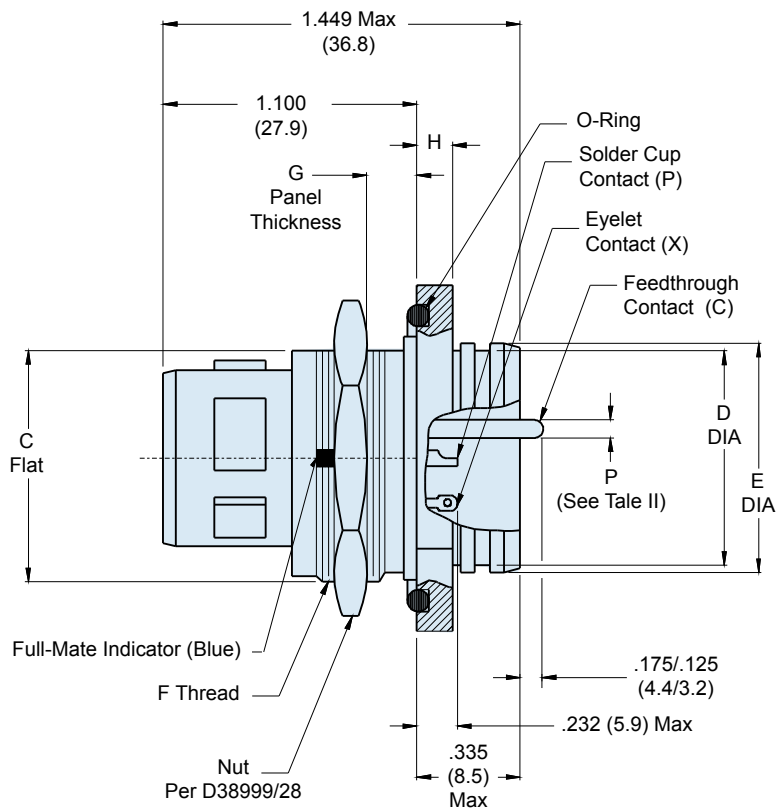
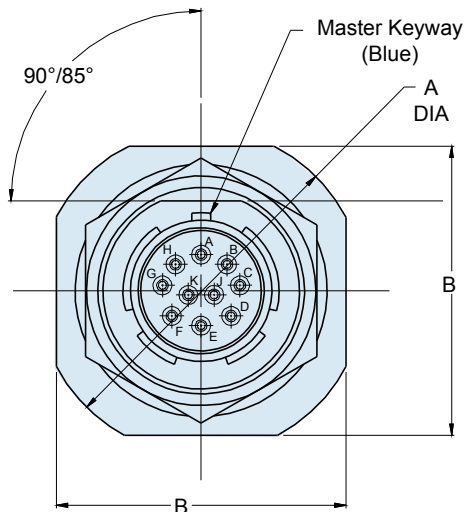
B - 11 **F** - 19
C - 13 **G** - 21
D - 15 **H** - 23
E - 17 **J** - 25

Contact Termination

P - Pin, Solder Cup **S** - Socket, Solder Cup
X - Pin, Eyelet **Z** - Socket, Eyelet
C - Pin, PCB **D** - Socket, PCB
Flex Feedthrough Flex Feedthrough



Recommended Panel
Cut-Out



234-100-H7 Jam Nut Mount Hermetic Receptacle MIL-DTL-38999 Series IV Type



MIL-DTL
38999 Type

How To Order: Commercial

Connector Series 234 - Series IV Type	Shell Style H7 - Hermetic Jam Nut Mount	Shell Size 11, 13, 15, 17, 19, 21, 23, 25	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
234	100	H7	Z1	11 - 35
Connector Type 100 - Hermetic Receptacle	Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated	Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4	Alternate Key Position A, B, C, D, K, L, M, R, U (N = Normal)	
			P	N

B

TABLE I: CONNECTOR DIMENSIONS

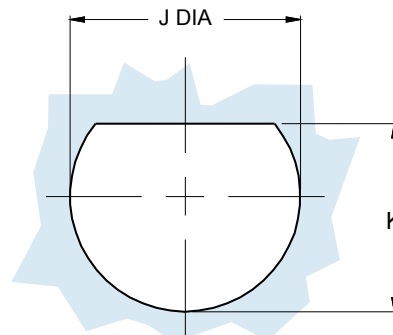
SHELL SIZE CODE	SHELL SIZE	A DIA	B FLATS ±.018(0.5)	C FLAT	D DIA	E DIA ±.010(0.3)	F THREAD ISO METRIC	G ±.033(0.8)	H ±.012(0.3)
B	11	1.385(35.2) 1.362(34.6)	1.250(31.8)	.754(19.2) .745(18.9)	.733(18.6) .716(18.2)	.769(19.5)	M20 X 1.0-6g	.092(2.3)	.106(2.7)
C	13	1.511(38.4) 1.488(37.8)	1.376(35.0)	.941(23.9) .932(23.7)	.858(21.8) .839(21.3)	.899(22.8)	M25 X 1.0-6g	.092(2.3)	.106(2.7)
D	15	1.637(41.6) 1.614(41.0)	1.502(38.2)	1.065(27.1) 1.056(26.8)	.984(25.0) .968(24.6)	1.025(26.0)	M28 X 1.0-6g	.092(2.3)	.106(2.7)
E	17	1.763(44.8) 1.740(44.2)	1.624(41.2)	1.190(30.2) 1.181(30.0)	1.110(28.2) 1.091(27.7)	1.147(29.1)	M32 X 1.0-6g	.092(2.3)	.106(2.7)
F	19	1.948(49.5) 1.925(48.9)	1.813(46.1)	1.316(33.4) 1.306(33.2)	1.236(31.4) 1.220(31.0)	1.273(32.3)	M35 X 1.0-6g	.092(2.3)	.137(3.5)
G	21	2.074(52.7) 2.051(52.1)	1.939(49.3)	1.441(36.6) 1.431(36.3)	1.358(34.5) 1.342(34.1)	1.399(35.5)	M38 X 1.0-6g	.092(2.3)	.137(3.5)
H	23	2.200(55.9) 2.177(55.3)	2.061(52.3)	1.565(39.8) 1.556(39.5)	1.484(37.7) 1.468(37.3)	1.525(38.7)	M41 X 1.0-6g	.092(2.3)	.137(3.5)
J	25	2.326(59.1) 2.299(58.4)	2.187(55.5)	1.692(43.0) 1.681(42.7)	1.610(40.9) 1.594(40.5)	1.647(41.8)	M44 X 1.0-6g	.092(2.3)	.137(3.5)

TABLE I (CONTINUED):
CUT-OUT DIMENSIONS

SHELL SIZE CODE	J DIA ±.005 (0.1)	K ±.005 (0.1)
B	.825 (20.96)	.771 (19.59)
C	1.010 (25.65)	.955 (24.26)
D	1.135 (28.83)	1.085 (27.56)
E	1.260 (32.01)	1.210 (30.73)
F	1.385 (35.18)	1.335 (33.91)
G	1.510 (38.35)	1.460 (37.08)
H	1.635 (41.53)	1.585 (40.26)
J	1.760 (44.70)	1.710 (43.43)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



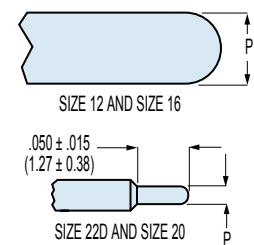
Recommended Panel
Cut-Out

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS CONTACT STYLE C AND D



Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

D38999/45

Solder Mount Hermetic Receptacle

MIL-DTL-38999 Series IV

How To Order: *MS*

Basic Specification
D38999

Connector Material / Finish
N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement
Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position
A, B, C, D, K, L, M, R, U
(*N* = Normal)

D38999

/45

Y

B

35

P

N

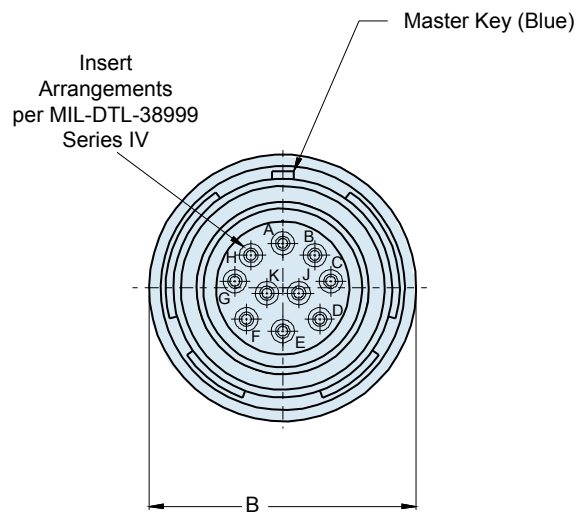
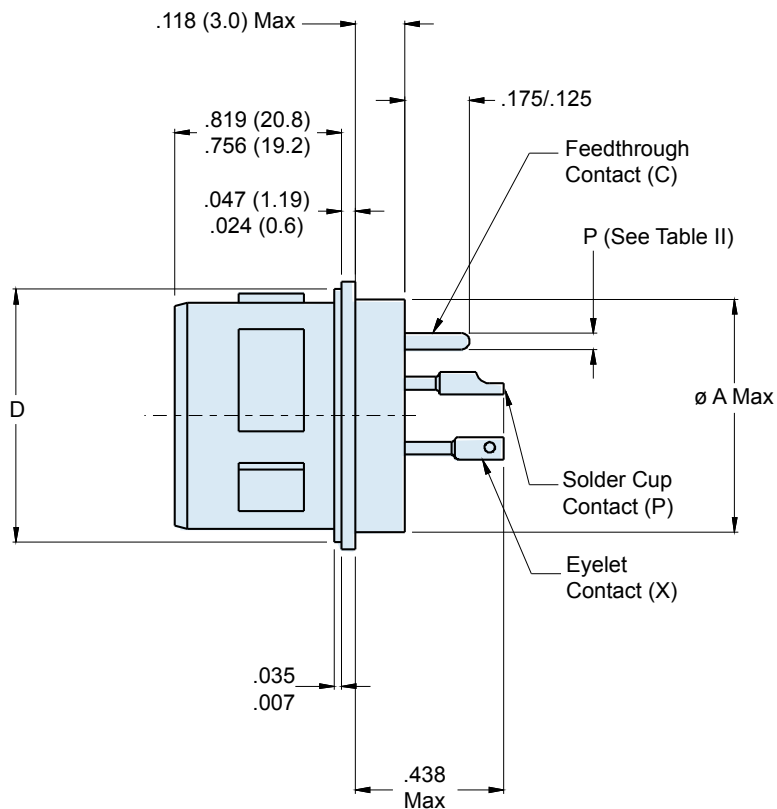
Shell Style
/45 - Solder Mount

Shell Size

B - 11 *F* - 19
C - 13 *G* - 21
D - 15 *H* - 23
E - 17 *J* - 25

Contact Termination

P - Pin, Solder Cup *S* - Socket, Solder Cup
X - Pin, Eyelet *Z* - Socket, Eyelet
C - Pin, PCB *D* - Socket, PCB
Flex Feedthrough Flex Feedthrough



234-100-H5 Solder Mount Hermetic Receptacle MIL-DTL-38999 Series IV Type

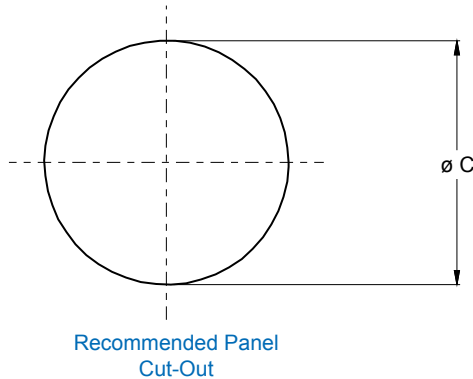


MIL-DTL
38999 Type

How To Order: Commercial

Connector Series 234 - Series IV Type	Shell Style H5 - Hermetic Solder Mount	Shell Size 11, 13, 15, 17, 19, 21, 23, 25	Contact Termination P - Pin, Solder Cup S - Socket, Solder Cup X - Pin, Eyelet Z - Socket, Eyelet C - Pin, PCB D - Socket, PCB	
234	- 100	- H5	Z1	11 - 35
Connector Type 100 - Hermetic Receptacle		Connector Material / Finish ZL - CRES, Nickel Z1 - CRES, Passivated		Insert Arrangement Per MIL-STD-1560; See Pages B-2 - B-4
Alternate Key Position A, B, C, D, K, L, M, R, U (N = Normal)				

B



WIRE ACCOMODATION	
Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS					
SHELL SIZE CODE	SHELL SIZE	ø A MAX	ø B MAX	ø C ±.005(0.1)	D
B	11	.783(19.9)	.862(21.9)	.789(20.0)	.793(20.1) .778(19.8)
C	13	.909(23.1)	.988(25.1)	.914(23.2)	.919(23.3) .904(23.0)
D	15	1.035(26.3)	1.110(28.2)	1.038(26.4)	1.044(26.5) 1.028(26.1)
E	17	1.157(29.4)	1.236(31.4)	1.164(29.6)	1.170(29.7) 1.155(29.3)
F	19	1.252(31.8)	1.331(33.8)	1.258(32.0)	1.294(32.9) 1.279(32.5)
G	21	1.378(35.0)	1.457(37.0)	1.383(35.1)	1.419(36.0) 1.404(35.7)
H	23	1.504(38.2)	1.583(40.2)	1.508(38.3)	1.544(39.2) 1.528(38.8)
J	25	1.630(41.4)	1.705(43.3)	1.643(41.7)	1.670(42.4) 1.654(42.0)

TABLE II: CONTACT SIZE	
PRINTED CIRCUIT TAIL CONFIGURATIONS CONTACT STYLE C AND D	
Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

D38999/48

Weld Mount Hermetic Receptacle

MIL-DTL-38999 Series IV

How To Order: *MS*

Basic Specification
D38999

Connector Material / Finish
N - CRES, Nickel
Y - CRES, Passivated

Insert Arrangement
Per MIL-STD-1560;
See Pages B2 - B4

Alternate Key Position
A, B, C, D, K, L, M, R, U
(*N* = Normal)

D38999

/48

Y

B

35

P

N

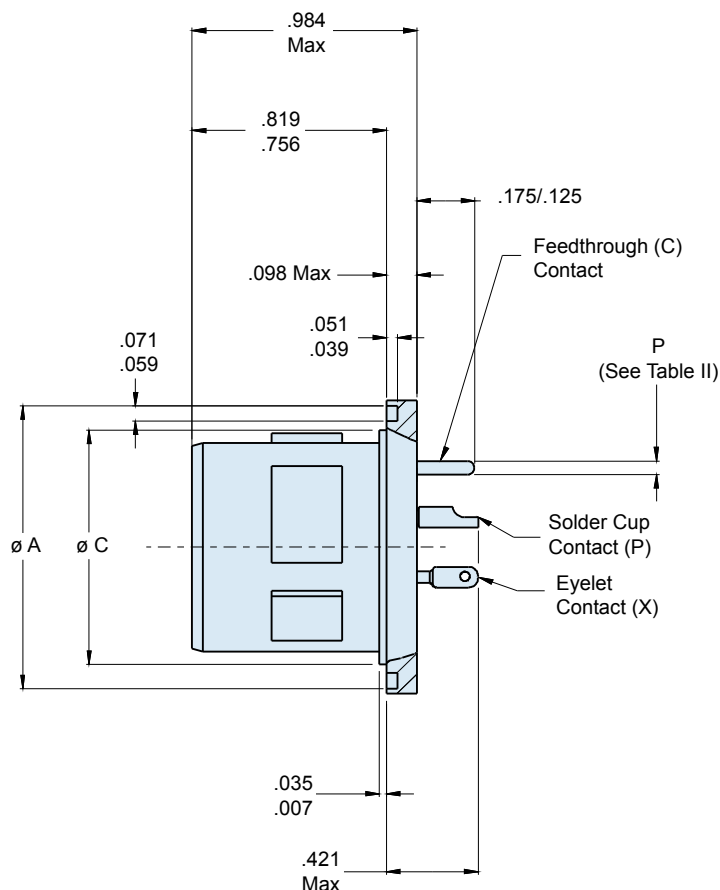
Shell Style
/48 - Weld Mount

Shell Size

B - 11 *F* - 19
C - 13 *G* - 21
D - 15 *H* - 23
E - 17 *J* - 25

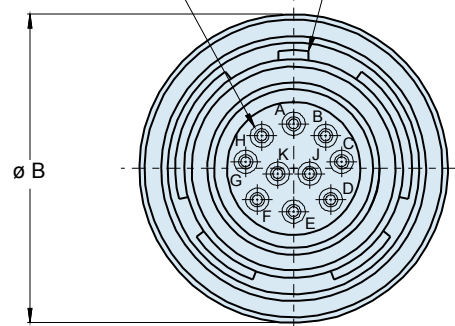
Contact Termination

P - Pin, Solder Cup *S* - Socket, Solder Cup
X - Pin, Eyelet *Z* - Socket, Eyelet
C - Pin, PCB *D* - Socket, PCB
Flex Feedthrough Flex Feedthrough



Insert Arrangement
per MIL-DTL-38999
Series IV

Master Key (Blue)



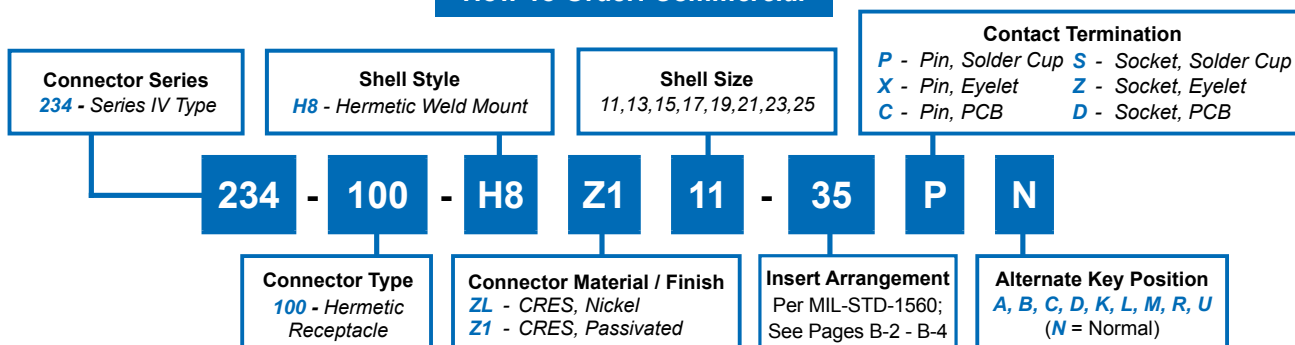
Consult Factory for Recommended Panel Cutout Dimensions

234-100-H8 Weld Mount Hermetic Receptacle MIL-DTL-38999 Series IV Type

Glenair

MIL-DTL
38999 Type

How To Order: Commercial



B

HERMETIC LEAK RATE MOD CODES

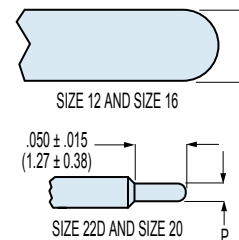
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE CODE	SHELL SIZE	ø A	ø B	ø C
B	11	1.035 (26.3) 1.024 (26.0)	1.106 (28.1) 1.094 (27.8)	.793 (20.1) .778 (19.8)
C	13	1.161 (29.5) 1.150 (29.2)	1.232 (31.3) 1.220 (31.0)	.919 (23.3) .904 (23.0)
D	15	1.287 (32.7) 1.276 (32.4)	1.358 (34.5) 1.346 (34.2)	1.044 (26.5) 1.029 (26.1)
E	17	1.374 (34.9) 1.362 (34.6)	1.445 (36.7) 1.433 (36.4)	1.170 (29.7) 1.155 (29.3)
F	19	1.520 (38.6) 1.508 (38.3)	1.591 (40.4) 1.579 (40.1)	1.294 (32.9) 1.279 (32.5)
G	21	1.661 (42.2) 1.650 (41.9)	1.732 (44.0) 1.720 (43.7)	1.419 (36.0) 1.404 (35.7)
H	23	1.827 (46.4) 1.815 (46.1)	1.898 (48.2) 1.886 (47.4)	1.544 (39.2) 1.529 (38.8)
J	25	1.913 (48.6) 1.902 (48.3)	1.984 (50.4) 1.972 (50.1)	1.669 (42.4) 1.654 (42.0)

TABLE II: CONTACT SIZE

PRINTED CIRCUIT TAIL CONFIGURATIONS
CONTACT STYLE C AND D



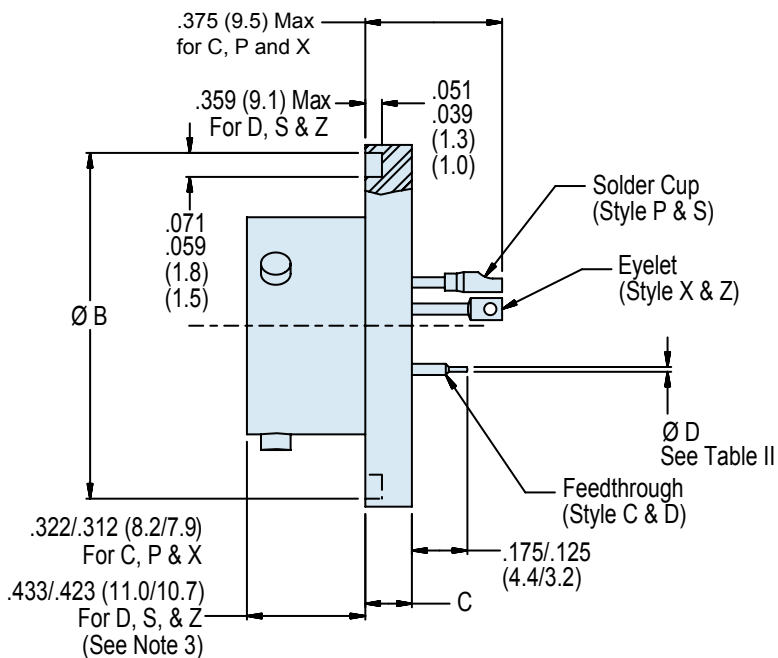
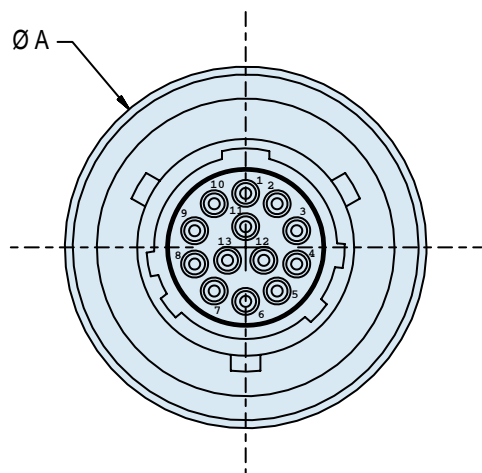
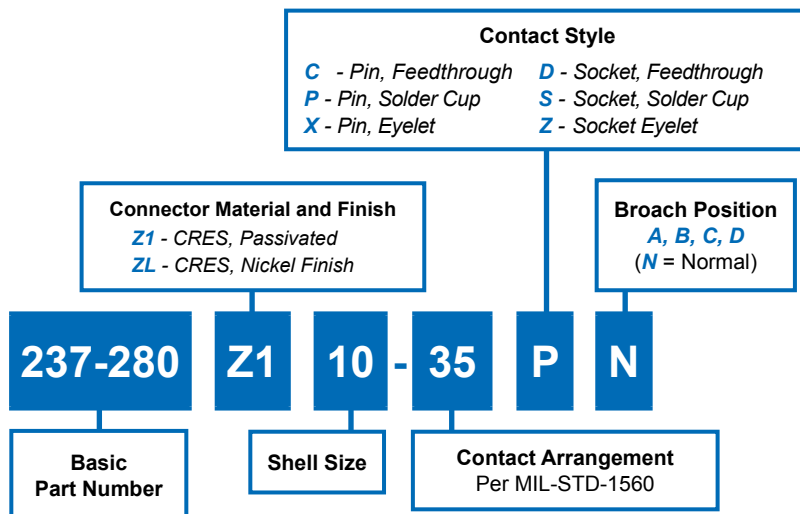
Contact Size	ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)

WIRE ACCOMODATION

Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

237-280 Special Weld Mount Hermetic Receptacle MIL-DTL-38999 Series II Type (Similar to MS27478Y Series II)

B



237-280
Special Weld Mount Hermetic Receptacle
MIL-DTL-38999 Series II Type (Similar to MS27478Y Series II)



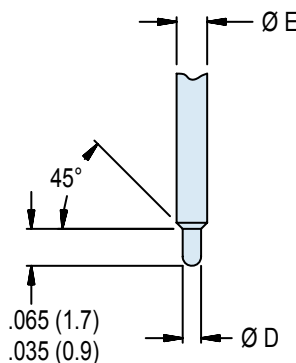
MIL-DTL
38999 Type

TABLE I: Connector Dimensions

Shell Size	A Dia	B Dia	C Flange
08	.863/.851 (21.9/21.6)	.820/.808 (20.8/20.5)	.134/.118 (3.4/3.0)
10	.984/.972 (25.0/24.7)	.941/.929 (23.9/23.6)	.134/.118 (3.4/3.0)
12	1.106/1.094 (28.1/27.8)	1.063/1.051 (27.0/26.7)	.134/.118 (3.4/3.0)
14	1.232/1.220 (31.3/31.0)	1.189/1.177 (30.2/29.9)	.134/.118 (3.4/3.0)
16	1.358/1.346 (34.5/34.2)	1.315/1.303 (33.4/33.1)	.134/.118 (3.4/3.0)
18	1.445/1.433 (36.7/36.4)	1.402/1.390 (35.6/35.3)	.134/.118 (3.4/3.0)
20	1.591/1.579 (40.4/40.1)	1.547/1.535 (39.3/39.0)	.134/.118 (3.4/3.0)
22	1.732/1.720 (44.0/43.7)	1.689/1.677 (42.9/42.6)	.165/.149 (4.2/3.8)
24	1.898/1.886 (48.2/47.9)	1.854/1.842 (47.1/46.8)	.165/.149 (4.2/3.8)

TABLE II: Contact Size

Contact Size	D Dia	E Dia
220	.011/.015 (0.28/0.38)	.0305/.0295 (0.77/0.75)
20	.024/.028 (0.61/0.71)	.041/.039 (1.04/0.99)
16	.0635/.0615 (1.61/1.56)	.0635/.0615 (1.61/1.56)
12	.095/.093 (2.41/2.36)	.095/.093 (2.41/2.36)
10	.126/.124 (3.20/3.15)	.126/.124 (3.20/3.15)



**For #22D and 20
 Contacts Only
 (#20 Inactive for New Design)**

APPLICATION NOTES

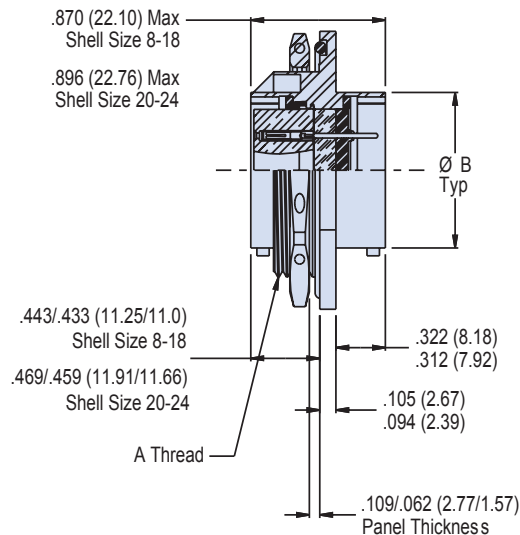
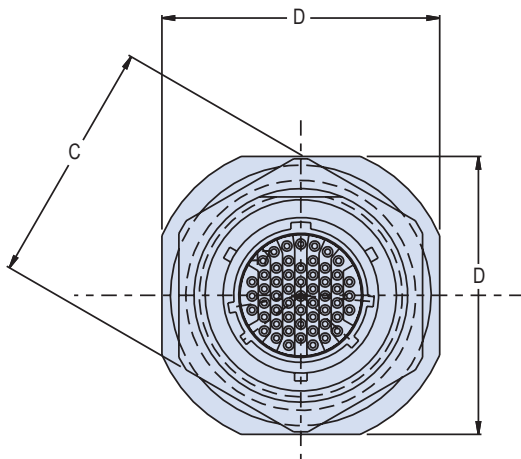
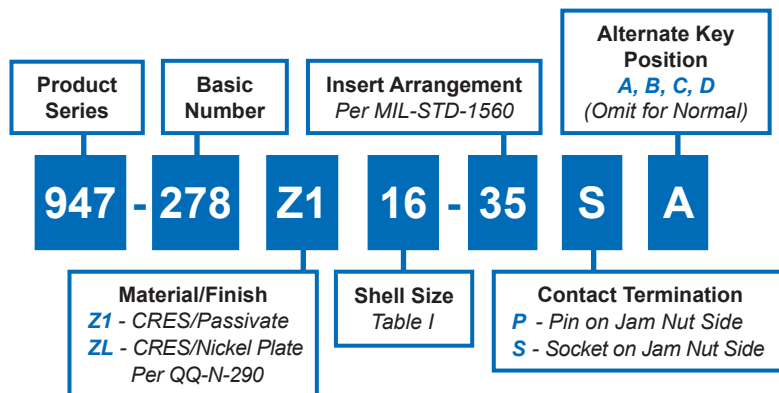
- | | |
|---|--|
| <p>1. Material/finish:
 Shell (Z1) – 304L CRES/passivate per ASTM A-697.
 Shell (ZL) – 304L CRES/nickel plate per DTL-38999.
 Contacts – 52 Ni-Alloy per AMS-I-23011 Class 2, MIL-DTL-45204 Type II, Class 1 (.00005 min thick).
 Insulator – full glass/N.A.
 Bayonets – 300 Series CRES/passivate.
 Seals – fluorosilicone blend elastomer/N.A.</p> | <p>2. Assembly identified with manufacturer's name and part number, space permitting.</p> <p>3. This area IAW MC27478 (MIL-DTL-38999, Series II).</p> <p>4. Performance Criteria IAW MIL-DTL-38999.</p> <p>5. Metric Dimensions (mm) in parentheses.</p> |
|---|--|

947-278

Jam Nut Mount Hermetic Bulkhead Feed-Thru

MIL-DTL-38999 Series II Type (MS27477Y)

B



947-278
Jam Nut Mount Hermetic Bulkhead Feed-Thru
MIL-DTL-38999 Series II Type (MS27477Y)

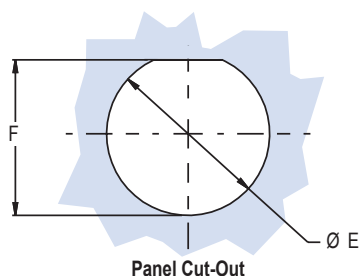


MIL-DTL
38999 Type

B

TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005(0.1)	F +.000-.005 (0-0.1)
08	11/16-24 UNEF	.474(12.0)	1.062(27.0)	1.250(31.8)	.890 (22.6)	.825 (21.0)
10	13/16-20 UNEF	.591(15.0)	1.188(30.2)	1.375(34.9)	1.015 (25.8)	.950 (24.1)
12	1-20 UNEF	.751(19.1)	1.312(33.3)	1.500(38.1)	1.140 (29.0)	1.080 (27.4)
14	1 1/8-18 UNEF	.876(22.3)	1.438(36.5)	1.625(41.3)	1.265 (32.1)	1.205 (30.6)
16	1 1/4-18 UNEF	1.001(25.4)	1.562(39.7)	1.781(45.2)	1.390 (35.3)	1.330 (33.8)
18	1 3/8-18 UNEF	1.126(28.6)	1.688(42.9)	1.890(48.0)	1.515 (38.5)	1.455 (37.0)
20	1 1/2-18 UNEF	1.251(31.8)	1.812(46.0)	2.016(51.2)	1.640 (41.7)	1.580 (40.1)
22	1 5/8-18 UNEF	1.376(35.0)	2.000(50.8)	2.140(54.4)	1.765 (44.8)	1.704 (43.3)
24	1 3/4-18 UNS	1.501(38.1)	2.125(54.0)	2.265(57.5)	1.890 (48.0)	1.830 (46.5)



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc Helium per second
-585B	1 x 10 ⁻⁹ cc Helium per second
-585C	1 x 10 ⁻⁸ cc Helium per second

APPLICATION NOTES

- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair's 947-278 will mate with any QPL manufacturer's plug having the same shell size, contact arrangement and opposite contact gender.
- Hermeticity = less than 1 x 10⁻⁷ cc/sec at one atmosphere.
- Metric Dimensions (mm) are indicated in parentheses.
- Material/Finish:
 Shell and jam nut - CRES/passivate or CRES/Nickel plate
 Contacts, pin - nickel alloy/gold plate
 Contacts, socket - copper alloy/gold plate
 Bayonets - CRES/passivate
 Insulator, pins - full glass/N.A.
 Insulator - sockets - rigid dielectric/N.A.
 Seals - Fluorosilicone blend/N.A.

Series 80 "Mighty Mouse" Hermetic Connectors

SECTION C TABLE OF CONTENTS

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Series 800 Hermetic



Series 801 Solder Mount Hermetic

Series 80 Mighty Mouse Hermetic Connectors



Series 80 Mighty Mouse Hermetic Connectors

The Series 80 Connector was originally developed as a smaller and lighter alternative to D38999 connectors for aerospace applications such as Attack Helicopters and Unmanned Aerial Vehicles. Today, the Series 80 Mighty Mouse serves in dozens of safety-critical defense, medical, industrial and geo-physical applications.

The Series 80 Mighty Mouse Connector is supplied in six mating styles, including a triple-

start threaded version, a push-pull quick-disconnect version and rugged bayonet-lock. All the connectors in the Series 80 family are available in hermetic versions with PC tail or solder cup terminations. Made of stainless steel with a glass seal, Mighty Mouse hermetics are available with solder cup or PC tail contacts and are 100% tested to meet 1×10^{-7} cc/second helium leakage and an open face pressure rating of 1000 PSI.

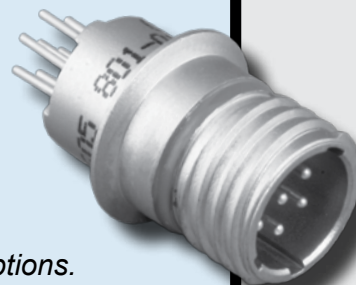
Same-Day Delivery on Most Common Shell Styles and Layouts

Space Grade Special Screening Available

1×10^{-7} cc/Helium per Second Leakage Rate

Jam Nut, Solder Mount, Wall Mount and Box Mount Options

*Stainless Steel Shells with Vitreous Glass Sealing
with All Standard Material Options, plus Titanium and Inconel® Options.*



C

HERMETIC MATERIALS

Shell, Barrel Coupling and Jam Nut (Hermetic)	Stainless steel per AMS-QQ-S-763
Front and Rear Insulators	Glass-filled liquid crystal polymer (LCP) in accordance with MIL-M-24519, Type GLP-30F
Grommet, Peripheral Seal and Interfacial Seal	Blended elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Hermetic Insert	Vitreous glass
Contacts	Nickel-iron alloy per ASTM F30 (Alloy 52), 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1, 27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches
Adhesives	Silicone and epoxy
Potting Compound	Epoxy

HERMETIC FINISHES

Plating Code	Material	Finish	Specification
Z1	Stainless Steel	Passivate	AMS-QQ-P-35
ZL	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290, Class 2

*Additional materials are available, including titanium and Inconel®. Consult factory for ordering information.



Series 80 Mighty Mouse Product Selection Guide

The Series 80 Mighty Mouse Connector is designed for high-reliability commercial and aerospace/defense interconnect applications that require both robust environmental/EMI performance and reduced size and weight. The Series 80 Mighty Mouse Connector offers comparable performance to MIL-DTL-38999 Series interconnects with up to 71% weight and 52% size savings for similar contact layouts. The six versions of the product offer a variety of styles and features to suit just about any application.

Series 800



Series 801



Description

Original Mighty Mouse with UNF Threads

Double-Start ACME Thread

Notes

A general purpose connector for high-speed Ethernet switches, tactical equipment and instrumentation.

More rugged keys and threads compared to Series 800. Faster mating, slightly larger than Series 800.

Number of Contacts

1 to 37

1 to 130

Coupling

Threaded Coupling with 4 ½ Turns to Full Mate

Threaded Coupling with 1 ½ Turns to Full Mate

Hermeticity

1 X10⁻⁷ cc/second maximum helium leak rate

1 X10⁻⁷ cc/second maximum helium leak rate

EMI Shielding

Good

Good

Vibration and Shock

37 g's Random Vibration;
300 g's Shock

37 g's Random Vibration;
300 g's Shock

Mating Cycles

2000 Cycles

2000 Cycles

Electrical Performance

#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

Proven Performance Applications

Commercial air frame sensors; UAV telemetry; Tactical computers; field radios

Military air frame; Dismounted soldier; Tactical ground weaponry; Avionic (FLIR) systems

Series 80 Mighty Mouse Product Selection Guide



Series 802

Series 803

Series 804

Series 805



"Aqua Mouse" 3500 PSI

Rugged stainless steel,
resists chemicals.
For geophysical and
underwater applications.

1 to 130

Threaded Coupling with
UN Threads

1 X10⁻⁷ cc/second
maximum helium leak
rate

Good

37 g's Random Vibration;
300 g's Shock

2000 Cycles

#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

Pipe line inspection
equipment; Well logging;
Amphibious vehicles;
Unmanned submersibles

Bayonet

Quick-mating, light duty,
general purpose. Not
rated for immersion. 50
milliohms shell-to-shell
resistance.

1 to 55

Push-to-Mate, ¼ Turn to
Lock

1 X10⁻⁷ cc/second
maximum helium leak
rate

Fair

37 g's Random Vibration;
300 g's Shock

2000 Cycles SST

#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

Soldier system radios;
Autosport diagnostics;
Airborne surveillance;
Communication systems

Push-Pull

Breakaway connector
for headsets and tactical
equipment. Gold-plated
spring for long mating
life and superior EMI
shielding.

1 to 55

Quick-Disconnect

1 X10⁻⁷ cc/second
maximum helium leak
rate

Very Good

37 g's Random Vibration;
300 g's Shock

2000 Cycles

#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

Helmet breakaway
connector; QDC battery;
Missile applications;
Weapon interconnects

Triple-Start ACME Thread

"Clicker" ratchet
mechanism and ground
spring for military
airframes and avionics
boxes. Fast-mating,
D38999 equivalent.

1 to 130

One Full Turn for Full
Mate

1 X10⁻⁷ cc/second
maximum helium leak
rate

Excellent

37 g's Random Vibra-
tion;
300 g's Shock

500 Cycles

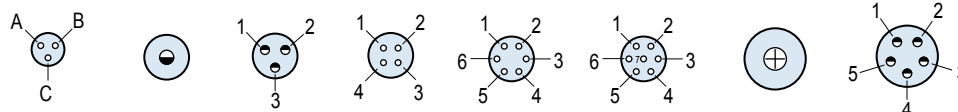
#12: 23 AMP, 500 VAC
#16: 13 AMP, 500 VAC
#20: 7.5 AMP, 500 VAC
#23: 5 AMP, 500 VAC

Autosport; Military air
frame; Joint Strike
Fighter

C

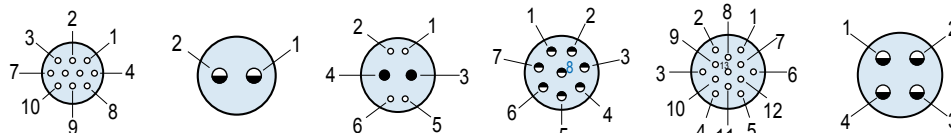
Mating Face View of Pin Connector (socket connector numbers are reversed)

Contact Legend
#23° #20HD° #20● #16● #12⊕



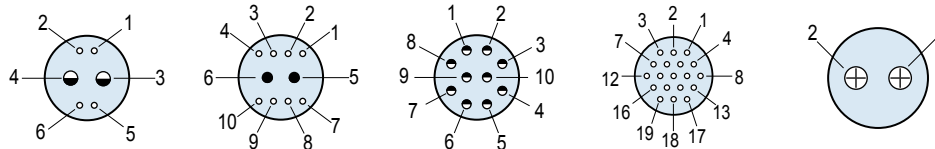
Series 800, 801, 802, 803, 804	5-3	6-1	6-23	6-4	6-6	6-7	7-1	7-25
Series 805	Not Avail.	8-1	8-23	8-4	8-6	8-7	9-1	9-25
No. of Contacts	3	1	3	4	6	7	1	5
Contact Size	#23	#16	#20HD	#23	#23	#23	#12	#20HD
DWV Voltage (VAC)	500	1800	750	500	500	500	1800	750
Current Rating (Amps)	5	13	7.5	5	5	5	23	7.5

Contact Legend
#23° #20HD° #20● #16● #12⊕



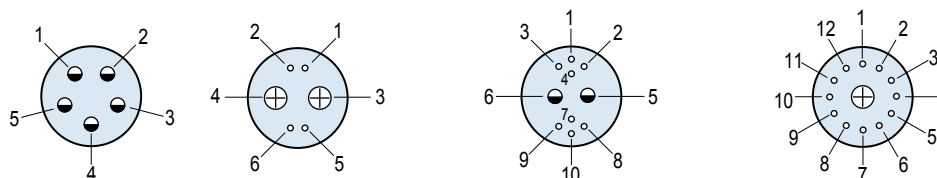
Series 800, 801, 802, 803, 804	7-10	8-2	8-200	8-28	8-13	9-4
Series 805	9-10	10-2	10-200	10-28	10-13	11-4
No. of Contacts	10	2	2 4	8	13	4
Contact Size	#23	#16	#20 #23	#20HD	#23	#16
DWV Voltage (VAC)	500	1800	1000 500	750	500	1800
Current Rating (Amps)	5	13	7 5	7.5	5	13

Contact Legend
#23° #20HD° #20● #16● #12⊕



Series 800, 801, 802, 803, 804	9-200	9-201	9-210	9-19	10-2
Series 805	11-200	11-201	11-210	11-19	12-2
No. of Contacts	2 4	2 8	10	19	2
Contact Size	#16 #23	#20 #23	#20HD	#23	#12
DWV Voltage (VAC)	1800 500	1000 500	750	500	1800
Current Rating (Amps)	13 5	7.5 5	7.5	5	23

Contact Legend
#23° #20HD° #20● #16● #12⊕



Series 800, 801, 802, 803, 804	10-5	10-201	10-202	10-200
Series 805	12-5	12-201	12-202	12-200
No. of Contacts	5	2 4	2 8	1 12
Contact Size	#16	#12 #23	#16 #23	#12 #23
DWV Voltage (VAC)	1800	1800 500	1800 500	1800 500
Current Rating (Amps)	13	23 5	13 5	23 5

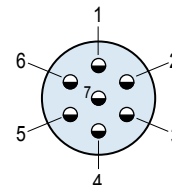
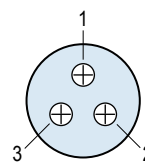
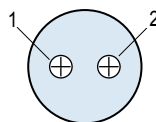
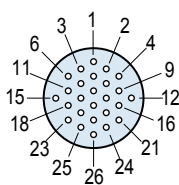
Series 80 Mighty Mouse Contact Arrangements



Mating Face View of Pin Connector (socket connector numbers are reversed)

Contact Legend

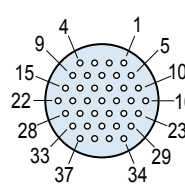
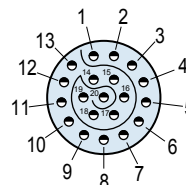
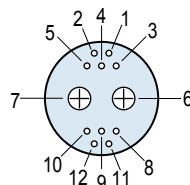
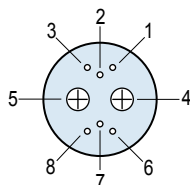
- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕



Series 800, 802, 803, 804	10-26	12-2	12-3	12-7
Series 801	10-26	13-2	13-3	13-7
Series 805	12-26	15-2	15-3	15-7
No. of Contacts	26	2	3	7
Contact Size	#23	#12	#12	#16
DWV Voltage (VAC)	500	1800	1800	1800
Current Rating (Amps)	5	23	23	13

Contact Legend

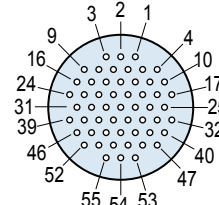
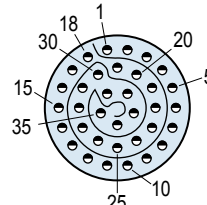
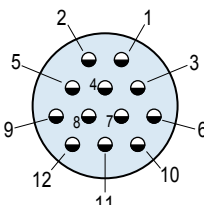
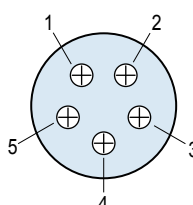
- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕



Series 800, 802, 803, 804	12-200	12-201	12-220	12-37
Series 801	13-200	13-201	13-220	13-37
Series 805	15-200	15-201	15-220	15-37
No. of Contacts	2 6	2 10	20	37
Contact Size	#12 #23	#12 #23	#20HD	#23
DWV Voltage (VAC)	1800 500	1800 500	750	500
Current Rating (Amps)	23 5	23 5	7.5	5

Contact Legend

- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕

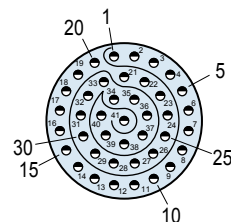
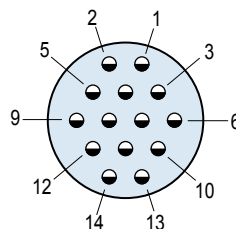
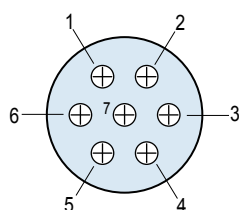


Series 802, 803, 804	14-5	14-12	14-235	14-55
Series 801	16-5	16-12	16-235	16-55
Series 805	18-5	18-12	18-235	18-55
No. of Contacts	5	12	35	55
Contact Size	#12	#16	#20HD	#23
DWV Voltage (VAC)	1800	1800	750	500
Current Rating (Amps)	23	13	7.5	5

Mating Face View of Pin Connector (socket connector numbers are reversed)

Contact Legend

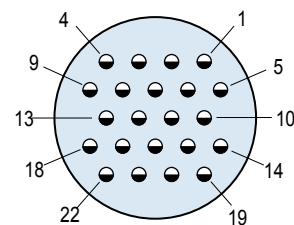
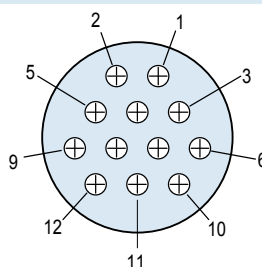
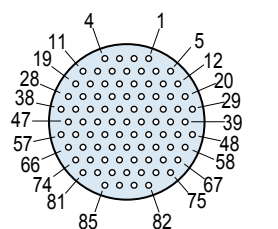
- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕



Series 801	17-7	17-14	17-241
Series 802	15-7	15-14	15-241
Series 805	19-7	19-14	19-241
No. of Contacts	7	14	41
Contact Size	#12	#16	#20HD
DWV Voltage (VAC)	1800	1800	750
Current Rating (Amps)	23	13	7.5

Contact Legend

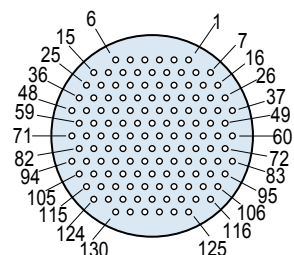
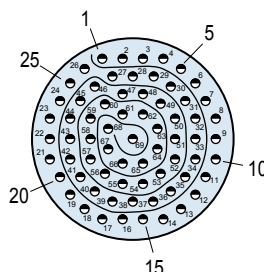
- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕



Series 801	17-85	21-12	21-22
Series 802	15-85	21-12	21-22
Series 805	19-85	23-12	23-22
No. of Contacts	85	12	22
Contact Size	#23	#12	#16
DWV Voltage (VAC)	500	1800	1800
Current Rating (Amps)	5	23	13

Contact Legend

- #23 ○
- #20HD ●
- #20 ●
- #16 ⊖
- #12 ⊕



Series 801, 802	21-269	21-130
Series 805	23-269	23-130
No. of Contacts	69	130
Contact Size	#20HD	#23
DWV Voltage (VAC)	750	500
Current Rating (Amps)	7.5	5

Series 80 Mighty Mouse Straight PCB Footprints



Series 80
Mighty Mouse

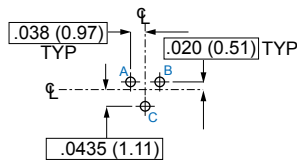
Component Mounting Side of PCB



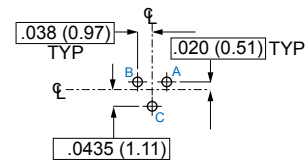
Insert Arrangement

5-3

3 #23 Contacts
.022 (0.56) Max. Dia. Tail



Pin Connector



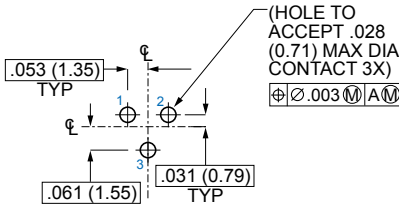
Socket Connector



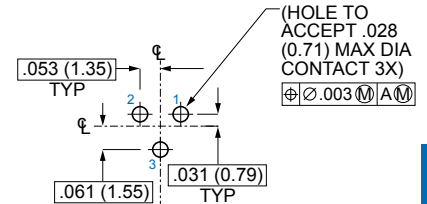
Insert Arrangement

6-23, 8-23

3 #20HD Contacts
.028 (0.56) Max. Dia. Tail



Pin Connector



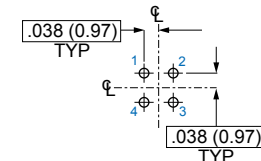
Socket Connector



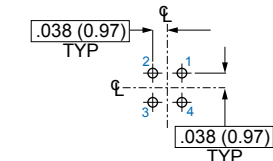
Insert Arrangement

6-4, 8-4

4 #23 Contacts
.022 (0.56) Max. Dia. Tail



Pin Connector



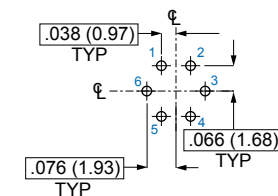
Socket Connector



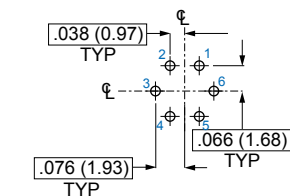
Insert Arrangement

6-6, 8-6

6 #23 Contacts
.022 (0.56) Max. Dia. Tail



Pin Connector



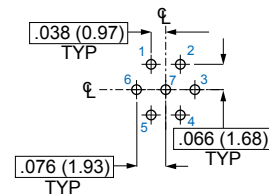
Socket Connector



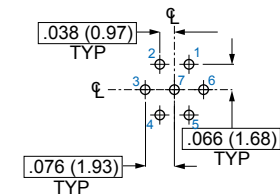
Insert Arrangement

6-7, 8-7

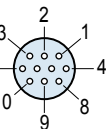
7 #23 Contacts
.022 (0.56) Max. Dia. Tail



Pin Connector



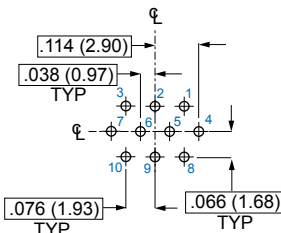
Socket Connector



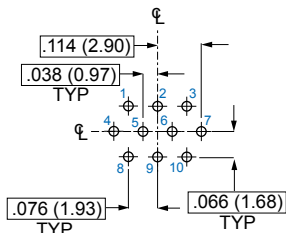
Insert Arrangement

7-10, 9-10

10 #23 Contacts
.022 (0.56) Max. Dia. Tail

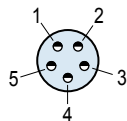


Pin Connector

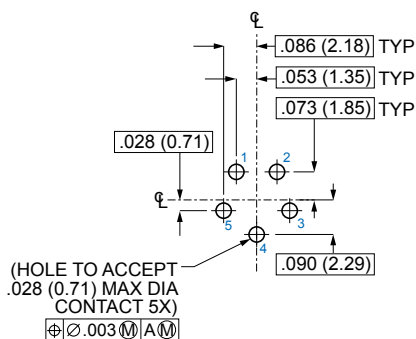


Socket Connector

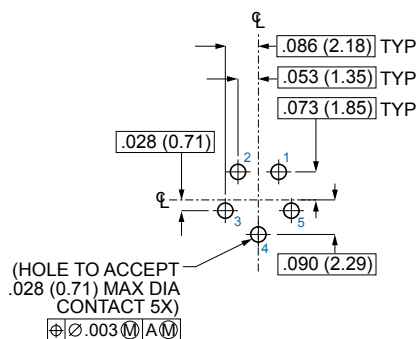
Component Mounting Side of PCB



**Insert Arrangement
7-25, 9-25**
5 #20HD Contacts
.028 (0.71) Max. Dia. Tail



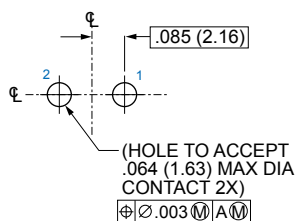
Pin Connector



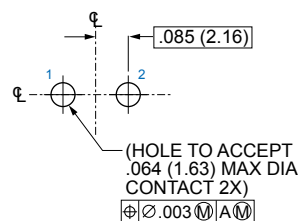
Socket Connector



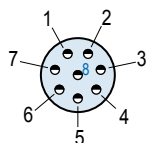
**Insert Arrangement
8-2, 10-2**
2 #16 Contacts



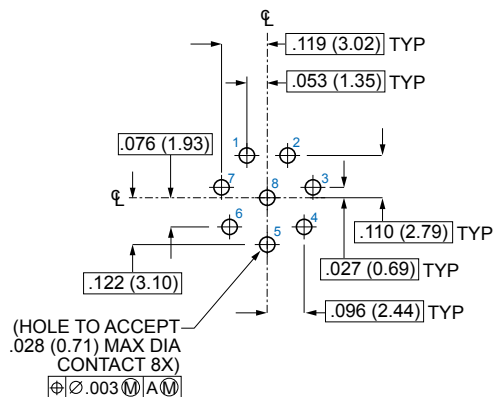
Pin Connector



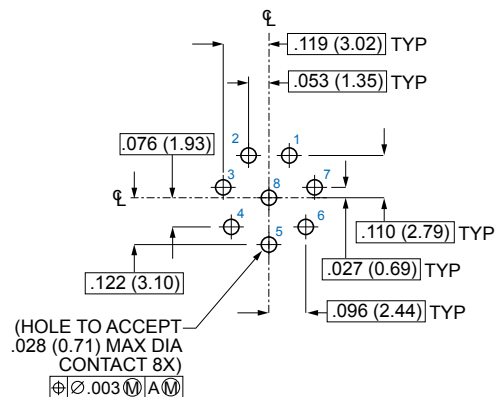
Socket Connector



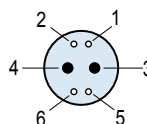
**Insert Arrangement
8-28, 10-28**
8 #20HD Contacts



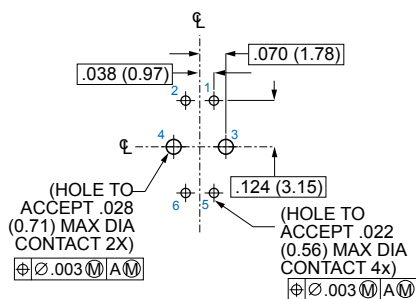
Pin Connector



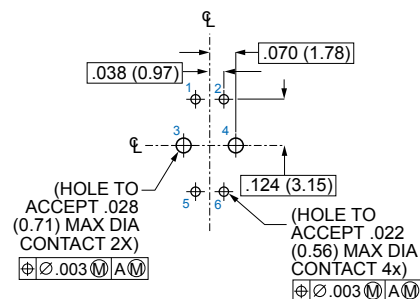
Socket Connector



**Insert Arrangement
8-200, 10-200**
2 #20 Contacts
4 #23 Contacts



Pin Connector



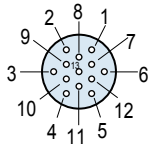
Socket Connector

Series 80 Mighty Mouse Straight PCB Footprints



Series 80
Mighty Mouse

Component Mounting Side of PCB

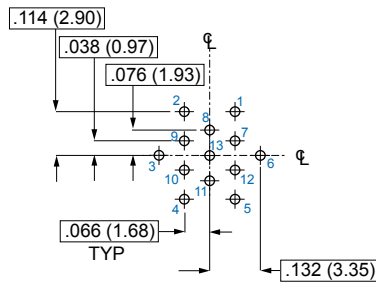


Insert Arrangement

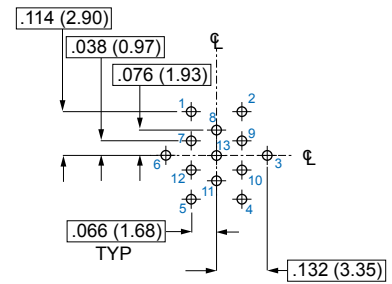
8-13, 10-13

13 #23 Contacts

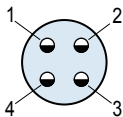
.022 (0.56) Max. Dia. Tail



Pin Connector



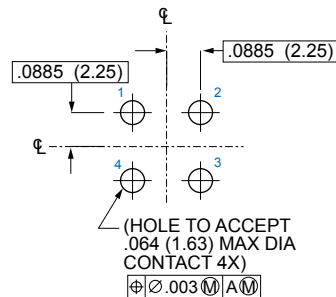
Socket Connector



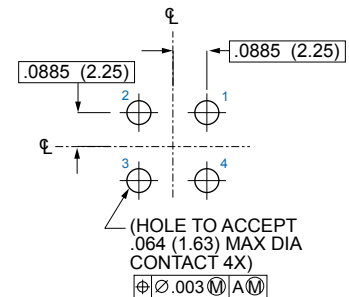
Insert Arrangement

9-4, 11-4

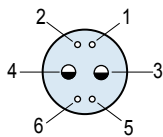
4 #16 Contacts



Pin Connector



Socket Connector

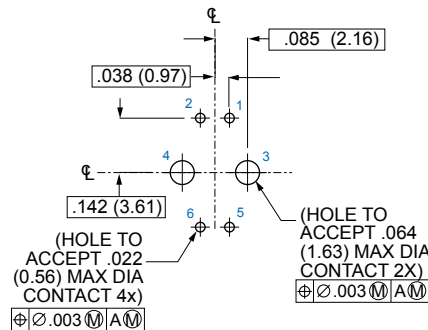


Insert Arrangement

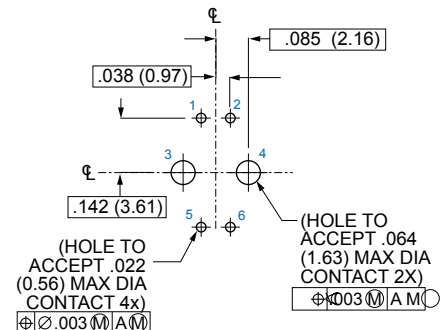
9-200, 11-200

4 #23 Contacts

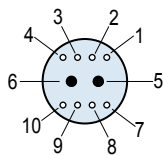
2 #16 Contacts



Pin Connector



Socket Connector

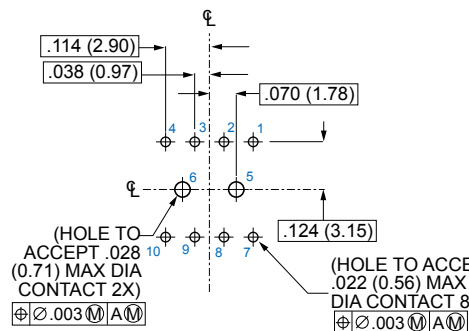


Insert Arrangement

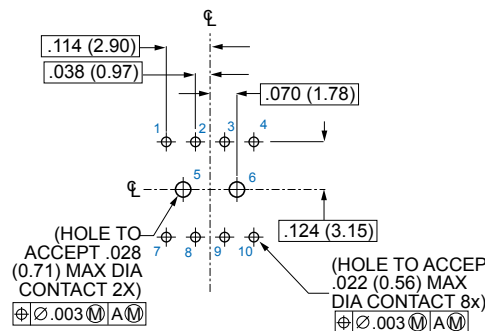
9-201, 11-201

2 #20 Contacts

8 #23 Contacts

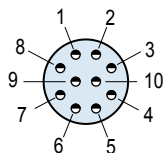


Pin Connector

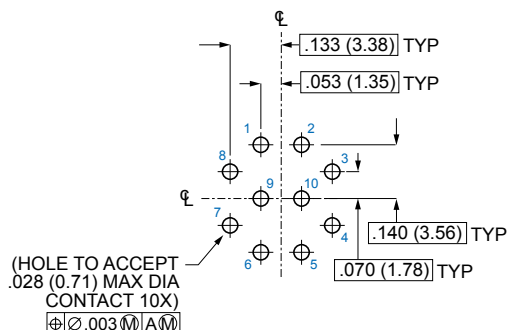


Socket Connector

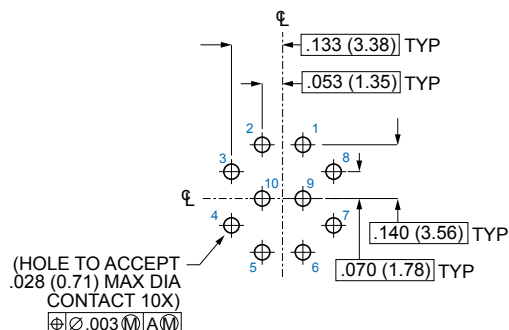
Component Mounting Side of PCB



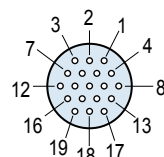
Insert Arrangement
9-210, 11-210
10 #20HD Contacts



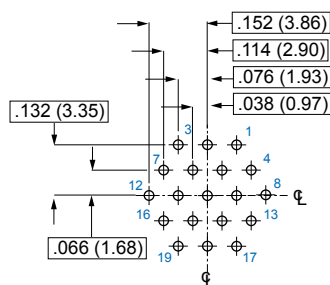
Pin Connector



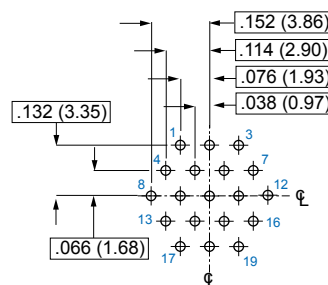
Socket Connector



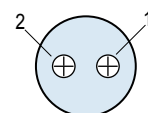
Insert Arrangement
9-19, 11-19
19 #23 Contacts
.022 (0.56) Max. Dia. Tail



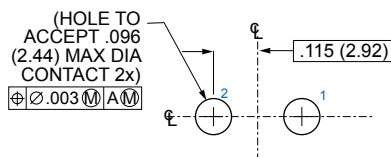
Pin Connector



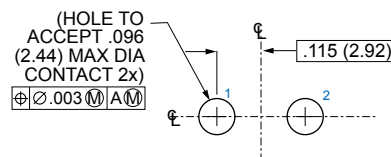
Socket Connector



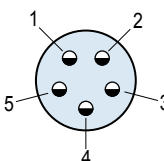
Insert Arrangement
10-2, 12-2
2 #12 Contacts



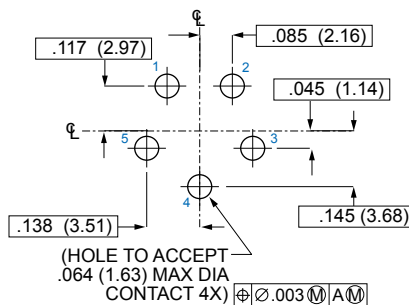
Pin Connector



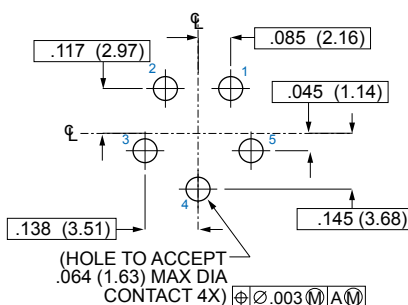
Socket Connector



Insert Arrangement
10-5, 12-5
5 #16 Contacts



Pin Connector



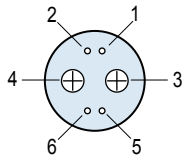
Socket Connector

Series 80 Mighty Mouse Straight PCB Footprints

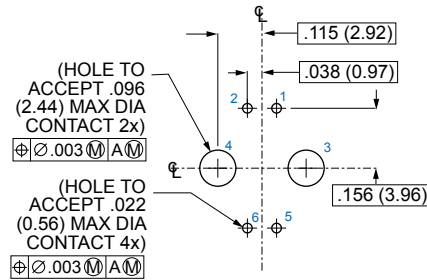


Series 80
Mighty Mouse

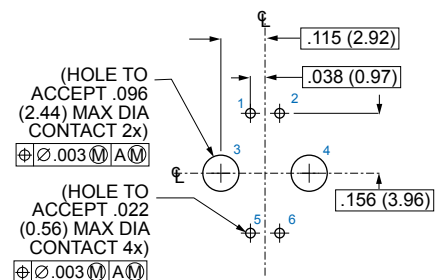
Component Mounting Side of PCB



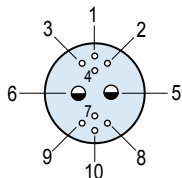
Insert Arrangement
10-201, 12-201
2 #12 Contacts
4 #23 Contacts



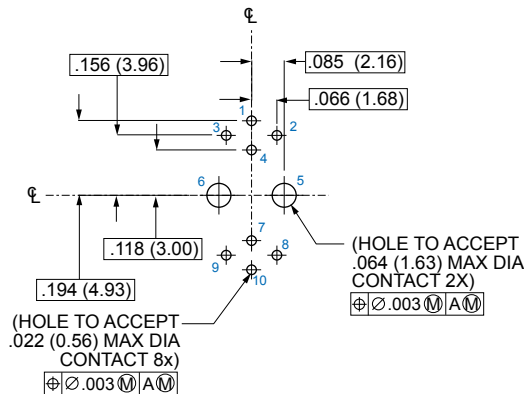
Pin Connector



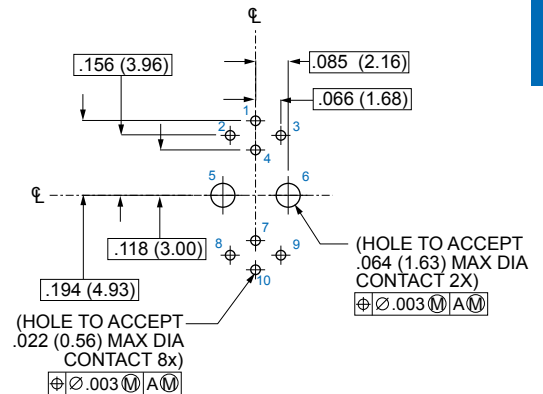
Socket Connector



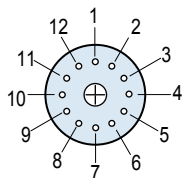
Insert Arrangement
10-202, 12-202
2 #16 Contacts
8 #23 Contacts



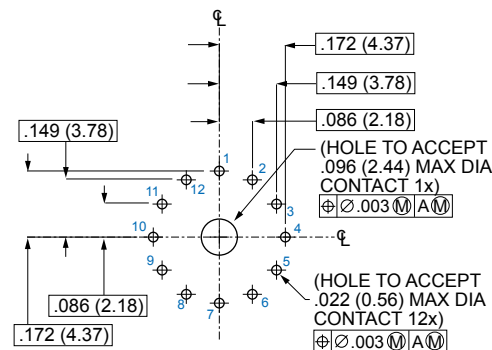
Pin Connector



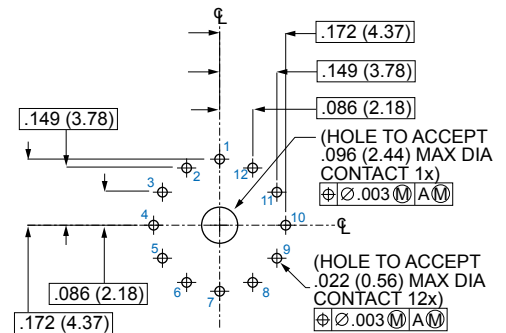
Socket Connector



Insert Arrangement
10-200, 12-200
1 #12 Contact
12 #23 Contacts

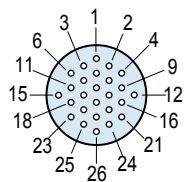


Pin Connector

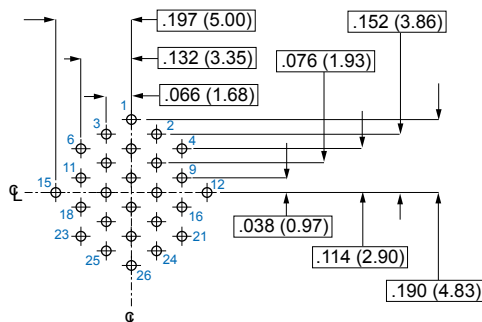


Socket Connector

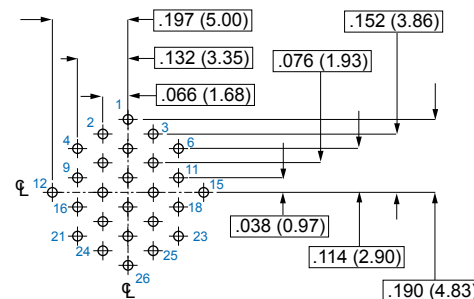
Component Mounting Side of PCB



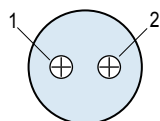
**Insert Arrangement
10-26, 12-26**
26 #23 Contacts
.022 (0.56) Max. Dia. Tail



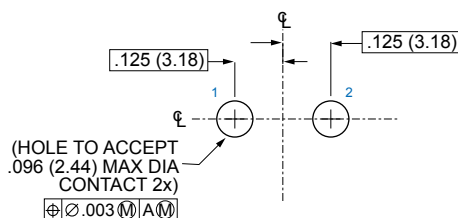
Pin Connector



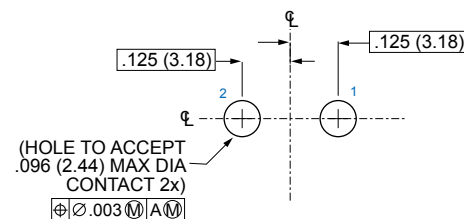
Socket Connector



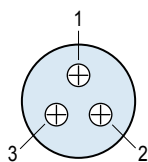
**Insert Arrangement
12-2, 13-2, 15-2**
2 #12 Contacts



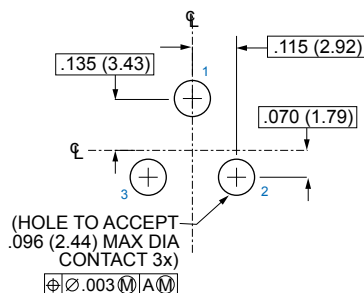
Pin Connector



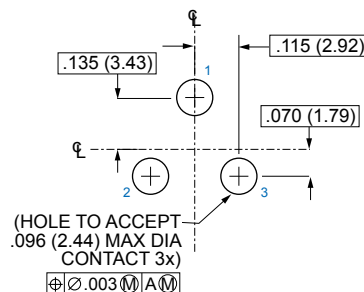
Socket Connector



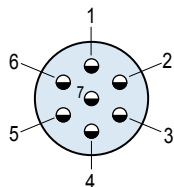
**Insert Arrangement
12-3, 13-3, 15-3**
3 #12 Contacts



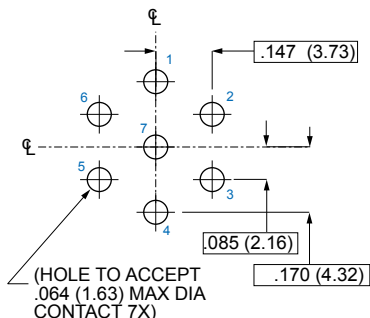
Pin Connector



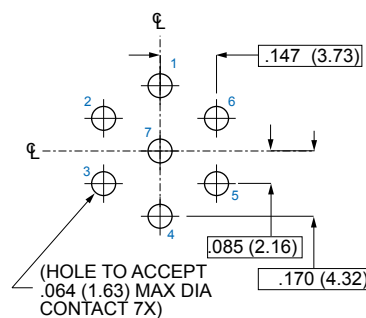
Socket Connector



**Insert Arrangement
12-7, 13-7, 15-7**
7 #16 Contacts



Pin Connector



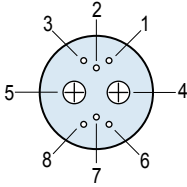
Socket Connector

Series 80 Mighty Mouse Straight PCB Footprints

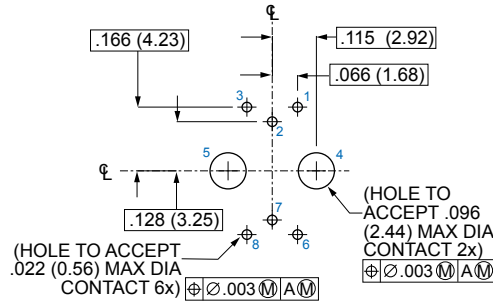


Series 80
Mighty Mouse

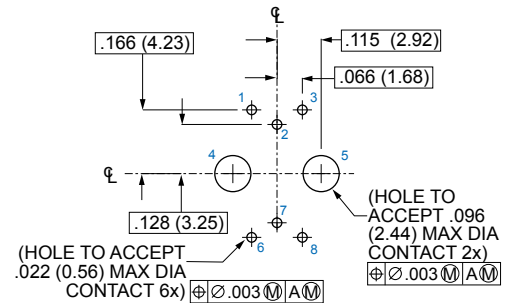
Component Mounting Side of PCB



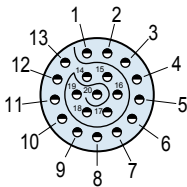
Insert Arrangement
12-200, 13-200, 15-200
2 #12 Contacts
6 #23 Contacts



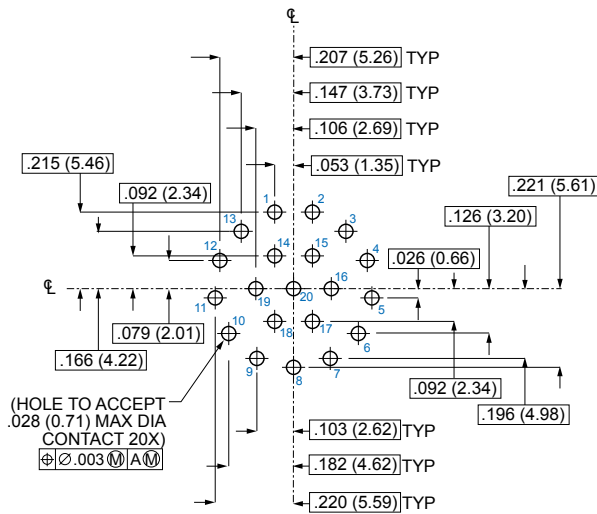
Pin Connector



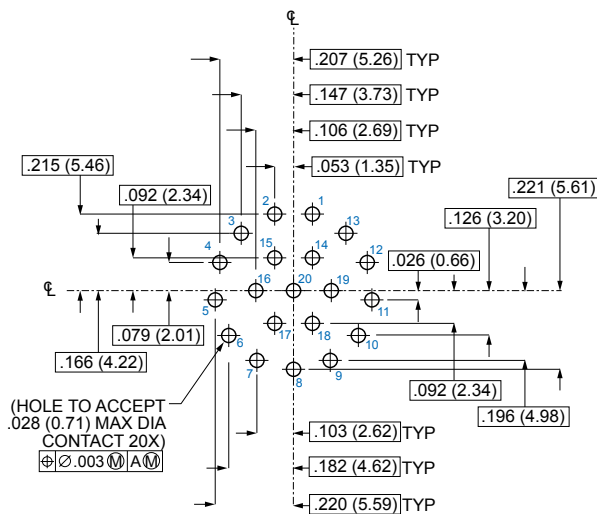
Socket Connector



Insert Arrangement
12-220, 13-220, 15-220
20 #20HD Contacts

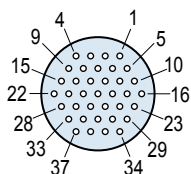


Pin Connector

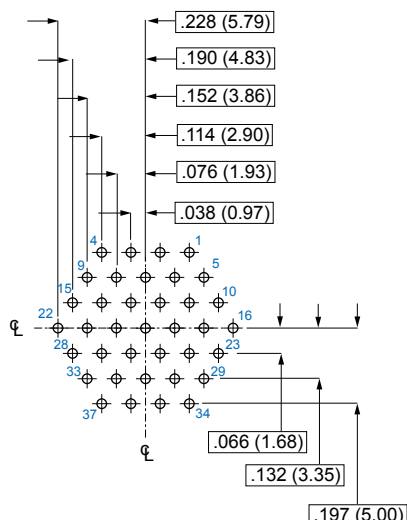


Socket Connector

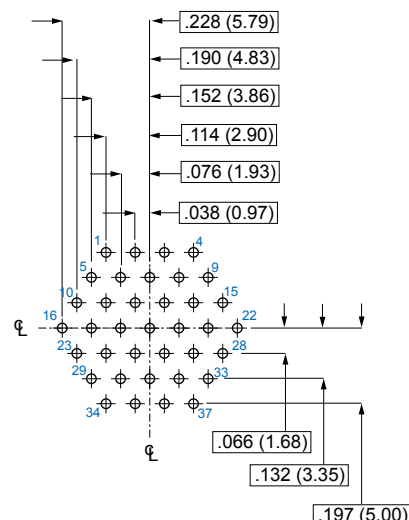
Component Mounting Side of PCB



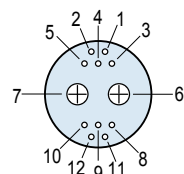
**Insert Arrangement
12-37, 13-37, 15-37**
37 #23 Contacts
.022 (0.56) Max. Dia. Tail



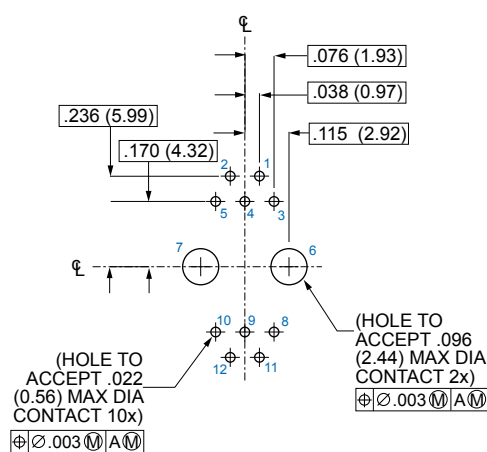
Pin Connector



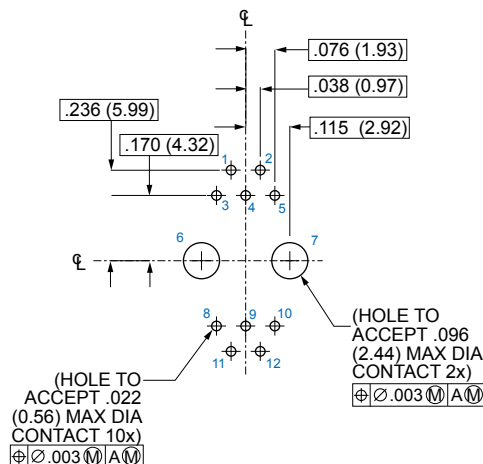
Socket Connector



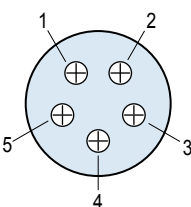
**Insert Arrangement
12-201, 13-201, 15-201**
2 #12 Contacts
10 #23 Contacts



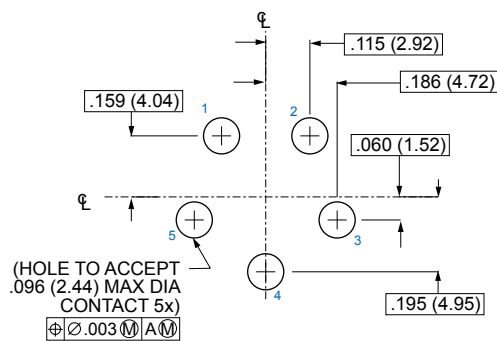
Pin Connector



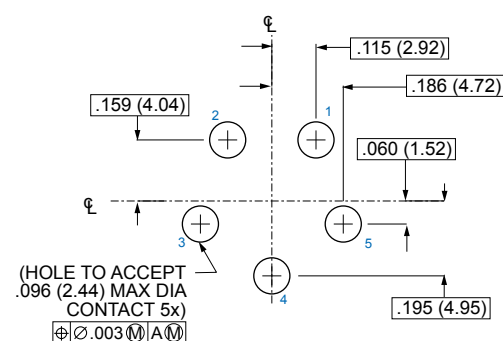
Socket Connector



**Insert Arrangement
14-5, 16-5, 18-5**
5 #12 Contacts



Pin Connector



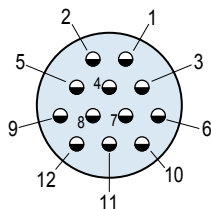
Socket Connector

Series 80 Mighty Mouse Straight PCB Footprints

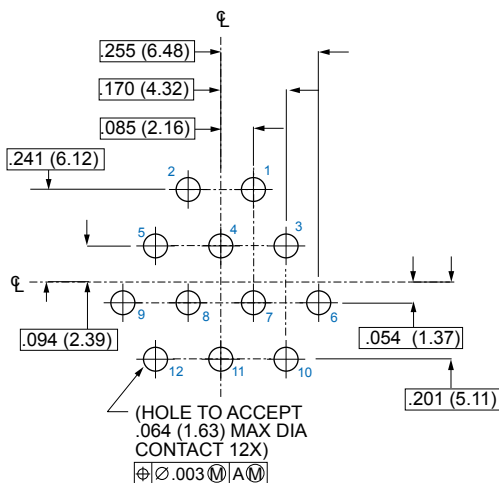


Series 80
Mighty Mouse

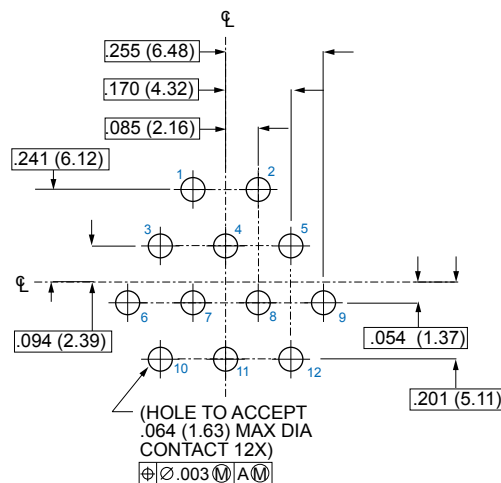
Component Mounting Side of PCB



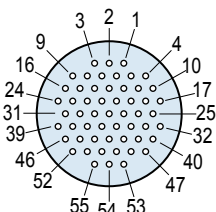
Insert Arrangement
14-12, 16-12, 18-12
12 #16 Contacts



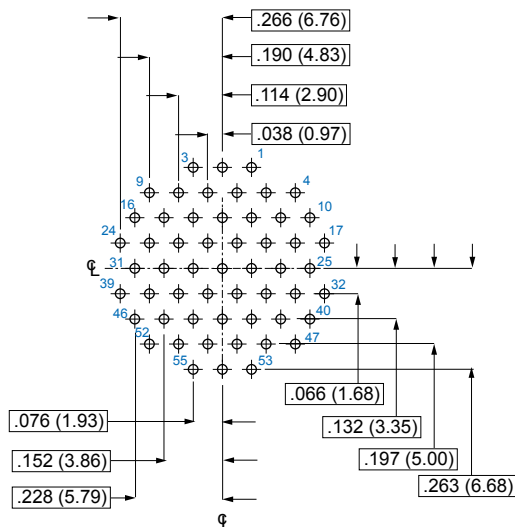
Pin Connector



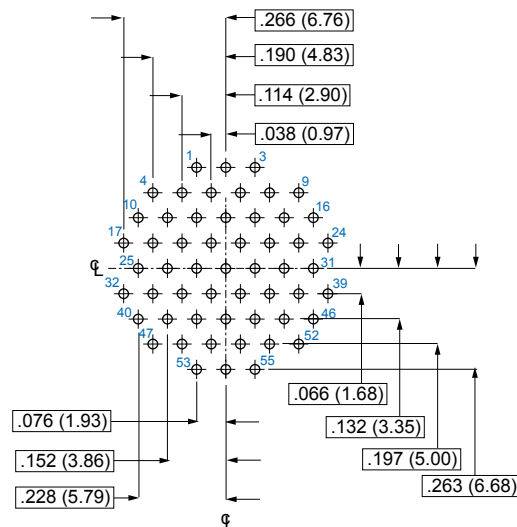
Socket Connector



Insert Arrangement
14-55, 16-55, 18-55
55 #23 Contacts
.022 (0.56) Max. Dia. Tail

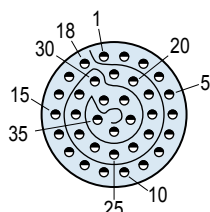


Pin Connector

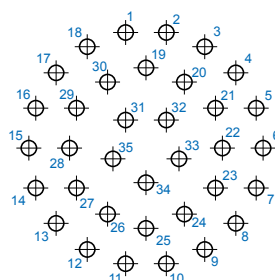


Socket Connector

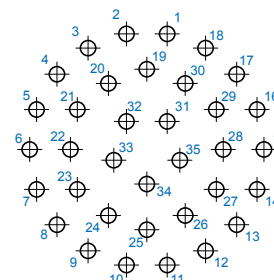
Component Mounting Side of PCB



Insert Arrangement
14-235, 16-235,
18-235
35 #20HD Contacts
.028 (0.71) Max. Dia. Tail

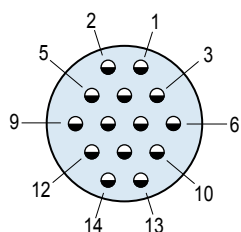


Pin Connector

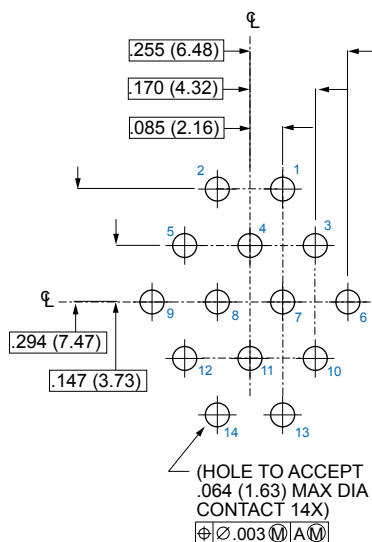


Socket Connector

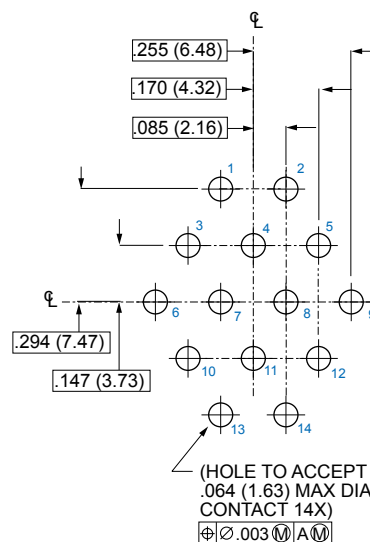
Pin No.	In.	mm.	In.	mm.	Pin No.	In.	mm.	In.	mm.	Pin No.	In.	mm.	In.	mm.
1	-.053	-1.35	.301	7.65	13	-.234	-5.94	-.196	-4.98	25	.000	0.00	-.209	-5.31
2	.053	1.35	.301	7.65	14	-.287	-7.29	-.104	-2.64	26	-.100	-2.54	-.172	-4.37
3	.153	3.89	.264	6.71	15	-.305	-7.75	.000	0.00	27	-.181	-4.60	-.104	-2.64
4	.234	5.94	.196	4.98	16	-.287	7.29	.104	2.64	28	-.199	-5.05	.000	0.00
5	.287	7.29	.104	2.64	17	-.234	-5.94	.196	4.98	29	-.181	-4.60	.104	2.64
6	.305	7.75	.000	0.00	18	-.153	-3.89	.264	6.71	30	-.100	-2.54	.172	4.37
7	.287	7.29	-.104	-2.64	19	.000	0.00	.209	5.31	31	-.053	-1.35	.073	1.85
8	.234	5.94	-.196	-4.98	20	.100	2.54	.172	4.37	32	.053	1.35	.073	1.85
9	.153	3.89	-.264	-6.71	21	.181	4.60	.104	2.64	33	.086	2.18	-.028	-0.71
10	.053	1.35	-.301	-7.65	22	.199	5.05	.000	0.00	34	.000	0.00	-.090	-2.29
11	-.053	-1.35	-.301	-7.65	23	.181	4.60	-.104	-2.64	35	-.086	-2.18	-.028	-0.71
12	-.153	-3.89	-.264	-6.71	24	.100	2.54	-.172	-4.37					



Insert Arrangement
15-14, 17-14, 19-14
14 #16 Contacts



Pin Connector

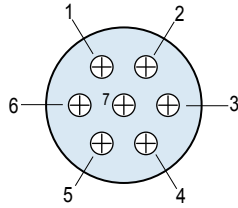


Socket Connector

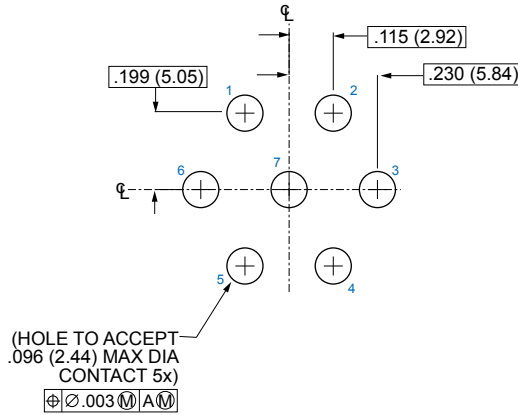
Series 80 Mighty Mouse Straight PCB Footprints



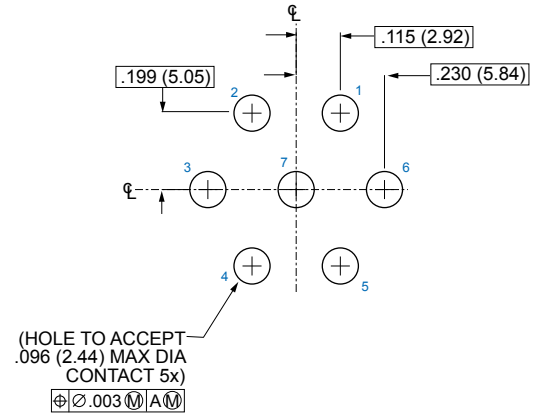
Component Mounting Side of PCB



Insert Arrangement
15-7, 17-7, 19-7
7 #12 Contacts

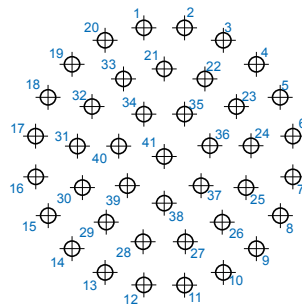


Pin Connector

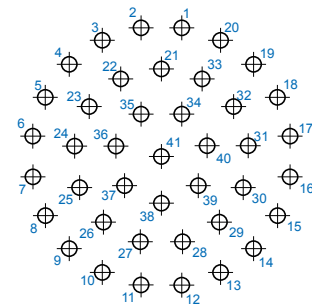


Socket Connector

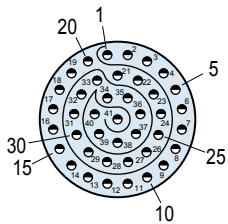
C



Pin Connector



Socket Connector

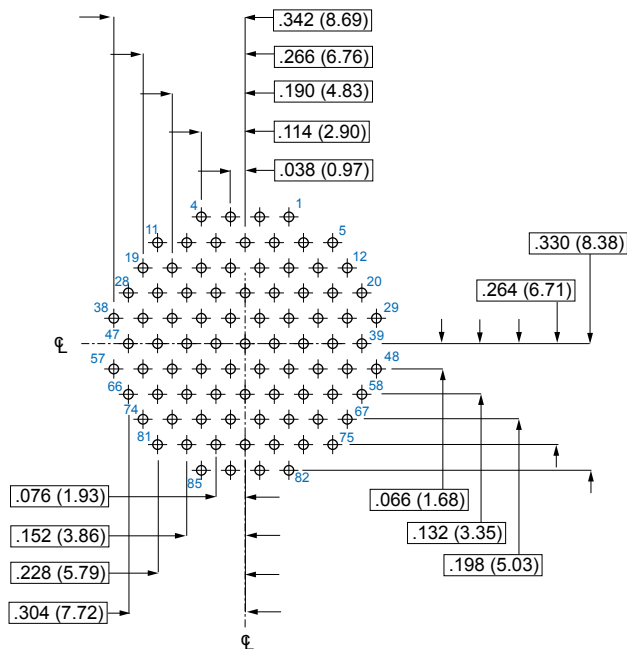


Insert Arrangement
15-241, 16-241, 18-241
41 #20HD Contacts
.028 (0.71) Max. Dia. Tail

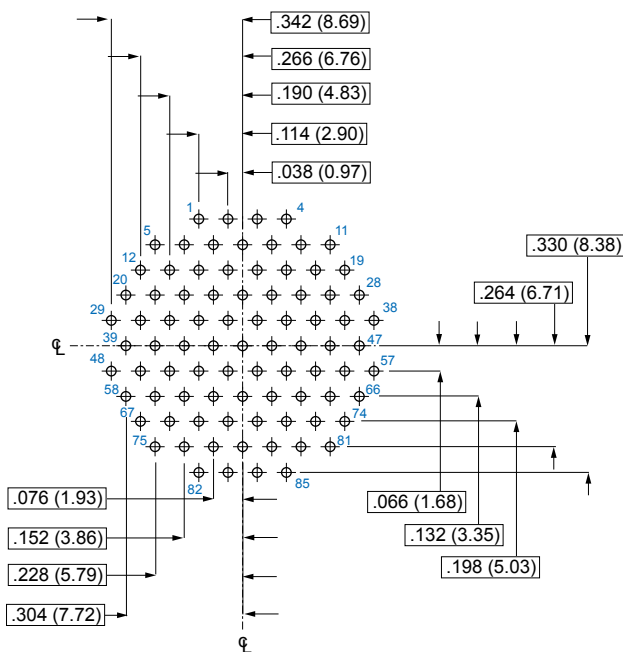
Pin No.	X		Y		Pin No.	X		Y		Pin No.	X		Y	
	In.	mm.	In.	mm.		In.	mm.	In.	mm.		In.	mm.	In.	mm.
1	-.053	-1.35	.335	8.51	15	-.302	-7.67	-.154	-3.91	29	-.151	-3.84	-.171	-4.34
2	.053	1.35	.335	8.51	16	-.335	-8.51	-.053	-1.35	30	-.213	-5.41	-.081	-2.06
3	.154	3.91	.302	7.67	17	-.335	-8.51	.053	1.35	31	-.226	-5.74	.028	0.71
4	.240	6.10	.240	6.10	18	-.302	-7.67	.154	3.91	32	-.188	-4.78	.130	3.30
5	.302	7.67	.154	3.91	19	-.240	-6.10	.240	6.10	33	-.106	-2.69	.202	5.13
6	.335	8.51	.053	1.35	20	-.154	-3.91	.302	7.67	34	-.053	-1.35	.110	2.79
7	.335	8.51	-.053	-1.35	21	.000	0.00	.228	5.79	35	.053	1.35	.110	2.79
8	.302	7.67	-.154	-3.91	22	.106	2.69	.202	5.13	36	.119	3.02	.027	0.69
9	.240	6.10	-.240	-6.10	23	.188	4.78	.130	3.30	37	.096	2.44	-.076	-1.93
10	.154	3.91	-.302	-7.67	24	.226	5.74	.028	0.71	38	.000	0.00	-.122	-3.10
11	.053	1.35	-.335	-8.51	25	.213	5.41	-.081	-2.06	39	-.096	-2.44	-.076	-1.93
12	-.053	-1.35	-.335	-8.51	26	.151	3.84	-.171	-4.34	40	-.119	-3.02	.027	0.69
13	-.154	-3.91	-.302	-7.67	27	.055	1.40	-.222	-5.64	41	.000	0.00	.000	0.00
14	-.240	-6.10	-.240	-6.10	28	-.055	-1.40	-.222	-5.64					

Series 80 Mighty Mouse Straight PCB Footprints

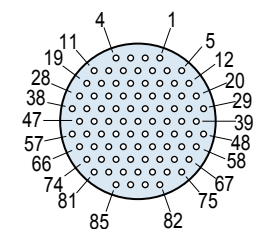
Component Mounting Side of PCB



Pin Connector



Socket Connector



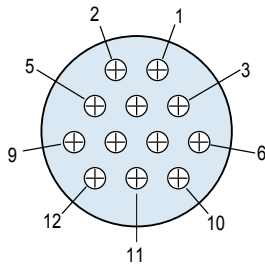
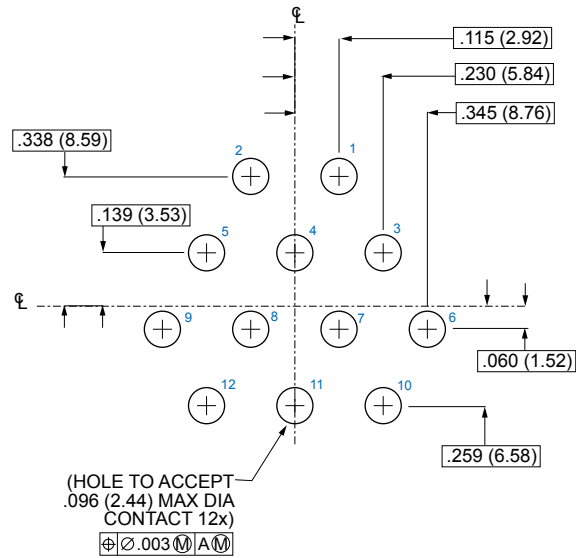
Insert Arrangement
15-85, 17-85, 19-85
85 #23 Contacts
.022 (0.56) Max. Dia. Tail

Series 80 Mighty Mouse Straight PCB Footprints



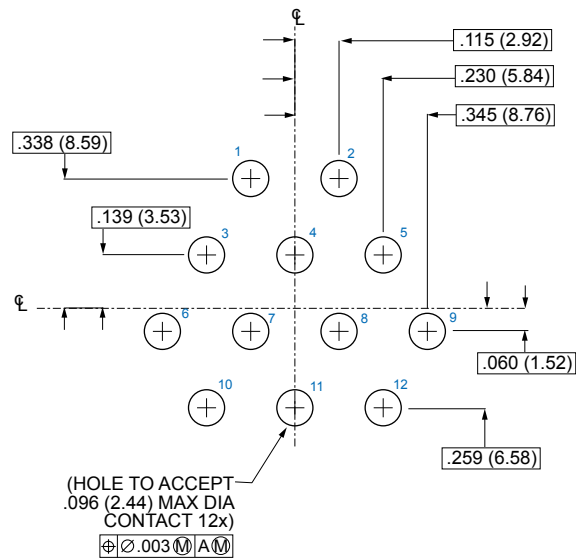
Series 80
Mighty Mouse

Component Mounting Side of PCB



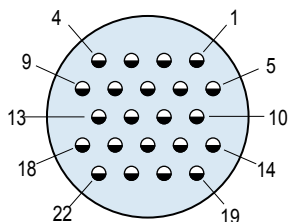
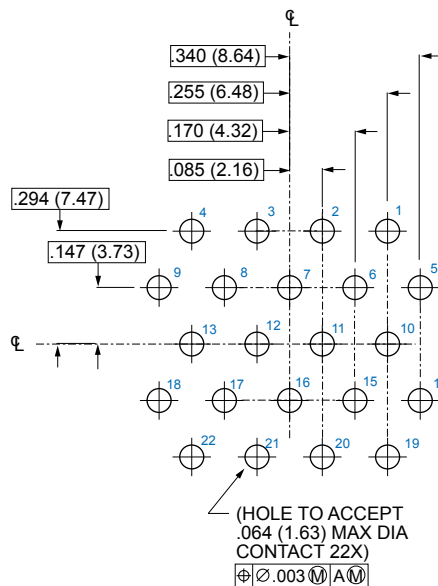
Insert Arrangement
21-12, 23-12
 12 #12 Contacts

Pin Connector



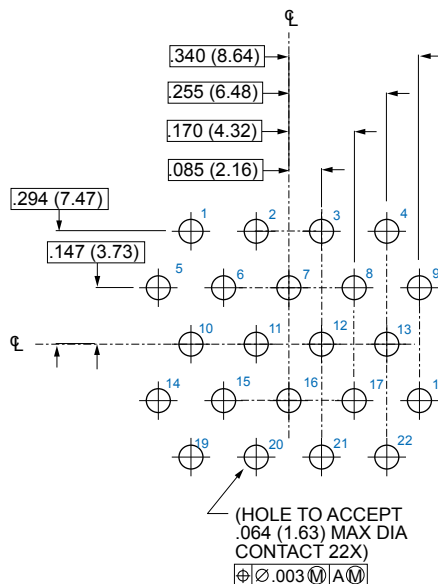
Socket Connector

Component Mounting Side of PCB



Insert Arrangement
21-22, 23-22
22 #16 Contacts

Pin Connector



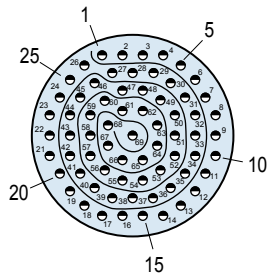
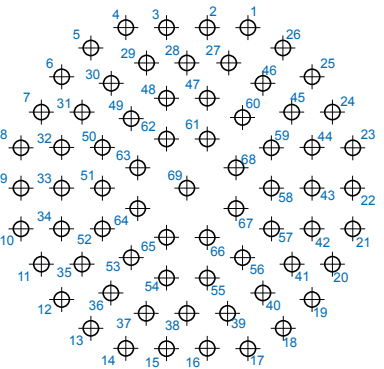
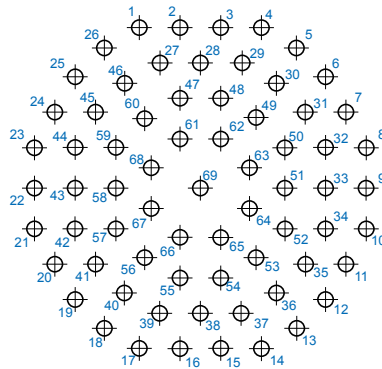
Socket Connector

Series 80 Mighty Mouse Straight PCB Footprints



Series 80
Mighty Mouse

Component Mounting Side of PCB



Insert Arrangement
21-269, 23-269
69 #20HD Contacts
.028 (0.71) Max. Dia. Tail

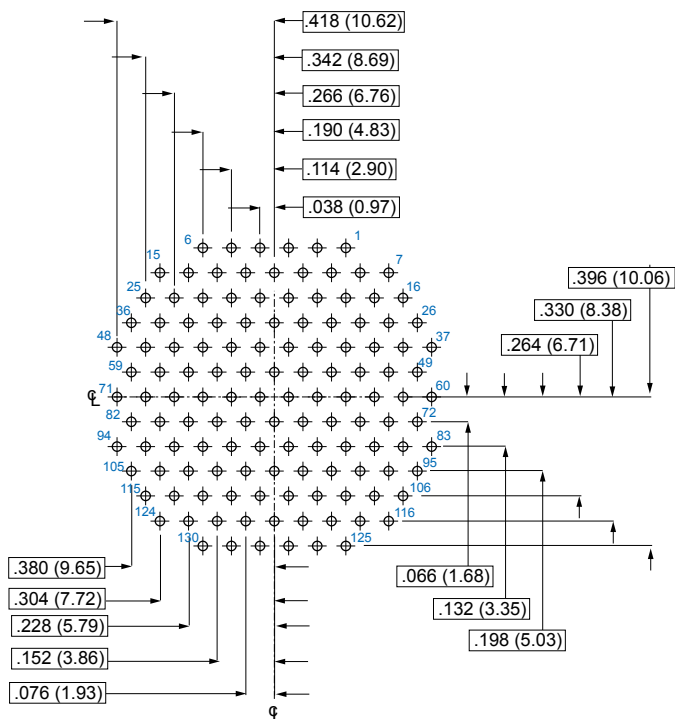
Pin Connector

Socket Connector

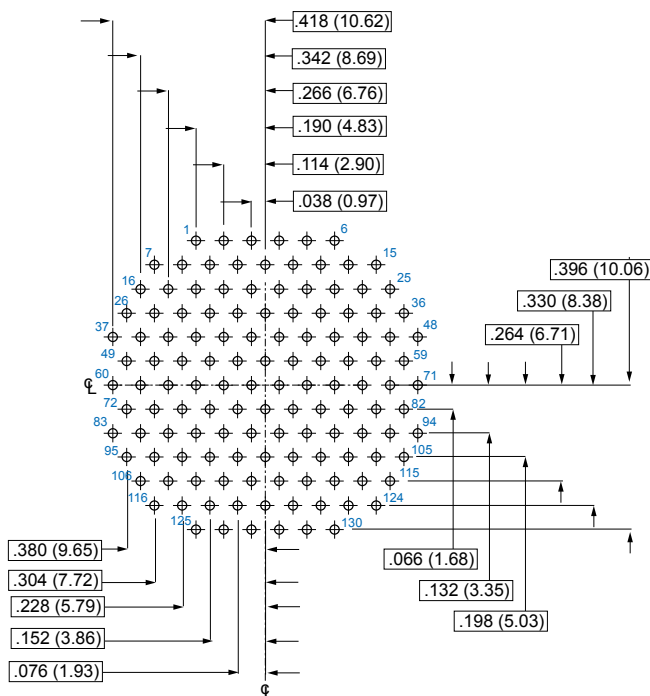
Pin No.	X		Y		Pin No.	X		Y		Pin No.	X		Y	
	In.	mm.	In.	mm.		In.	mm.	In.	mm.		In.	mm.	In.	mm.
1	-.159	-4.04	.418	10.62	24	-.379	-9.63	.198	5.03	47	-.053	-1.35	.234	5.94
2	-.053	-1.35	.418	10.62	25	-.326	-8.28	.290	7.37	48	.053	1.35	.234	5.94
3	.053	1.35	.418	10.62	26	-.251	-6.38	.365	9.27	49	.145	3.68	.181	4.60
4	.159	4.04	.418	10.62	27	-.106	-2.69	.326	8.28	50	.220	5.59	.106	2.69
5	.251	6.38	.365	9.27	28	.000	0.00	.326	8.28	51	.220	5.59	.000	0.00
6	.326	8.28	.290	7.37	29	.106	-2.69	.326	8.28	52	.220	5.59	-.106	-2.69
7	.379	9.63	.198	5.03	30	.198	5.03	.273	6.93	53	.145	3.68	-.181	-4.60
8	.432	10.97	.106	2.69	31	.273	6.93	.198	5.03	54	.053	1.35	-.234	-5.94
9	.432	10.97	.000	0.00	32	.326	8.28	.106	2.69	55	-.053	-1.35	-.234	-5.94
10	.432	10.97	-.106	-2.69	33	.326	8.28	.000	0.00	56	-.145	-3.68	-.181	-4.60
11	.379	9.63	-.198	-5.03	34	.326	8.28	-.106	-2.69	57	-.220	-5.59	-.106	-2.69
12	.326	8.28	-.290	-7.37	35	.273	6.93	-.198	-5.03	58	.220	-5.59	.000	0.00
13	.251	6.38	-.365	-9.27	36	.198	5.03	-.273	-6.93	59	-.220	-5.59	.106	2.69
14	.159	4.04	-.418	-10.62	37	.106	2.69	-.326	-8.28	60	-.145	-3.68	.181	4.60
15	.053	1.35	-.418	-10.62	38	.000	0.00	-.326	-8.28	61	-.053	-1.35	.128	3.25
16	-.053	-1.35	-.418	-10.62	39	-.106	-2.69	-.326	-8.28	62	.053	1.35	.128	3.25
17	-.159	-4.04	-.418	-10.62	40	-.198	-5.03	-.273	-6.93	63	.128	3.25	.053	1.35
18	-.251	-6.38	-.365	-9.27	41	-.273	-6.93	-.198	-5.03	64	.128	3.25	-.053	-1.35
19	-.326	-8.28	-.290	-7.37	42	-.326	-8.28	-.106	-2.69	65	.053	1.35	-.128	-3.25
20	-.379	-9.63	-.198	-5.03	43	-.326	-8.28	.000	0.00	66	-.053	-1.35	-.128	-3.25
21	-.432	-10.97	-.106	-2.69	44	-.326	-8.28	.106	2.69	67	-.128	-3.25	-.053	-1.35
22	-.432	-10.97	.000	0.00	45	-.273	-6.93	.198	5.03	68	-.128	-3.25	.053	1.35
23	-.432	-10.97	.106	2.69	46	-.198	-5.03	.273	6.93	69	.000	0.00	.000	0.00

Series 80 Mighty Mouse Straight PCB Footprints

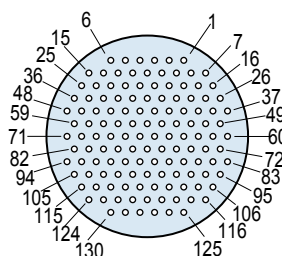
Component Mounting Side of PCB



Pin Connector



Socket Connector



Insert Arrangement

21-130, 23-130

130 #23 Contacts

.022 (0.56) Max. Dia. Tail

Series 80 Mighty Mouse Contact Arrangement Table



Series 80 Mighty Mouse Contact Arrangement table

						Contact Arrangement					
Contact Size and Qty						Series 800	Series 801	Series 802	Series 803	Series 804	Series 805
#23	#20	#20HD	#16	#12							
Size #23 Contacts 5 Amp Max. Current 500 VAC #22-#28 AWG	3					5-3	5-3	5-3	5-3	5-3	Not Avail.
	4					6-4	6-4	6-4	6-4	6-4	8-4
	6					6-6	6-6	6-6	6-6	6-6	8-6
	7					6-7	6-7	6-7	6-7	6-7	8-7
	10					7-10	7-10	7-10	7-10	7-10	9-10
	13					8-13	8-13	8-13	8-13	8-13	10-13
	19					9-19	9-19	9-19	9-19	9-19	11-19
	26					10-26	10-26	10-26	10-26	10-26	12-26
	37					12-37	13-37	12-37	12-37	12-37	15-37
	55					Not Avail.	16-55	14-55	14-55	14-55	18-55
Size #20HD Contacts 7.5 Amp Max. Current 750 VAC #20-#24 AWG	85					Not Avail.	17-85	15-85	Not Avail.	Not Avail.	19-85
	130					Not Avail.	21-130	21-130	Not Avail.	Not Avail.	23-130
			3			6-23	6-23	6-23	6-23	6-23	8-23
			5			7-25	7-25	7-25	7-25	7-25	9-25
			8			8-28	8-28	8-28	8-28	8-28	10-28
Size #16 Contacts 13 Amp Max. Current 1800 VAC #16-#20 AWG			10			9-210	9-210	9-210	9-210	9-210	11-210
			20			12-220	13-220	12-220	12-220	12-220	15-220
			35			Not Avail.	16-235	14-235	14-235	14-235	18-235
			41			Not Avail.	17-241	15-241	Not Avail.	Not Avail.	19-241
			69			Not Avail.	21-269	21-269	Not Avail.	Not Avail.	23-269
Size #12 Contacts 23 Amp Max. Current 1800 VAC #12-#14 AWG				1		6-1	6-1	6-1	6-1	6-1	8-1
				2		8-2	8-2	8-2	8-2	8-2	10-2
				4		9-4	9-4	9-4	9-4	9-4	11-4
				5		10-5	10-5	10-5	10-5	10-5	12-5
				7		12-7	13-7	12-7	12-7	12-7	15-7
				12		Not Avail.	16-12	14-12	14-12	14-12	18-12
				14		Not Avail.	17-14	15-14	Not Avail.	Not Avail.	19-14
				22		Not Avail.	21-22	21-22	Not Avail.	Not Avail.	23-22
Size #12 Contacts 23 Amp Max. Current 1800 VAC #12-#14 AWG				1		7-1	7-1	7-1	7-1	7-1	9-1
				2		10-2	10-2	10-2	10-2	10-2	12-2
				2		12-2	13-2	12-2	12-2	12-2	15-2
				3		12-3	13-3	12-3	12-3	12-3	15-3
				5		Not Avail.	16-5	14-5	14-5	14-5	18-5
				7		Not Avail.	17-7	15-7	Not Avail.	Not Avail.	19-7
				12		Not Avail.	21-12	21-12	Not Avail.	Not Avail.	23-12
Contact Arrangements with Mixed Size (Combo) Layouts	4	2				8-200	8-200	8-200	8-200	8-200	10-200
	8	2				9-201	9-201	9-201	9-201	9-201	11-201
	4			2		9-200	9-200	9-200	9-200	9-200	11-200
	8			2		10-202	10-202	10-202	10-202	10-202	12-202
	4				2	10-201	10-201	10-201	10-201	10-201	12-201
	6				2	12-200	13-200	12-200	12-200	12-200	15-200
	10				2	12-201	13-201	12-201	12-201	12-201	15-201
	12				1	10-200	10-200	10-200	10-200	10-200	12-200



800-013 Series 800 Mighty Mouse Hermetic Receptacles with UN Mating Thread



Series 800 Hermetic Receptacles feature 304L stainless steel shells, fused vitreous glass insulators and Alloy 52 iron alloy contacts.

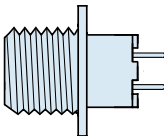
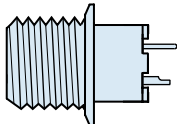
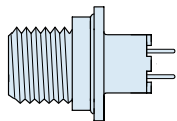
1 X 10⁻⁷ cc/second maximum helium leak rate.

Three Shell Styles: solder mount, jam nut or square flange.

Solder Cup Contacts for wire attachment, or **PC Tail Contacts** for attachment to flexible or rigid circuits.

Series 800 Hermetic

C

HOW TO ORDER					
Sample Part Number					
800-013	-07	Z1	7-10	P	Z
Series	Shell Style	Shell Material / Finish	Shell Size- Insert Arrangement	Contact Type	Shell Key Position
800-013 Hermetic Receptacle	 -02 Square Flange	Z1 Stainless Steel / Passivated ZL Stainless Steel / Nickel Plated	See C-23 for Contact Arrangements	P Pin, Solder Cup	N Normal
	 -03 Solder Mount	*Titanium and Inconel® shell materials are available. Consult factory for ordering information.		C Pin, PC Tail	X Pos. X
	 -07 Jam Nut			S Socket, Solder Cup	Y Pos. Y
				D Sockets, PC Tail	Z Pos. Z

Series 800 Mighty Mouse Hermetic Receptacles with UN Mating Thread Torque Values and Panel Cutouts



SERIES 800 RECOMMENDED TORQUE VALUES

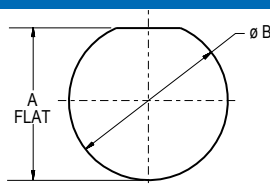
Shell Size	Coupling Torque				Jam Nut				Backshell			
	In-Lbs.		N-m		In-Lbs.		N-m		In-Lbs.		N-m	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
5	13	17	1.5	1.9	20	25	2.2	2.8	13	17	1.5	1.9
6	18	22	2.0	2.5	20	25	2.2	2.8	18	22	2.0	2.5
7	20	25	2.3	2.8	20	25	2.2	2.8	30	40	3.4	4.5
8	30	40	3.4	4.5	20	25	2.2	2.8	30	40	3.4	4.5
9	30	40	3.4	4.5	25	30	2.8	3.3	35	45	4.0	5.1
10	35	45	4.0	5.1	25	30	2.8	3.3	35	45	4.0	5.1
12	35	45	4.0	5.1	25	30	2.8	3.3	35	45	4.0	5.1

C

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

SERIES 800 PANEL CUTOUTS

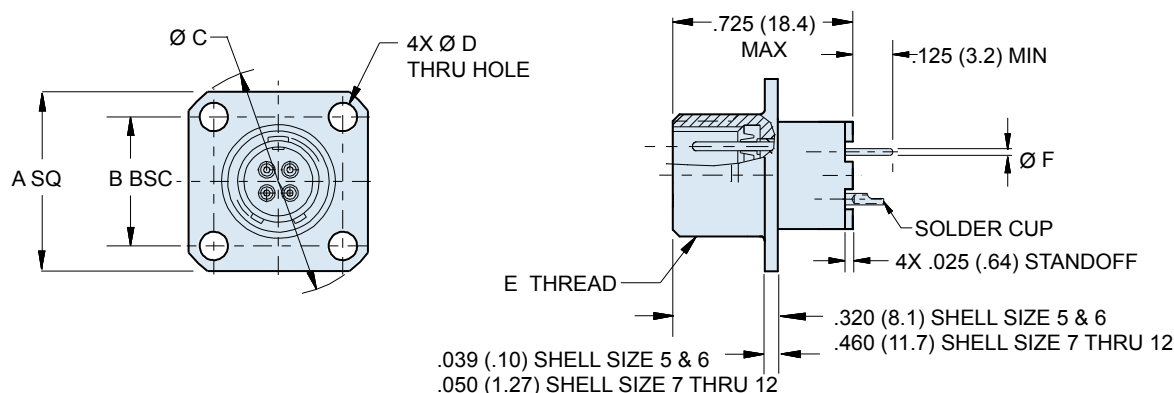


Shell Size	A Flat		øB	
	In.	mm.	In.	mm.
5	.302 / .298	7.67 / 7.57	.318	8.08
6	.365 / .361	9.27 / 9.17	.386	9.80
7	.424 / .420	10.77 / 10.67	.449	11.40
8	.486 / .482	12.34 / 12.24	.510	12.95
9	.543 / .539	13.79 / 13.69	.574	14.58
10	.617 / .613	15.67 / 15.57	.635	16.12
12	.725 / .721	18.42 / 18.31	.760	19.30



800-013-02 and 800-013-03 Series 800 Mighty Mouse Hermetic Receptacles Square Flange Mount with UN Mating Thread Connector Dimensions

800-013-02 Square Flange Dimensions



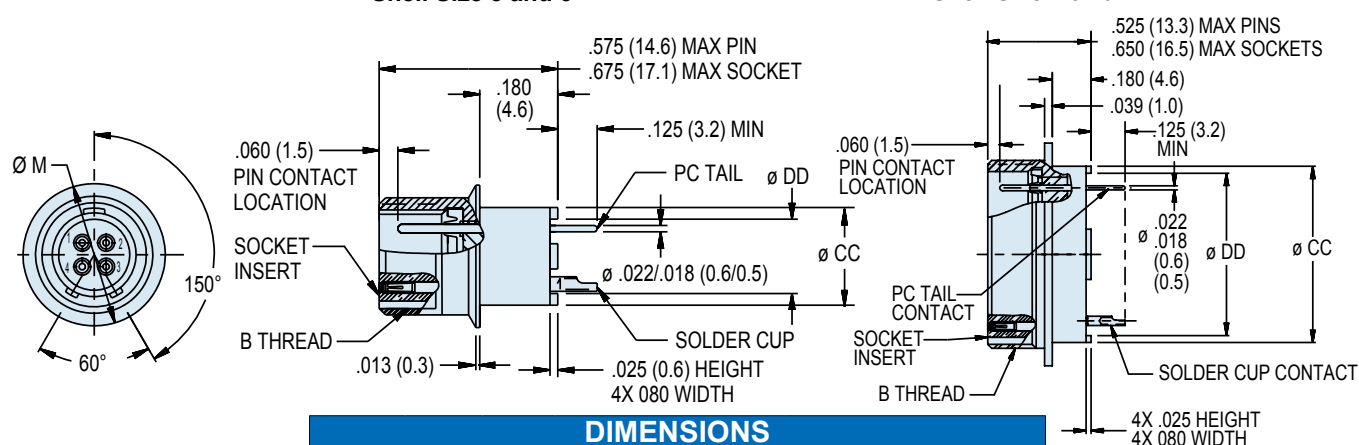
800-013-02 SQUARE FLANGE HERMETIC RECEPTACLE DIMENSIONS

Shell Size	A SQ		B		Ø C		Ø D		E Threads Mating	Ø F PC TAIL DIA. ± .002 (0.05)
	In.	mm.	In.	mm.	In.	mm.	In. ± .005	mm. ± 0.13		
5	.527	13.39	.363	9.22	.680	17.27	.094	2.39	.3125-28 UN-2A	Size #23
6	.588	14.92	.423	10.74	.750	19.05	.094	2.39	.3750-28 UN-2A	.020 (0.51)
7	.650	16.51	.483	12.27	.830	21.08	.130	3.30	.4375-28 UNEF-2A	Size #20
8	.710	18.03	.542	13.77	.938	23.83	.130	3.30	.5000-32 UN-2A	.026 (0.66)
9	.938	23.83	.719	18.26	1.250	31.75	.130	3.30	.5625-32 UN-2A	Size #16
10	.938	23.83	.719	18.26	1.250	31.75	.130	3.30	.6250-32 UN-2A	.062 (1.57)
12	1.031	26.19	.812	20.62	1.375	34.93	.130	3.30	.7500-28 UN-2A	Size #12
										.094 (2.34)

800-013-03 Solder Mount Dimensions

Shell Size 5 and 6

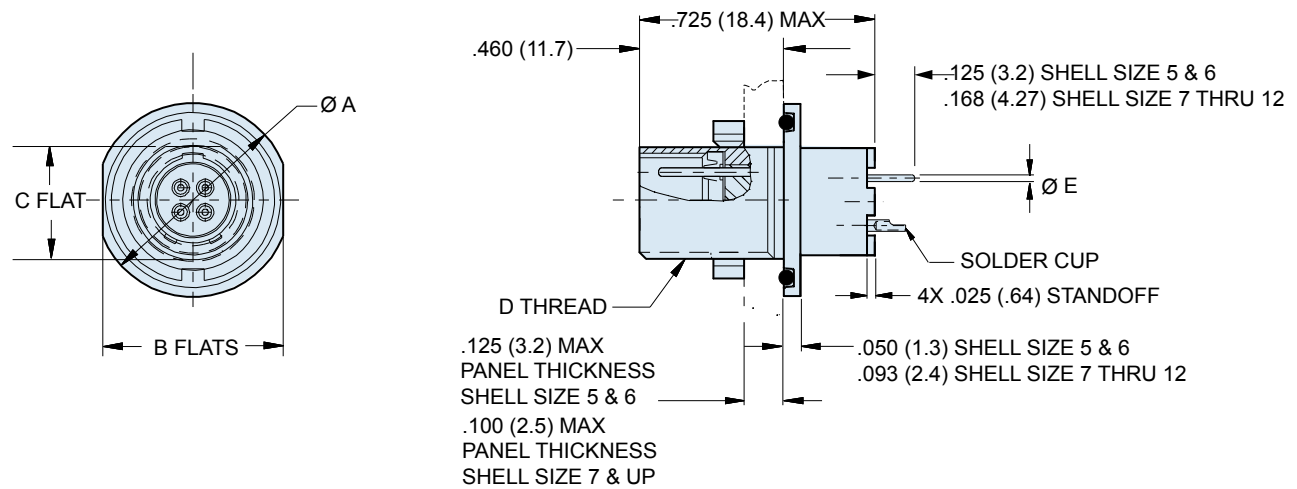
Shell Size 7 thru 12



DIMENSIONS

Shell Size	Ø A		B Threads	Ø C PC TAIL DIA. ± .002 (0.05)
	In.	mm.		
5	.400	10.16	.3125-28 UN-2A	Size #22
6	.455	11.56	.3750-28 UN-2A	.020 (0.51)
7	.520	13.21	.4375-28 UNEF-2A	Size #20
8	.650	16.51	.5000-32 UN-2A	.026 (0.66)
9	.764	19.41	.5625-32 UN-2A	Size #16
10	.775	19.69	.6250-32 UN-2A	.062 (1.57)
12	.858	21.79	.7500-28 UN-2A	Size #12
				.094 (2.34)

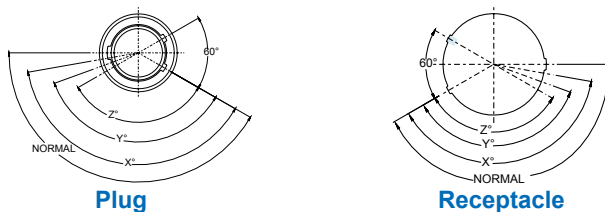
800-013-07
Series 800 Mighty Mouse Hermetic Receptacles
 Jam Nut Mount with UN Mating Thread
 Hermetic Connector Dimensions



DIMENSIONS

Shell Size	$\varnothing A$		$\varnothing B$		C		D Threads Mating	$\varnothing E$ PC TAIL DIA. $\pm .002$ (0.05)
	In.	mm.	In.	mm.	In.	mm.		
5	.541	13.74	.500	12.70	.285	7.24	.3125-28 UN-2A	Size #23
6	.610	15.49	.562	14.27	.352	8.94	.3750-28 UN-2A	.020 (0.51)
7	.670	17.02	.635	16.13	.411	10.44	.4375-28 UNEF-2A	Size #20
8	.775	19.69	.735	18.67	.473	12.01	.5000-32 UN-2A	.026 (0.66)
9	.875	22.23	.806	20.47	.530	13.46	.5625-32 UN-2A	Size #16
10	.980	24.89	.940	23.88	.604	15.34	.6250-32 UN-2A	.062 (1.57)
12	1.062	26.97	.986	25.04	.712	18.08	.7500-28 UN-2A	Size #12
								.094 (2.34)

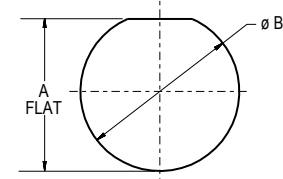
SERIES 800 KEY POSITIONS



Key Position	Key Rotation
Normal (N)	150°
X	140°
Y	130°
Z	120°

Shell size 5 and 6: master key is located at top dead center for normal (N) position. Shell size 7 thru 12: master key is rotated 90° from TDC.

SERIES 800 PANEL CUTOUTS



Shell Size	A Flat		$\varnothing B$	
	In.	mm.	In.	mm.
5	.302 / .298	7.67 / 7.57	.318	8.08
6	.365 / .361	9.27 / 9.17	.386	9.80
7	.424 / .420	10.77 / 10.67	.449	11.40
8	.486 / .482	12.34 / 12.24	.510	12.95
9	.543 / .539	13.79 / 13.69	.574	14.58
10	.617 / .613	15.67 / 15.57	.635	16.12
12	.725 / .721	18.42 / 18.31	.760	19.30



801-012 Series 801 Mighty Mouse Hermetic Receptacle Double-Start ACME Threads Ordering Information



Series 801 Hermetic Receptacles feature 304L stainless steel shells, fused vitreous glass insulators and Alloy 52 iron alloy contacts.

1 X 10⁻⁷ cc/second maximum helium leak rate.

Three Shell Styles: solder mount, jam nut or square flange.

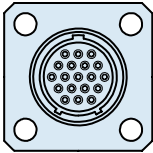
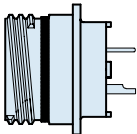
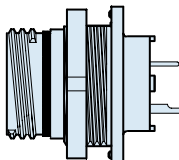
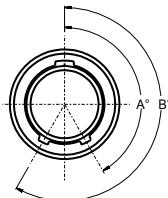
Solder Cup Contacts or **PC Tail Contacts** for attachment to flexible or rigid circuits or rigid boards.

Series 801 Solder Mount Hermetic

HOW TO ORDER

Sample Part Number

801-012 -03 Z1 7-10 P A

Series	Shell Style	Shell Material / Finish	Shell Size/Insert Arrangement	Contact Type	Shell Key Position																					
801-012 Hermetic Receptacles with Printed Circuit Board Contacts or Solder Cup Contacts		Z1 Stainless Steel / Passivated	See C-23 for Contact Arrangements	P Pin, Solder Cup	A Normal																					
	-02 Square Flange	ZL Stainless Steel / Nickel Plated		C Pin, PC Tail	B Pos. B																					
		*Titanium and Inconel® shell materials are available. Consult factory for ordering information.		E Pos. E																						
	-03 Solder Mount			F Pos. F																						
																										
	-07 Jam Nut				<table><tr><th></th><th>A°</th><th>B°</th></tr><tr><td>A</td><td>150°</td><td>210°</td></tr><tr><td>B</td><td>75°</td><td>210°</td></tr><tr><td>C</td><td>95°</td><td>230°</td></tr><tr><td>D</td><td>140°</td><td>275°</td></tr><tr><td>E</td><td>75°</td><td>275°</td></tr><tr><td>F</td><td>95°</td><td>210°</td></tr></table>		A°	B°	A	150°	210°	B	75°	210°	C	95°	230°	D	140°	275°	E	75°	275°	F	95°	210°
	A°	B°																								
A	150°	210°																								
B	75°	210°																								
C	95°	230°																								
D	140°	275°																								
E	75°	275°																								
F	95°	210°																								

801-012-02

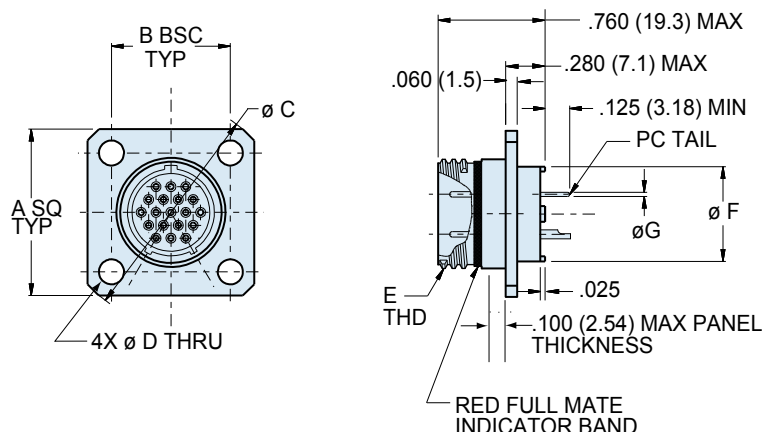
Series 801 Mighty Mouse Hermetic Receptacles

Double-Start ACME Threads • Square Flange

Connector Dimensions



HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



DIMENSIONS

Shell Size	A		B BSC		Ø C		Ø D		E Thread	Ø F		Ø G Tail Dia
	In.	mm.	In.	mm.	In.	mm.	In. ±.003	mm. ± 0.08		In.	mm.	
5	.530	13.46	.363	9.22	.680	17.27	.093	2.36	.3125-.05P-1L-2A	.244	6.20	#23 .018/.022 (0.46/0.56)
6	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.375-.05P-1L-2A	.330	8.38	
7	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.4375-.05P-1L-2A	.432	10.97	
8	.712	18.08	.545	13.84	.938	23.83	.093	2.36	.5000-.05P-1L-2A	.493	12.52	#16 .060/.064 (1.52/1.63)
9	.850	21.59	.607	15.42	1.125	28.58	.128	3.25	.5625-.05P-1L-2A	.551	14.00	
10	.890	22.61	.670	17.02	1.188	30.18	.128	3.25	.6250-.05P-1L-2A	.620	15.75	
13	1.030	26.16	.812	20.62	1.375	34.93	.128	3.25	.8125-1P-2L-2A	.703	17.86	#12 .092/.096 (2.34/2.44)
16	1.219	31.96	.981	24.92	1.625	41.28	.128	3.25	1.000-1P-2L-2A	.863	21.92	
17	1.280	32.51	1.060	26.92	1.700	43.18	.128	3.25	1.062-1P-2L-2A	.912	23.16	
21	1.430	36.32	1.205	30.61	1.938	49.23	.128	3.25	1.3125-1P-2L-2A	1.170	29.72	

SERIES 801 PANEL CUTOUT

Shell Size	Ø A		Ø B		Ø C	
	In.	mm.	In.	mm.	In.	mm.
5	.330	8.38	.363	9.22	.093	2.36
6	.390	9.91	.423	10.74	.093	2.36
7	.450	11.43	.483	12.27	.093	2.36
8	.510	12.95	.545	13.84	.093	2.36
9	.575	14.61	.607	15.42	.128	3.25
10	.640	16.26	.670	17.02	.128	3.25
13	.825	20.96	.812	20.65	.128	3.25
16	1.015	25.78	.981	24.92	.128	3.25
17	1.075	27.31	1.060	26.92	.128	3.25
21	1.325	33.66	1.205	30.61	.128	3.25

KEY POSITIONS

	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

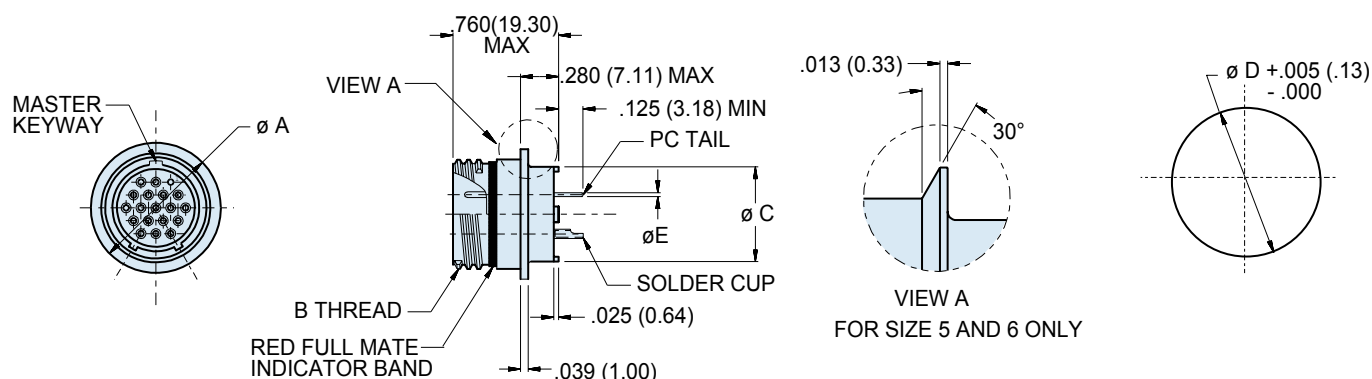


801-012-03

Series 801 Mighty Mouse Hermetic Receptacles

Double-Start ACME Threads • Solder Mount

Connector Dimensions



Solder Mount Hermetic
801-012-03

DIMENSIONS

Shell Size	Ø A		B Thread	Ø C		Ø D Panel Cutout		Ø L Tail Dia.
	In.	mm.		In.	mm.	In.	mm.	
5	.395	10.03	.3125-.05P-.1L-2A	.244	6.20	.319	8.10	#23
6	.455	11.56	.375-.05P-.1L-2A	.330	8.38	.376	9.55	.018/.022 (0.46/0.56)
7	.520	13.21	.4375-.05P-.1L-2A	.432	11.97	.438	11.13	#20
8	.580	14.73	.5000-.05P-.1L-2A	.493	12.52	.438	11.13	.024/.028 (0.61/0.71)
9	.645	16.38	.5625-.05P-.1L-2A	.551	14.00	.563	14.30	#16
10	.705	18.01	.6250-.05P-.1L-2A	.620	15.75	.438	11.13	.060/.064 (1.52/1.63)
13	.895	22.73	.8125-.1P-.2L-2A	.703	17.86	.814	20.68	#12
16	1.080	27.43	1.000-.1P-.2L-2A	.863	21.92	1.007	25.58	.092/.096 (2.34/2.44)
17	1.145	29.08	1.062-.1P-.2L-2A	.912	23.16	1.067	27.10	
21	1.395	35.43	1.3125-.1P-.2L-2A	1.170	29.72	1.320	33.53	

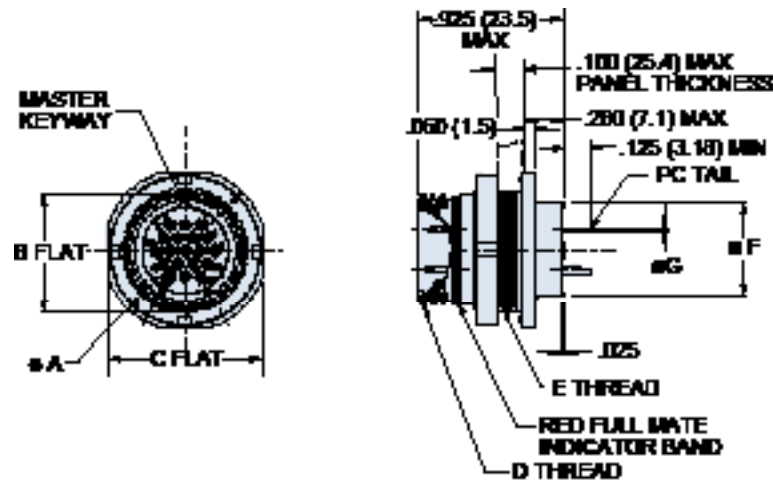
KEY POSITIONS

	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

801-012-07
Series 801 Mighty Mouse Hermetic Receptacle
 with Double-Start ACME Threads • Jam-Nut Mount
 Connector Dimensions

Glenair.

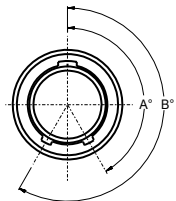
Series 80
Mighty Mouse



DIMENSIONS

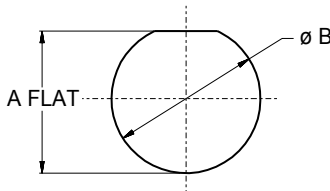
Shell Size	Ø A		B Flat		C Flat		D Thread	E Thread UN-2A	Ø F		Ø G Tail Dia.
	In.	mm.	In.	mm.	In.	mm.			In.	mm.	
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.375-28	.244	6.20	#23
6	.635	16.13	.410	10.41	.595	15.11	.375-.05P-.1L-2A	.4375-28	.330	8.38	.018/.022 (0.46/0.56)
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-1L2A	.5625-32	.432	10.97	#20
8	.755	19.18	.536	13.61	.723	18.36	.5000-.05P-1L-2A	.5625-32	.493	12.52	.024/.028 (0.61/0.71)
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.625-28	.551	14.00	#16
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-1L-2A	.6875-28	.620	15.75	.060/.064 (1.52/1.63)
13	1.078	27.38	.845	21.46	1.044	26.52	.8125-.1P-.2L-2a	.875-28	.703	17.86	#12
16	1.264	32.11	1.022	25.96	1.230	31.24	1.000-.1P-.2L-2A	1.0625-20	.863	21.92	.092/.096 (2.34/2.44)
17	1.325	33.66	1.096	27.84	1.290	32.77	1.062-.1P-.2L-2A	1.125-28	.912	23.16	
21	1.625	41.28	1.345	34.16	1.577	40.06	1.3125-.1P-.2L-2A	1.375-28	1.170	29.72	

KEY POSITIONS



	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

SERIES 801 JAM NUT PANEL CUTOUT



Shell Size	A Flat		Ø B	
	In. ± .002	mm. ± 0.05	In.	mm.
5	.360	9.14	.385	9.78
6	.420	10.67	.448	11.37
7	.551	14.00	.573	14.55
8	.551	14.00	.573	14.55
9	.609	15.47	.635	16.13
10	.671	17.04	.698	17.73
13	.859	21.82	.885	22.48
16	1.038	26.37	1.075	27.31
17	1.111	28.22	1.135	28.83
21	1.354	34.39	1.385	35.18



802-013 Series 802 "Aqua Mouse" Submersible Hermetic Receptacle Ordering Information



Series 802 Hermetic Receptacles feature gold plated iron alloy contacts and compression glass dielectric material. The 316L stainless steel connector shell provides excellent corrosion protection and is suitable for e-beam welding. The Viton® interfacial seal and piston o-ring offer improved resistance to harsh chemicals.

1 x 10⁻⁷ cc/Second Maximum Helium Leak Rate. Open face (unmated) pressure rating is 1000 PSI. When mated, Series 802 connectors withstand 3500 PSI hydrostatic pressure.

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

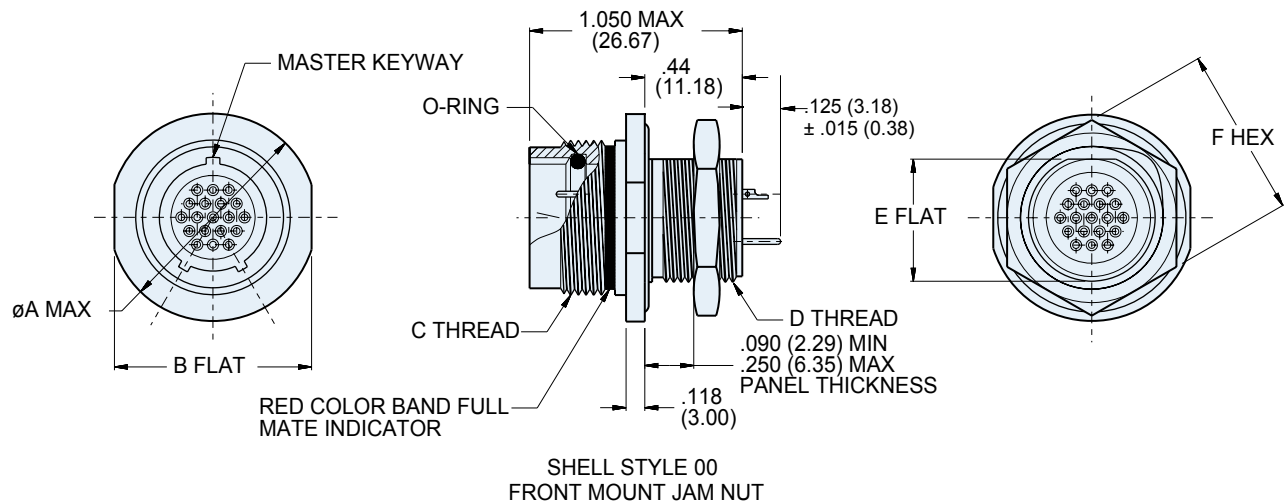
Style 00 Front Mount

C

HOW TO ORDER SERIES 802 HERMETIC RECEPTACLES

Sample Part Number					
802-013	-00	Z1	6-7	P	A
Series	Shell Style	Shell Material / Finish	Shell Size- Insert Arrangement	Contact Type	Shell Key Position
802-013 Series 802 Hermetic Receptacle with Solder Cup or PCB Contacts	 -00 Jam Nut for Front Panel Mounting	Z1 Stainless Steel / Passivated ZL Stainless Steel / Nickel Plated *Titanium and Inconel® shell materials are available. Consult factory for ordering information.	See C-23 for Contact Arrangements	P Pin, PC Tail	A Normal
	 -02 Square Flange Mount			E Pin, Solder Cup	B Pos. B
	 -03 Weld Mount				C Pos. C
	 -07 Jam Nut for Rear Panel Mounting				D Pos. D

802-013-00
Series 802 "Aqua Mouse" Submersible
Hermetic Front Mount Jam Nut Receptacle
Connector Dimensions



DIMENSIONS

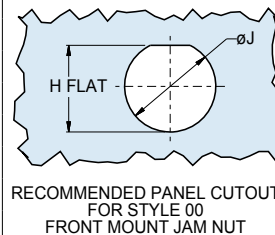
Shell Size	A Max.		B Flat		C Mating Threads	D Threads	Ø E Tail Dia.	F Flat		G Hex	
	In.	mm.	In.	mm.				In.	mm.	In.	mm.
5	.720	18.29	.625	15.88	.438-28 UNEF-2A	.312-28 UN-2A	#23 .018/.022 (0.46/0.56)	.281	7.14	.500	12.70
6	.780	19.81	.750	19.05	.562-20 UN-2A	.438-28 UN-2A		.344	8.74	.625	15.88
7	.910	23.11	.812	20.62	.625-20 UN-2A	.500-32 UN-2A		.469	11.91	.688	17.48
8	.960	24.38	.875	22.23	.687-20 UN-2A	.562-28 UN-2A	#20 .024/.028 (0.61/0.71)	.531	13.49	.750	19.05
9	1.030	26.16	.937	23.80	.750-20 UNEF-2A	.625-20 UN-2A		.594	15.09	.812	20.62
10	1.090	27.69	1.000	25.40	.812-20 UNEF-2A	.687-28 UN-2A		.656	16.66	.875	22.23
12	1.160	29.46	1.062	26.97	.875-20 UNEF-2A	.750-28 UN-2A	#16 .060/.064 (1.52/1.63)	.719	18.26	.938	23.83
14	1.340	34.04	1.250	31.75	1.062-20 UN-2A	.938-28 UN-2A		.893	22.68	1.125	28.58
15	1.410	35.18	1.312	33.32	1.125-20 UN-2A	1.000-28 UN-2A	#12 .092/.096 (2.34/2.44)	.955	24.26	1.188	30.18
21	1.700	43.18	1.562	39.67	1.4375-20 UN-2A	1.312-28 UN-2A		1.257	31.93	1.500	38.10

SERIES 802 RECEPTACLE KEY POSITIONS

Key Position	Key Rotation		
	A°	B°	
Normal (A)	150°	210°	
B	75°	210°	
C	95°	230°	
D	140°	275°	

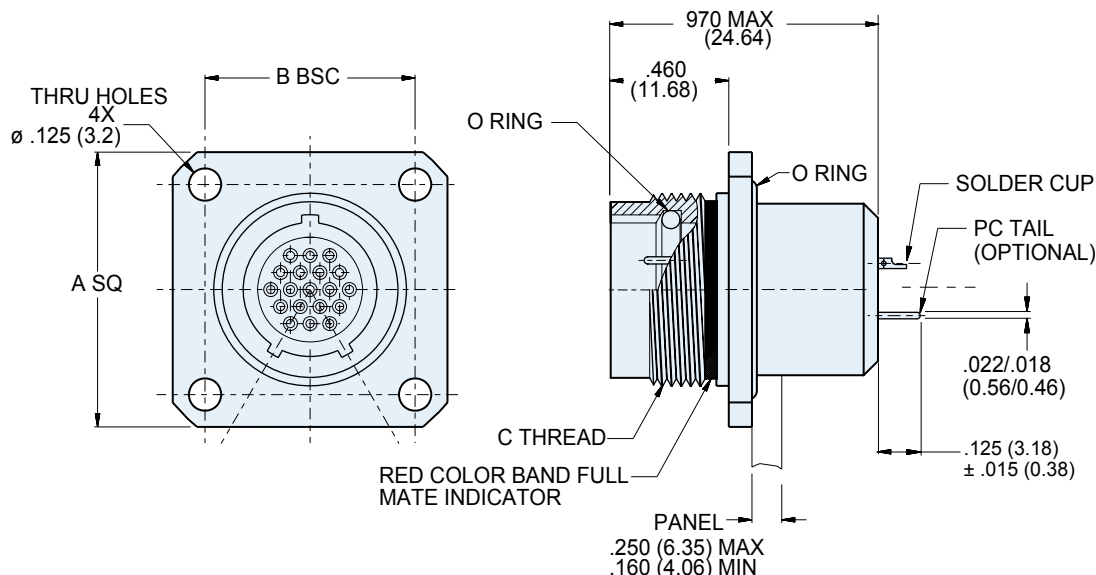
CUTOUT DIMENSIONS

Shell Size	H Flat		Ø J	
	In.	mm.	In.	mm.
5	.291/.286	7.4/7.3	.322	8.2
6	.417/.412	10.6/10.5	.448	11.4
7	.479/.474	12.2/12.0	.510	13.0
8	.541/.536	13.7/13.6	.572	14.5
9	.604/.599	15.3/15.2	.635	16.1
10	.666/.661	16.9/16.8	.697	17.7
12	.729/.724	18.5/18.4	.760	19.3
14	.903/.898	22.9/22.8	.948	24.1
15	.965/.960	24.5/24.4	1.010	25.7
21	1.267/1.263	32.2/32.1	1.322	33.6





802-013-02 Series 802 "Aqua Mouse" Submersible Square Flange Mount Hermetic Receptacle Connector Dimensions



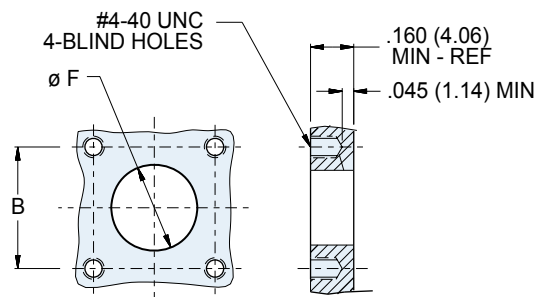
DIMENSIONS

Shell Size	A Square		B Bsc.		C Mating Threads	$\varnothing$ D Tail Dia.	$\varnothing$ E	
	In.	mm.	In.	mm.			In.	mm.
5	.885	22.48	.500	12.70	.438-28 UNEF	#23 .018/.022 (0.46/0.56)	.327	8.31
6	1.010	25.65	.625	15.88	.562-20 UN		.390	9.91
7	1.072	27.23	.688	17.48	.625-20 UN		.515	13.08
8	1.135	28.83	.750	19.05	.687-20 UN	#20 .024/.028 (0.61/0.71)	.577	14.66
9	1.195	30.35	.812	20.62	.750-20 UNEF		.640	16.26
10	1.260	32.00	.875	22.23	.812-20 UNEF		.702	17.83
12	1.323	33.60	.938	23.83	.875-20 UNEF	#16 .060/.064 (1.52/1.63)	.765	19.43
14	1.510	38.25	1.125	28.58	1.062-20 UN		.953	24.21
15	1.573	39.95	1.188	30.18	1.125-20 UN		1.015	25.78
21	1.750	44.45	1.375	34.93	1.4375-20 UN	#12 .092/.096 (2.34/2.44)	1.312	33.32

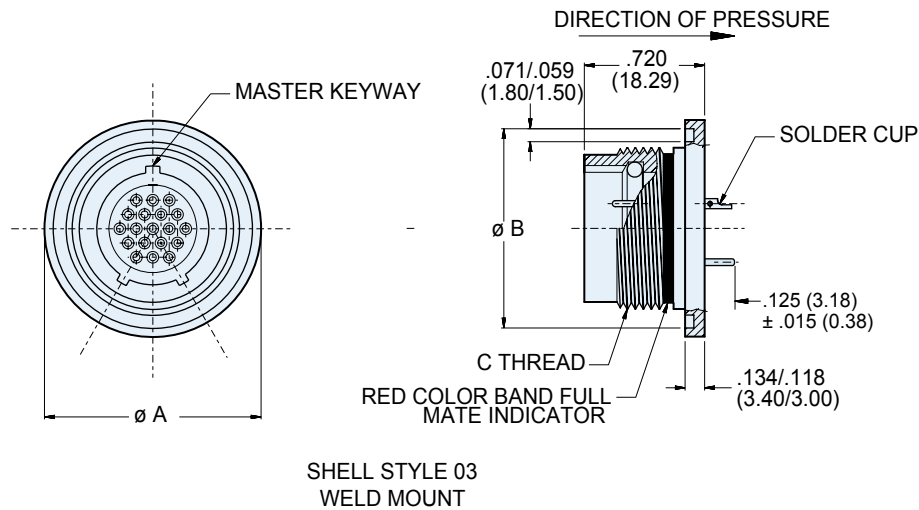
SERIES 802 RECEPTACLE KEY POSITIONS

Key Position	Key Rotation	
	A°	B°
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

SERIES 802 SQ. FLANGE PANEL CUTOUT



802-013-03
Series 802 "Aqua Mouse" Submersible
Weld Mount Hermetic Receptacle
Connector Dimensions

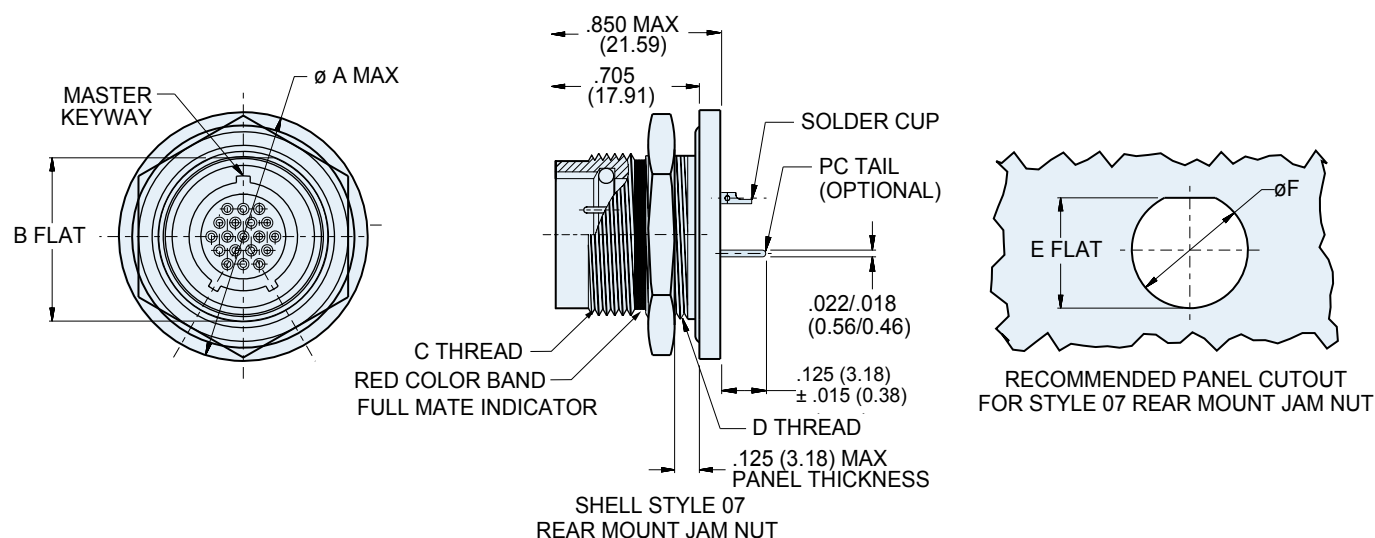


DIMENSIONS						
Shell Size	Ø A		Ø B		C Mating Threads	Ø E Tail Dia.
	In. ± .006	mm. ± 0.15	In. ± .006	mm. ± 0.15		
5	.788	20.02	.745	18.92	.438-28 UNEF	#23 .018/.022 (0.46/0.56)
6	.912	23.16	.869	22.07	.562-20 UN	
7	.975	24.77	.933	23.70	.625-20 UN	
8	1.038	26.37	.995	25.27	.687-20 UN	#20 .024/.028 (0.61/0.71)
9	1.100	27.94	1.057	26.85	.750-20 UNEF	
10	1.162	29.53	1.119	28.42	.812-20 UNEF	#16 .060/.064 (1.52/1.63)
12	1.225	31.12	1.182	30.02	.875-20 UNEF	
14	1.412	35.86	1.369	34.77	1.062-20 UN	#12 .092/.096 (2.34/2.44)
15	1.475	37.47	1.432	36.37	1.125-20 UN	
21	1.795	45.59	1.747	44.38	1.4375-20 UN	

SERIES 802 RECEPTACLE KEY POSITIONS			
Key Position	Key Rotation		
	A°	B°	
Normal (A)	150°	210°	
B	75°	210°	
C	95°	230°	
D	140°	275°	



802-013-07 Series 802 "Aqua Mouse" Submersible Hermetic Rear Mount Jam Nut Receptacle Connector Dimensions



DIMENSIONS

Shell Size	A Max.		B Flat		C Mating Threads	D Threads	Ø E Tail Dia.	F Flat		Ø G	
			In.	mm.				In.	mm.		
	In.	mm.	± .003	± 0.08				± .003	± 0.08	In.	mm.
5	.885	22.48	.466	11.84	.438-28 UNEF	.500-32 UN-2A	#23 .018/.022 (0.46/0.56)	.473	12.01	.510	12.95
6	1.010	25.65	.591	15.01	.562-20 UN	.625-20 UN-2A		.603	15.32	.635	16.13
7	1.072	27.23	.653	16.59	.625-20 UN	.687-28 UN-2A		.662	16.81	.697	17.70
8	1.135	28.83	.716	18.19	.687-20 UN	.750-28 UN-2A	#20 .024/.028 (0.61/0.71)	.714	18.14	.760	19.30
9	1.195	30.35	.778	19.76	.750-20 UNEF	.812-28 UN-2A		.785	19.94	.822	20.88
10	1.260	32.00	.827	21.01	.812-20 UNEF	.875-28 UN-2A		.835	21.21	.885	22.48
12	1.322	33.58	.890	22.61	.875-20 UNEF	.938-28 UN-2A	#16 .060/.064 (1.52/1.63)	.899	22.83	.948	24.08
14	1.510	38.25	1.077	27.36	1.062-20 UN	1.125-28 UN-2A		1.085	27.56	1.135	28.83
15	1.572	39.93	1.140	28.96	1.125-20 UN	1.188-28 UN-2A		1.155	29.34	1.198	30.43
21	1.940	49.28	1.464	37.19	1.4375-20 UN	1.500-28 UN-2A	#12 .092/.096 (2.34/2.44)	1.473	37.41	1.510	39.12

SERIES 802 RECEPTACLE KEY POSITIONS

Key Position	Key Rotation		
	A°	B°	
Normal (A)	150°	210°	
B	75°	210°	
C	95°	230°	
D	140°	275°	

803-006

Series 803 Mighty Mouse Hermetic Receptacles with ¼ Turn Bayonet Coupling Connector Ordering Information

Glenair®

Series 80
Mighty Mouse



**Series 803 Hermetic
Jam Nut Mount**

Series 803 Hermetic Receptacles feature 304L stainless steel shells, fused vitreous glass insulators and gold-plated Alloy 52 iron alloy contacts.

1 X 10⁻⁷ cc/second maximum Helium leak rate when tested at 1 atmosphere vacuum.

Two Shell Styles are available: Jam Nut and Flange Mount.

Solder Cup Contacts accept up to #22 AWG stranded wire. Or, choose **Printed Circuit Board Contacts** for attachment to rigid boards or flexible circuits.

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

HOW TO ORDER

Sample Part Number

803-006

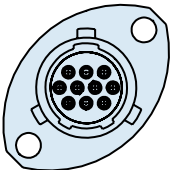
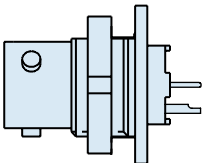
-07

Z1

9-19

P

N

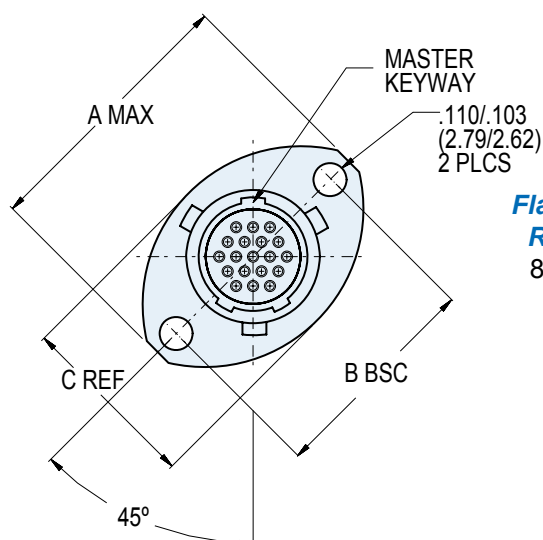
Series	Shell Style	Shell Material / Finish	Shell Size/Insert	Contact Type	Shell Key Position
803-006 Hermetic Receptacles with Printed Circuit Board Contacts or Solder Cup Contacts	 -02 Flange Mount  -07 Jam Nut	Z1 Stainless Steel / Passivated ZL Stainless Steel/ Nickel Plated *Titanium and Inconel® shell materials are available. Consult factory for ordering information.	See C-23 for Contact Arrangements	P Pin, Solder Cup C Pin, PC Tail	N Normal Alternate Key Positions: X Y Z



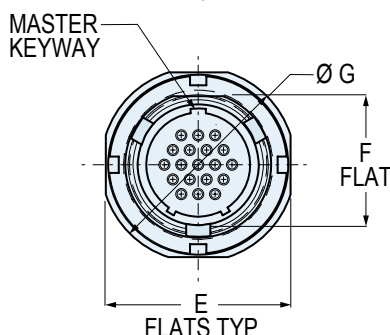
803-006-02 and 803-006-07

Series 803 Mighty Mouse Hermetic Receptacles

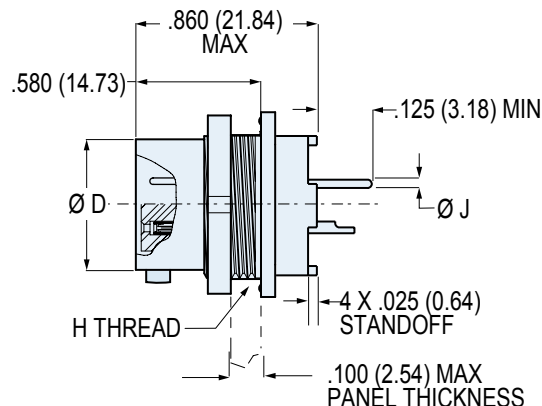
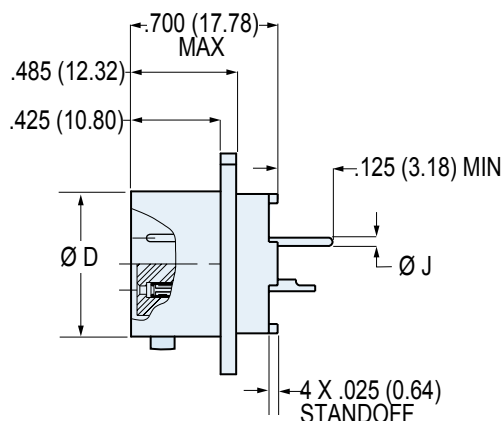
¼ Turn Bayonet Coupling Flange Mount and Jam Nut Connector Dimensions



Flange Mount Receptacle
803-006-02



Jam Nut Receptacle
803-006-07



DIMENSIONS

Shell Size	A Max.		B Bsc.		C Ref.		Ø D		E Flats		F Flat		Ø G		H Thread	Ø J Tail Dia.
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.		
5	.703	17.86	.513	13.03	.460	11.68	.300	7.62	.545	13.84	.350	8.89	.575	14.61	.3750-32 UNEF-2A	#23 .018/.022 (0.46/0.56)
6	.788	20.02	.598	15.19	.522	13.26	.362	9.19	.595	15.11	.410	10.42	.635	16.13	.4375-28 UNEF-2A	#20 .024/.028 (0.61/0.71)
7	.890	22.61	.708	17.98	.590	14.99	.436	11.07	.723	18.36	.536	13.61	.755	19.18	.5625-32 UN-2A	#16 .060/.064 (1.52/1.63)
8	1.154	29.31	.964	24.49	.668	16.97	.508	12.91	.790	20.07	.593	15.10	.755	19.18	.6250-32 UN-2A	#12 .092/.096 (2.34/2.44)
9	1.207	30.66	1.017	25.83	.721	18.31	.561	14.25	.790	20.07	.596	15.14	.830	21.08	.6250-28 UN-2A	
10	1.291	32.79	1.101	27.97	.795	20.19	.635	16.13	.925	23.51	.925	.721	.890	22.61	.7500-28 UN-2A	
12	1.394	35.41	1.204	30.58	.874	22.20	.714	18.14	1.044	26.52	.845	21.46	1.078	27.38	.8750-28 UN-2A	
14	1.545	39.24	1.280	32.51	1.050	26.67	.865	21.97	1.230	31.24	1.022	25.96	1.264	32.11	1.0625-20 UN-2A	

804-006
Series 804 Mighty Mouse Hermetic Receptacles
 Push-Pull Quick-Disconnect
 Ordering Information



**Series 804 Hermetic
Jam Nut Mount**

Series 804 Hermetic Receptacles feature 304L stainless steel shells, fused vitreous glass insulators and gold-plated Alloy 52 iron alloy contacts.

1 X 10⁻⁷ cc/second maximum helium leak rate when tested at 1 atmosphere vacuum.

Two Shell Styles are available: **Style 00** for front panel mounting, and **Style 07** for rear panel mounting.

Solder Cup Contacts accept up to #22 AWG stranded wire. Or, choose **Printed Circuit Board Contacts** for attachment to rigid boards or flexible circuits.

C

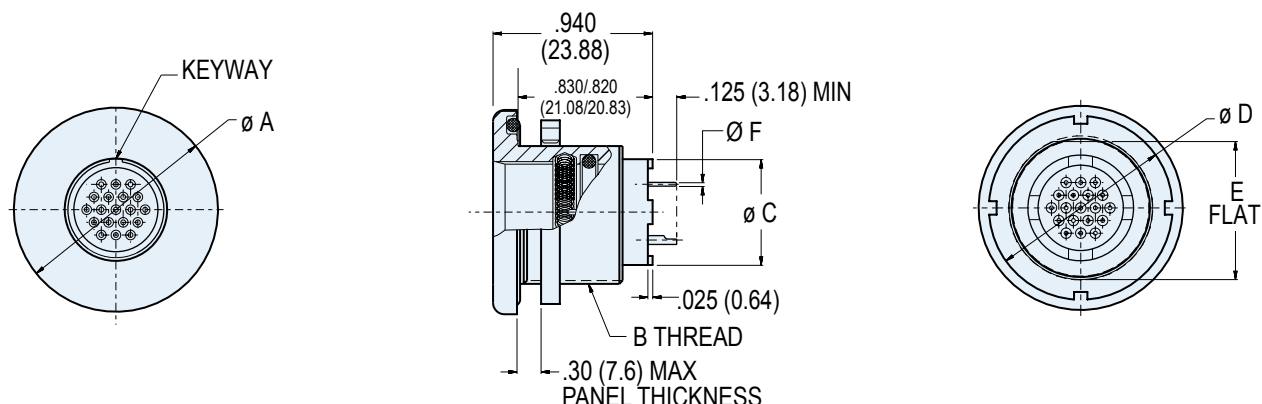
HOW TO ORDER					
Sample Part Number					
804-006	-07	Z1	9-19	P	A
Series	Shell Style	Shell Material / Finish	Shell Size/Insert	Contact Type	Shell Key Position
804-006 Hermetic Receptacles with Printed Circuit Board Contacts or Solder Cup Contacts	 -00 Jam Nut, Front Panel	Z1 Stainless Steel / Passivated ZL Stainless Steel/ Nickel Plated	See C-23 for Contact Arrangements	P Pin, Solder Cup C Pin, PC Tail	Omit for Single Master Key A Pos. A (Normal)
	 -07 Jam Nut, Rear Panel	*Titanium and Inconel® shell materials are available. Consult factory for ordering information.			B Pos. B C Pos. C D Pos. D



804-006-00

Series 804 Mighty Mouse Hermetic Receptacles

Front Panel Jam Nut Mount Connector Dimensions



Front Panel Jam Nut
804-006-00

DIMENSIONS

Shell Size	Ø A		B Threads	Ø C		Ø E		E Flat		Ø F Tail Dia.
	In.	mm.		In.	mm.	In.	mm.	In.	mm.	
5	.830	21.08	.5000-32 UN-2A	.244	6.20	.625	15.87	.470	11.94	#23
6	.885	22.48	.5625-28 UN-2A	.336	8.53	.688	17.47	.530	13.46	.018/.022 (0.46/0.56)
7	.995	25.27	.6875-32 UN-2A	.432	10.97	.812	20.62	.663	16.84	#20
8	.995	25.27	.6875-32 UN-2A	.493	12.52	.812	20.62	.663	16.84	.024/.028 (0.61/0.71)
9	1.075	27.31	.7500-28 UN-2A	.551	14.00	.875	22.22	.720	18.29	#16
10	1.140	28.95	.8125-28 UN-2A	.620	15.75	.938	23.82	.788	20.02	.060/.064 (1.52/1.63)
12	1.340	34.04	1.0000-28 UN-2A	.703	17.86	1.125	28.57	.970	24.64	#12
14	1.390	35.31	1.0625-20 UN-2A	.863	21.92	1.188	30.18	1.020	25.91	.092/.096 (2.34/2.44)

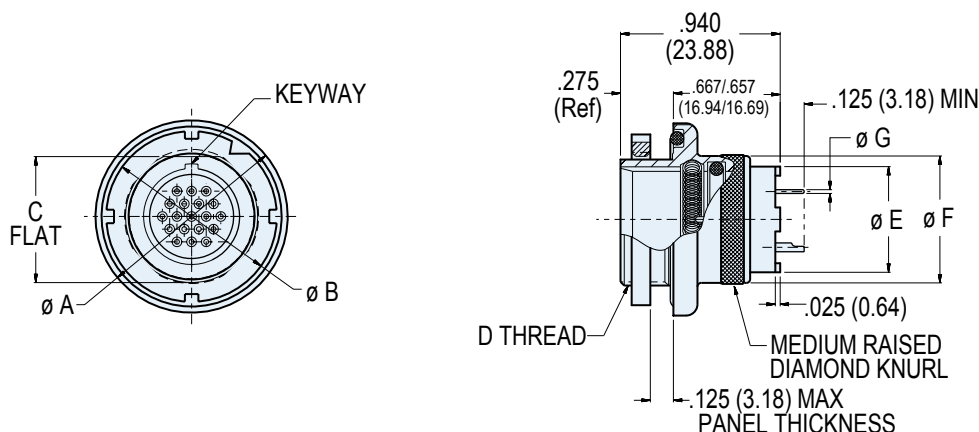
ALTERNATE KEY POSITIONS

Pos.	A°		B°
	In.	mm.	
A	150°	210°	
B	75°	210°	
C	95°	230°	
D	140°	275°	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		Ø B	
	In.	mm.	In.	mm.
5	.480	12.19	.510	12.95
6	.540	13.72	.575	14.61
7	.674	17.12	.698	17.73
8	.674	17.12	.698	17.73
9	.730	18.54	.760	19.30
10	.799	20.29	.822	20.88
12	.980	24.89	1.010	25.65
14	1.030	26.16	1.075	27.31
15	1.013	25.73	1.135	28.83

804-006-07
Series 804 Mighty Mouse Hermetic Receptacles
Rear Panel Jam Nut Mount
Dimensions



Rear Panel Jam Nut
804-006-07

C

DIMENSIONS												
Shell Size	Ø A		Ø B		C Flat		D Threads	Ø E		Ø F		Ø G Tail Dia.
	In.	mm.	In.	mm.	In.	mm.		In.	mm.	In.	mm.	
5	.790	20.07	.562	14.27	.415	10.54	.4375-32 UN-2A	.244	6.20	.450	11.43	#23
6	.830	21.08	.625	15.87	.467	14.40	.5000-32 UN-2A	.330	8.38	.520	13.21	.018/.022 (0.46/0.56)
7	.910	23.11	.750	19.05	.594	15.09	.6250-28 UN-2A	.432	10.97	.580	14.73	#20
8	.955	24.26	.750	19.05	.594	15.09	.6250-28 UN-2A	.493	12.52	.603	15.32	.024/.028 (0.61/0.71)
9	1.000	25.40	.812	20.62	.655	16.64	.6875-32 UN-2A	.551	14.00	.695	17.65	#16
10	1.085	27.48	.875	22.22	.721	18.31	.7500-28 UN-2A	.620	15.75	.735	18.67	.060/.064 (1.52/1.63)
12	1.180	29.97	1.000	25.40	.843	21.41	.8750-28 UN-2A	.703	17.86	.880	22.35	#12
14	1.325	33.66	1.125	28.57	.968	24.59	1.0000-28 UN-2A	.863	21.92	1.010	25.65	.092/.096 (2.34/2.44)

ALTERNATE KEY POSITIONS

Pos.	A°		B°
	A°	B°	
A	150°	210°	
B	75°	210°	
C	95°	230°	
D	140°	275°	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		Ø B	
	In. ± .002	mm. ± 0.05	In.	mm.
5	.425	10.80	.448	11.38
6	.477	12.12	.510	12.95
7	.604	15.34	.635	16.13
8	.604	15.34	.635	16.13
9	.665	16.89	.695	17.65
10	.731	18.57	.760	19.30
12	.853	21.67	.885	22.48
14	.978	24.84	1.010	25.65
15	1.039	26.39	1.070	27.18



805-006

Series 805 Mighty Mouse Hermetic Receptacles Triple-Start Threaded Ordering Information



**Series 805 Hermetic
Jam Nut Connector**

Series 805 Hermetic Receptacles feature 304L stainless steel shells, fused vitreous glass insulators and Alloy 52 iron alloy contacts. Triple-start ACME thread provides fast mating and cross-threading protection. Mating plug connectors feature EMI springs and ratcheting anti-decoupling mechanism for resistance to vibration. 1000 PSI open face pressure. Fluorosilicone seals for water ingress protection. Contacts are gold-plated 50 microinches minimum.

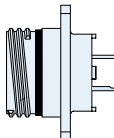
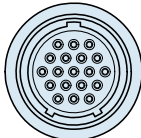
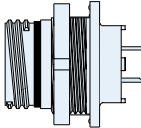
1 X 10⁻⁷ cc/second maximum helium leak rate.

Two Shell Styles: jam nut or square flange.

Solder Cup Contacts for #22 AWG wire, or **PC Tail Contacts** for attachment to flexible or rigid circuits.

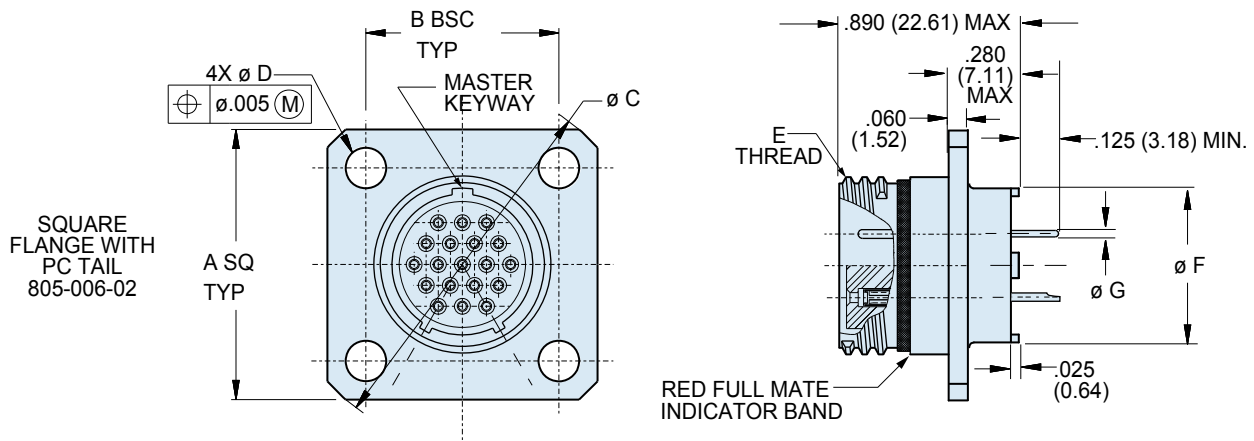
C

HOW TO ORDER SERIES 800 HERMETIC RECEPTACLES

Sample Part Number					
805-006	-07	Z1	12-26	C	A
Series	Shell Style	Shell Material / Finish	Shell Size- Insert Arrangement	Contact Type	Shell Key Position
805-006 Hermetic Receptacle		Z1 Stainless Steel / Passivated	See C-23 for Contact Arrangements	P Pin, Solder Cup	A Position A (Normal)
	-02 Square Flange	ZL Stainless Steel / Nickel Plated		C Pin, PC Tail	B Position B
		*Titanium and Inconel® shell materials are available. Consult factory for ordering information.		S Socket, Solder Cup	C Position C
	-03 Solder Mount			D Socket, PC Tail	D Position D
					
	-07 Jam Nut				

Series 805 Mighty Mouse Triple-Start Flange Mount Hermetic Receptacles

805-006-02 Connector Dimensions



DIMENSIONS

Shell Size	A		B		Ø C		Ø D		E Threads	Ø F		Ø G Tail Dia.
	In.	mm.	In.	mm.	In.	mm.	In. ± .003	mm. ± .08		In.	mm.	
8	.850	21.59	.660	16.76	1.150	29.21	.094	2.39	.5000-.1P-.3L-TS-2A	.330	8.38	#23
9	.913	23.19	.723	18.36	1.230	31.24	.094	2.39	.5625-.1P-.3L-TS-2A	.432	10.97	.018/.022 (0.46/0.56)
10	.975	24.77	.785	19.94	1.330	33.78	.094	2.39	.6250-.1P-.3L-TS-2A	.493	12.52	#20
11	1.039	26.39	.848	21.54	1.410	35.81	.094	2.39	.6875-.1P-.3L-TS-2A	.551	14.00	.024/.028 (0.61/0.71)
12	1.099	27.91	.909	23.09	1.500	38.10	.094	2.39	.7500-.1P-.3L-TS-2A	.620	15.78	#16
15	1.288	32.74	1.058	26.87	1.750	44.45	.128	3.25	.9375-.1P-.3L-TS-2A	.703	17.86	.060/.064 (1.52/1.63)
18	1.475	37.47	1.255	31.88	2.000	50.80	.128	3.25	1.1250-.1P-.3L-TS-2A	.863	21.92	#12
19	1.537	71.06	1.327	33.71	2.094	53.19	.128	3.25	1.1875-.1P-.3L-TS-2A	.912	23.16	.092/.096 (2.34/2.44)
23	1.787	45.39	1.570	39.88	2.440	61.98	.128	3.25	1.4375-.1P-.3L-TS-2A	1.162	29.51	

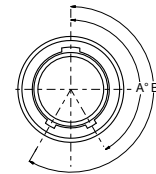
PERFORMANCE SPECIFICATIONS

DWV (VAC Sea Level)	#23 500 V., #20HD 750 V., #12 AND #16 1800 V.
Insulation Resistance	5000 Megohms Minimum
Operating Temperature	-55° C. to +150° C.
Immersion, Mated	MIL-STD-810 Method 512. One Meter for One Hour.
Hermeticity	1 x 10 ⁻⁷ cc/sec Helium Leak Rate @ 1 Atmosphere Diff.

MATERIALS AND FINISHES

Shell	304L Stainless Steel
Insulator	Fused Vitreous Glass
Seals	Fluorosilicone Rubber, Blue
Contacts	Iron Alloy (Alloy 52)

SERIES 805 KEY POSITIONS

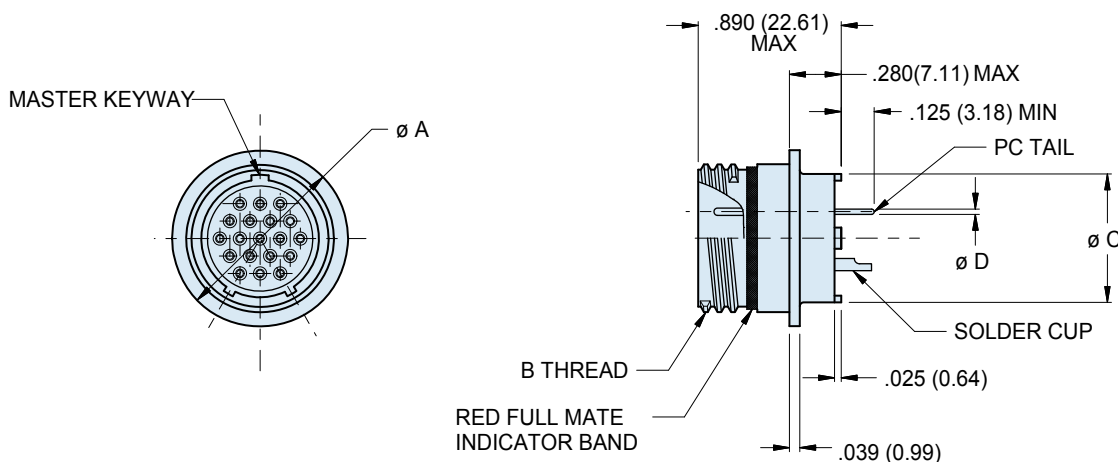


Key Position	Key Rotation	
	A	B
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



Series 805 Mighty Mouse Triple-Start Solder Mount Hermetic Receptacles

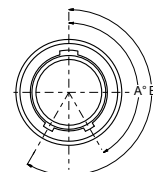
805-006-03 Connector Dimensions



DIMENSIONS

Shell Size	Ø A		B Threads	Ø C		Ø D Tail Dia.
	In.	mm.		In.	mm.	
8	.625	15.88	.5000-.1P-.3L-TS-2A	.330	8.38	#23 .018/.022 (0.46/0.56)
9	.688	17.48	.5625-.1P-.3L-TS-2A	.432	10.97	
10	.750	19.75	.6250-.1P-.3L-TS-2A	.493	12.52	#20 .024/.028 (0.61/0.71)
11	.812	20.62	.6875-.1P-.3L-TS-2A	.551	14.00	
12	.875	22.23	.7500-.1P-.3L-TS-2A	.620	15.78	#16 .060/.064 (1.52/1.63)
15	1.062	26.97	.9375-.1P-.3L-TS-2A	.703	17.86	
18	1.250	31.75	1.1250-.1P-.3L-TS-2A	.863	21.92	#12 .092/.096 (2.34/2.44)
19	1.312	33.32	1.1875-.1P-.3L-TS-2A	.912	23.16	
23			1.4375-.1P-.3L-TS-2A	1.162	29.51	

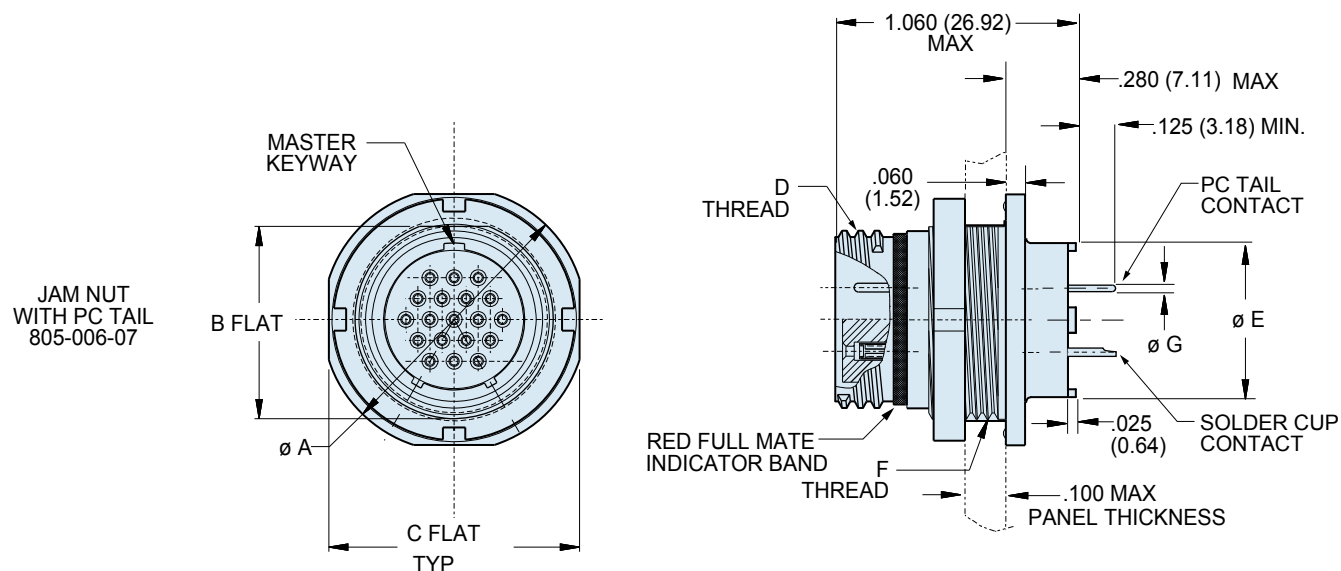
SERIES 805 KEY POSITIONS



Key Position	Key Rotation	
	A	B
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

Series 805 Mighty Mouse Triple-Start Jam Nut Mount Hermetic Receptacles

805-006-07 Connector Dimensions



DIMENSIONS

Shell Size	Ø A		B		C		D Threads	Ø E		F Threads	Ø G Tail Dia.
	In.	mm.	In.	mm.	In.	mm.		In.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-1P-.3L-TS-2A	.330	8.38	.5625-28 UNEF-2A	#23
9	.880	22.35	.661	16.79	.850	21.59	.5625-1P-.3L-TS-2A	.432	10.97	.6875-28 UN-2A	.018/.022 (0.46/0.56)
10	.880	22.35	.661	16.79	.850	21.59	.6250-1P-.3L-TS-2A	.493	12.52	.6875-28 UN-2A	#20
11	.955	24.26	.721	18.31	.925	23.50	.6875-1P-.3L-TS-2A	.551	14.00	.7500-28 UN-2A	.024/.028 (0.61/0.71)
12	1.060	26.92	.784	19.91	1.035	26.29	.7500-1P-.3L-TS-2A	.620	15.78	.8125-28 UN-2A	#16
15	1.203	30.56	.970	24.64	1.173	29.79	.9375-1P-.3L-TS-2A	.703	17.86	1.0000-28 UN-2A	.060/.064 (1.52/1.63)
18	1.389	35.28	1.147	29.13	1.359	34.52	1.1250-1P-.3L-TS-2A	.863	21.92	1.1875-28 UN-2A	#12
19	1.450	36.83	1.221	31.01	1.420	36.07	1.1875-1P-.3L-TS-2A	.912	23.16	1.2500-28 UN-2A	.092/.096 (2.34/2.44)
23	1.705	43.31	1.470	37.34	1.675	42.55	1.4375-1P-.3L-TS-2A	1.162	29.51	1.500-25 UN-2A	

PANEL CUTOUT FOR JAM NUT RECEPTACLE

Shell Size	A Flat		Ø B	
	In. ± .002	mm. ± 0.05	In. ± .005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
10	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88
15	.978	24.84	1.010	25.65
18	1.155	29.34	1.198	30.43
19	1.229	31.22	1.260	32.00
23	1.480	37.59	1.510	38.35

SERIES 805 KEY POSITIONS

Key Position	Key Rotation	
	A	B
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

MIL-DTL-26482 Type Hermetic Connectors

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MIL-DTL-26482

A Comprehensive Line of MIL-DTL-26482 Series I and II Type Bayonet Hermetic Connectors

Harsh Application Environments

The Glenair MIL-DTL-26482 Series I and II Bayonet-Lock Connector is ideally suited for vacuum chambers and other military and commercial applications that utilize this general purpose medium density cylindrical connector and that require helium leak test rates of less than 1×10^{-7} cc/second. The bayonet mechanism provides fast and easy coupling, especially when the connector is situated in an awkward or hard to reach location.

Intermateability

Glenair MIL-DTL-26482 Type hermetics are interchangeable and intermateable with the wide range of industry-standard bayonet connectors designed around MIL-DTL-26482 and/or qualified to VG 95328, including ITT Cannon KPT.

Errata

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so,

Bulkhead Feedthrus, Jam-Nut, Flange Mount and Solder Mount Receptacles

$<1 \times 10^{-7}$ cc/second Helium Leak Rate at 1 ATM Differential

General Purpose Medium Density Connector

Quick Release, Bayonet Coupling

Solder and Eyelet Contacts

9 Shell Sizes with up to 61 Contacts

#20, #16 and #12 AWG Contacts

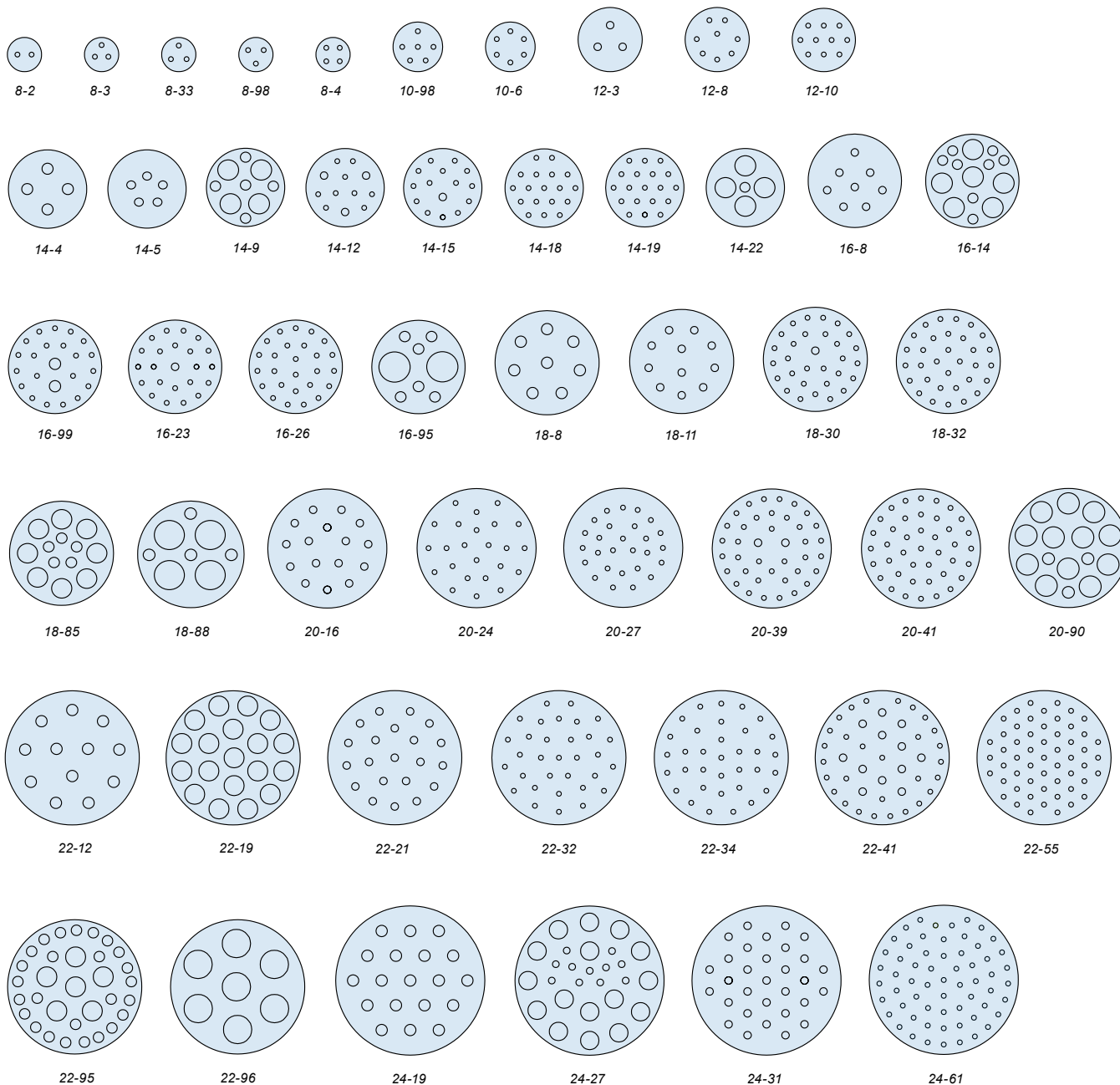
Space Grade Special Screening Available

*Complete Range of Materials and Finishes,
Including Titanium and Inconel® Options*



A wide range of available mounting styles—including both narrow and wide flange mounts—provide complete flexibility in interconnect system design. PCB and solder cup contacts allow easy integration and termination to I/O cabling and electronic sub-systems.

customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately to www.glenair.com.



D

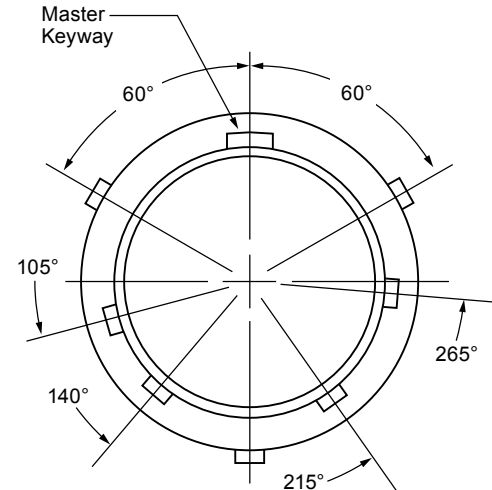
MIL-DTL-26482 Type Alternate Keyway Positions



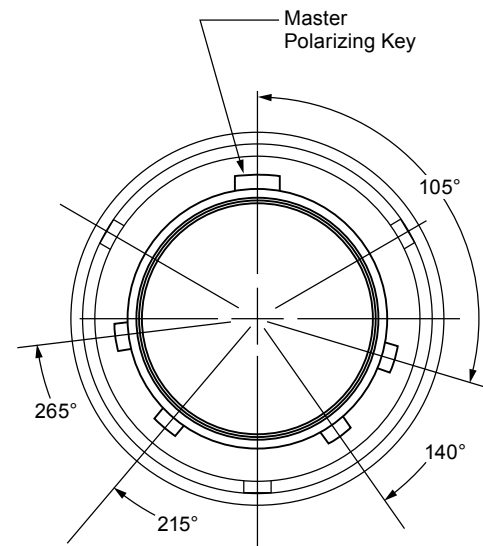
MIL-DTL
26482 Type

Insert Arrangements

Shell Size Designator	Insert Arrangement Dash Number	Contact Size and Quantity				Service Rating
		20	16	12	8	
8	8-2	2				I
	8-3	3				I
	8-4	4				I
	8-33	3				I
	8-98	3				I
10	10-6	6				I
	10-98	6				I
12	12-3		3			II
	12-8	8				I
	12-10	10				I
14	14-4			4		I
	14-5		5			II
	14-9	5		4		I
	14-12	8	4			I
	14-15	14	1			I
	14-18	18				I
	14-19	19				I
	14-22	1		4		I
16	16-8		8			II
	16-14	8		6		I
	16-23	22	1			I
	16-26	26				I
	16-95	6			2 ¹	I
	16-99	21	2			I
18	18-8			8		I
	18-11		11			II
	18-30	29	1			I
	18-32	32				I
	18-85	5		8		I
	18-88	88			4 ¹	I
20	20-16		16			II
	20-24	24				I
	20-27	27				I
	20-39	37	2			I
	20-41	41				I
	20-90	3		12		I
22	22-12			12		I
	22-19			19		I
	22-21		21			II
	22-32	32				I
	22-34	34				I
	22-41	27	14			I
	22-55	55				I
	22-95	26		6		I
24	22-96				7 ¹	I
	24-19			19		II
	24-27	11		16		I
	24-31		31			I
	24-61	61				I



Receptacle



Plug

Note 1: Shielded, not applicable to Series II.

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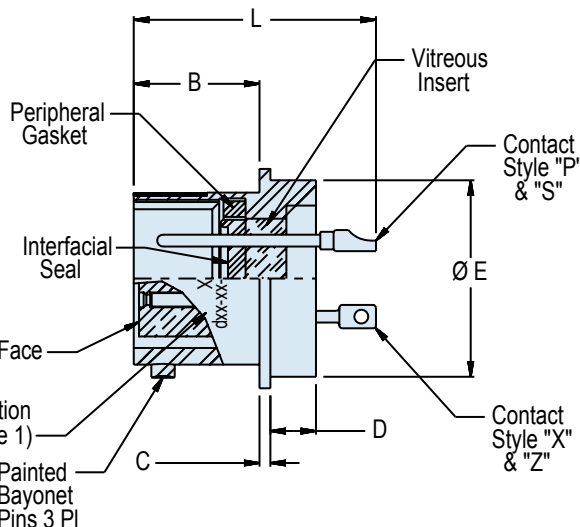
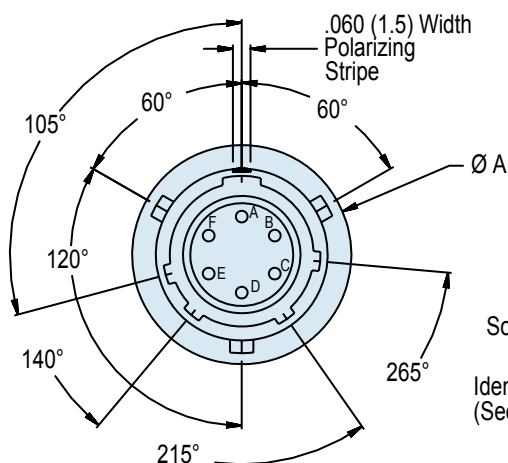
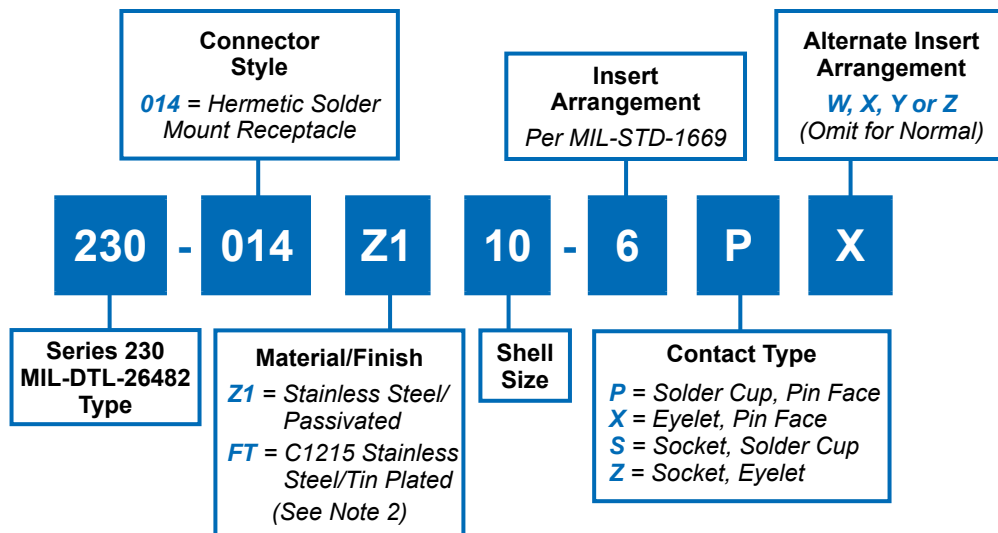
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D-3

E-Mail: sales@glenair.com



230-014
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Solder Mount Receptacle
MS3113 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Sockets - Copper alloy, gold plated.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Hermetic, Glass/N.A.; Socket: Rigid Dielectric/N.A.
- Contact current rating - #20-7.5 Amps, #16-10 Amps, #12-17 Amps, #8-35 Amps.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-014 will mate with any QPL MIL-DTL-26482 Series I bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

230-014
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Solder Mount Receptacle
MS3113 Type



MIL-DTL
26482 Type

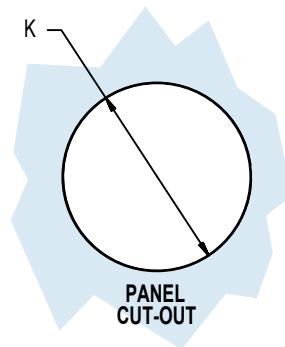
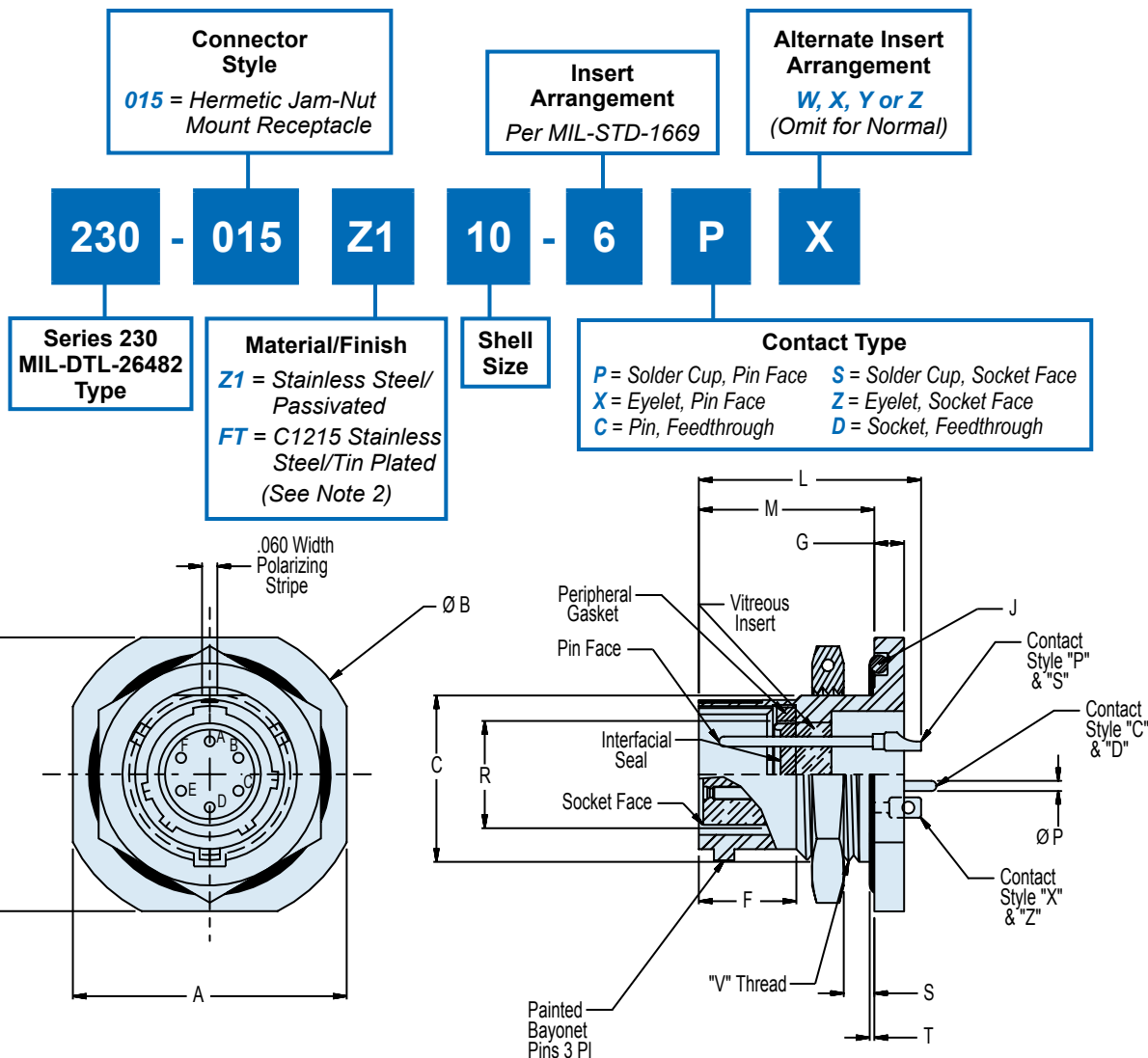


TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia ± .016 (0.4)	B Dim +.031 (0.8) -000	C Dim +.016 (0.4) -.005 (0.1)	D Max Length of Mtg Diameter		E Dia +.001 (.0) -.005 (0.1)	L Max Length Overall	
				Pin	Socket		Pin	Socket
8	.625 (15.9)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	.562 (14.3)	.828 (21.0)	.888 (22.6)
10	.750 (19.1)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	.672 (17.1)	.828 (21.0)	.888 (22.6)
12	.844 (21.4)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	.781 (19.8)	.828 (21.0)	.888 (22.6)
14	.969 (23.7)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	.906 (23.0)	.828 (21.0)	.888 (22.6)
16	1.094 (27.8)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	1.031 (26.2)	.828 (21.0)	.888 (22.6)
18	1.218 (30.9)	.411 (10.4)	.031 (0.79)	.156 (4.0)	.215 (5.5)	1.156 (29.4)	.828 (21.0)	.960 (24.4)
20	1.312 (33.3)	.473 (12.0)	.031 (0.79)	.156 (4.0)	.275 (7.0)	1.250 (31.8)	.891 (22.6)	.995 (25.3)
22	1.438 (36.5)	.473 (12.0)	.031 (0.79)	.188 (4.8)	.275 (7.0)	1.375 (34.9)	.921 (23.4)	.995 (25.3)
24	1.563 (39.7)	.506 (12.9)	.031 (0.79)	.188 (4.8)	.275 (7.0)	1.500 (38.1)	.921 (23.4)	.995 (25.3)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell and Jam Nut: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Contact current rating - #20-7.5 Amps, #16-10 Amps, #12-17 Amps, #8-35 Amps.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-015 will mate with any QPL MIL-DTL-26482 Series I bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Consult factory for feedthrough contact footprints.
- Metric Dimensions (mm) are indicated in parentheses.

230-015
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Jam Nut Receptacle
MS3114 Type



MIL-DTL
26482 Type

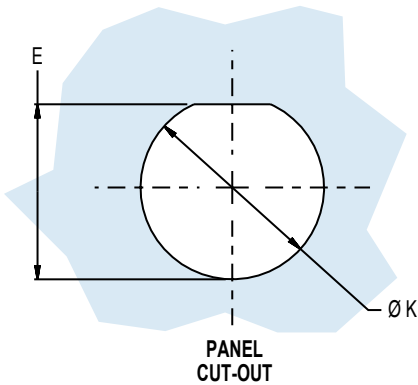


TABLE II	
Contact Size	Ø P
22D	.011 .015
20	.024 .028
16	.0635 .0615
12	.095 .093

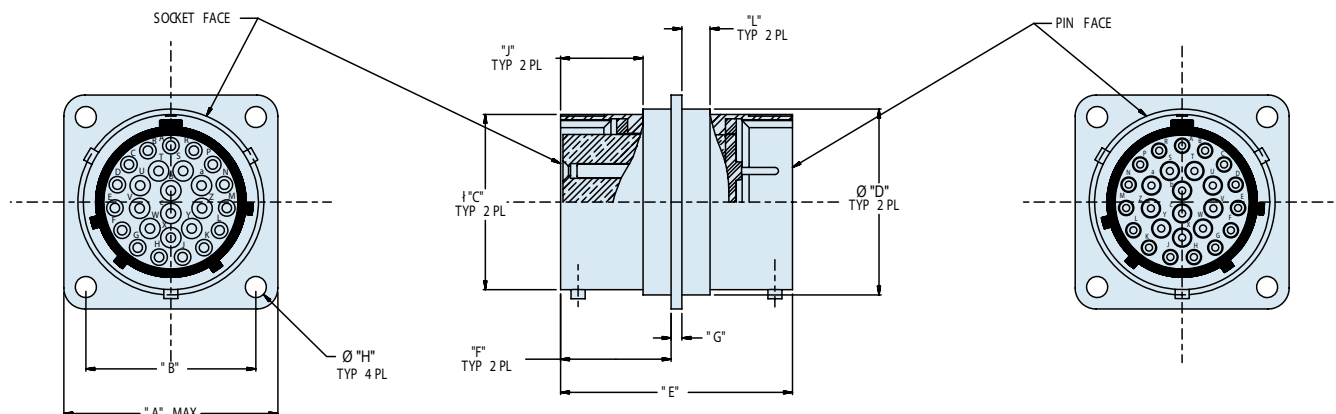
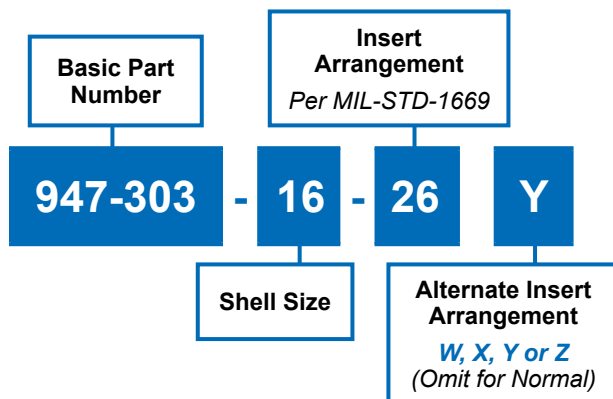
HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A Max	B Dia +.000 -.032 (0.8)	C Flat +.000 -.010 (0.3)	E +.000 -.002 (.05)	F Min	G ± .020 (0.5)	J O-Ring Seal MS29513-
8	.954 (24.2)	1.078 (27.4)	.530 (13.5)	.698 (17.7)	.384 (9.8)	.117 (3.0)	17
10	1.078 (27.4)	1.203 (30.6)	.655 (16.6)	.830 (21.1)	.384 (9.8)	.117 (3.0)	19
12	1.266 (32.2)	1.319 (33.5)	.818 (20.8)	1.015 (25.8)	.384 (9.8)	.117 (3.0)	22
14	1.391 (35.3)	1.516 (38.5)	.942 (23.9)	1.140 (29.0)	.384 (9.8)	.117 (3.0)	24
16	1.516 (38.5)	1.641 (41.7)	1.062 (27.0)	1.265 (32.1)	.384 (9.8)	.117 (3.0)	26
18	1.641 (41.7)	1.766 (44.9)	1.191 (30.3)	1.390 (35.3)	.384 (9.8)	.117 (3.0)	28
20	1.812 (46.0)	1.953 (49.6)	1.316 (33.4)	1.515 (38.5)	.446 (11.3)	.148 (3.8)	128
22	1.954 (49.6)	2.078 (52.8)	1.441 (36.6)	1.640 (41.7)	.446 (11.3)	.148 (3.8)	130
24	2.078 (52.8)	2.203 (56.0)	1.566 (39.8)	1.765 (44.8)	.479 (12.2)	.148 (3.8)	132

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	K DIA ±.005 (0.1)	L Max	M +.031 (0.8) -.000	R Max	S Panel Thickness Min Max		T O-Ring .011 (0.3)	V Thread UNEF-2A
8	.698 (17.7)	.875 (22.2)	.691 (17.6)	.329	.062 (1.6)	.125 (3.2)	.023 (0.6)	.5625-24
10	.830 (21.1)	.875 (22.2)	.691 (17.6)	.477	.062 (1.6)	.125 (3.2)	.023 (0.6)	.685-24
12	1.015 (25.8)	.875 (22.2)	.691 (17.6)	.564	.062 (1.6)	.125 (3.2)	.023 (0.6)	.875-20
14	1.140 (29.0)	.875 (22.2)	.691 (17.6)	.689	.062 (1.6)	.125 (3.2)	.023 (0.6)	1.000-20
16	1.265 (32.1)	.875 (22.2)	.691 (17.6)	.814	.062 (1.6)	.125 (3.2)	.023 (0.6)	1.125-18
18	1.390 (35.3)	.875 (22.2)	.691 (17.6)	.907	.062 (1.6)	.125 (3.2)	.023 (0.6)	1.250-18
20	1.515 (38.5)	1.094 (27.8)	.879 (22.3)	1.039	.062 (1.6)	.250 (6.4)	.028 (0.7)	1.375-18
22	1.640 (41.7)	1.094 (27.8)	.879 (22.3)	1.164	.062 (1.6)	.250 (6.4)	.028 (0.7)	1.500-18



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: 300 CRES / passivate
Titanium and Inconel® available. Consult factory.
Contacts, Pin - Nickel alloy / gold plate
Contacts, Socket - Copper alloy / gold plate
Hoods, Sockets - 300 series CRES / passivate
Bayonets - 300 series CRES / passivate
Insulator, Pins - full glass / N.A.
Insulator, Socket - high grade dielectric / N.A.
Seals - Silicone elastomer / N.A.
- Glenair 947-303 will meet all performance requirements of MIL-DTL-26482
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 947-303 will mate with any QPL manufacturer's MIL-DTL-26482 Series I or II plug with same shell size, arrangement and polarization, having opposite contact gender
- Glenair 947-303 is symmetrical on both sides of flange. There is no need to specify pin or sockets on one end.
- Metric Dimensions (mm) are indicated in parentheses.

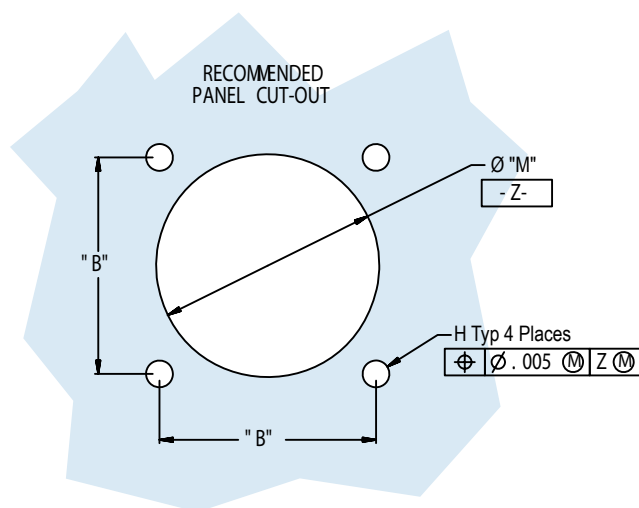
947-303
Narrow Flange Mount Bulkhead Feed-Thru
MS3440 Type

Glenair.

MIL-DTL
26482 Type

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A	B	C Dia	D Dia ± .010	E Max	F	G	H
8	.828 (21.03)	.594 (15.1)	.474 (12.0) .468 (11.9)	.533 (13.5)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
10	.954 (24.2)	.719 (18.3)	.591 (15.0) .585 (14.9)	.650 (16.5)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
12	1.047 (26.6)	.812 (20.6)	.751 (19.1) .745 (18.9)	.810 (20.6)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
14	1.141 (29.0)	.906 (23.0)	.876 (22.3) .870 (22.1)	.935 (23.7)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
16	1.234 (31.3)	.969 (24.6)	1.001 (25.4) .995 (25.3)	1.060 (26.9)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
18	1.328 (33.7)	1.062 (27.0)	1.126 (28.6) 1.120 (28.4)	1.185 (30.1)	1.362 (34.6)	.692 (17.6) .672 (17.1)	.078 (2.0) .046 (1.2)	.120 (3.0)
20	1.453 (36.9)	1.156 (29.4)	1.251 (31.8) 1.245 (31.6)	1.310 (33.3)	1.506 (38.3)	.698 (17.7) .678 (17.2)	.110 (2.8) .078 (2.0)	.120 (3.0)
22	1.578 (40.1)	1.250 (31.8)	1.376 (35.0) 1.371 (34.8)	1.435 (36.4)	1.506 (38.3)	.698 (17.7) .678 (17.2)	.110 (2.8) .078 (2.0)	.120 (3.0)
24	1.703 (43.3)	1.375 (34.9)	1.501 (38.1) 1.495 (38.0)	1.560 (39.4)	1.506 (38.3)	.698 (17.7) .678 (17.2)	.110 (2.8) .078 (2.0)	.147 (3.7)



HERMETIC LEAK RATE MOD CODES

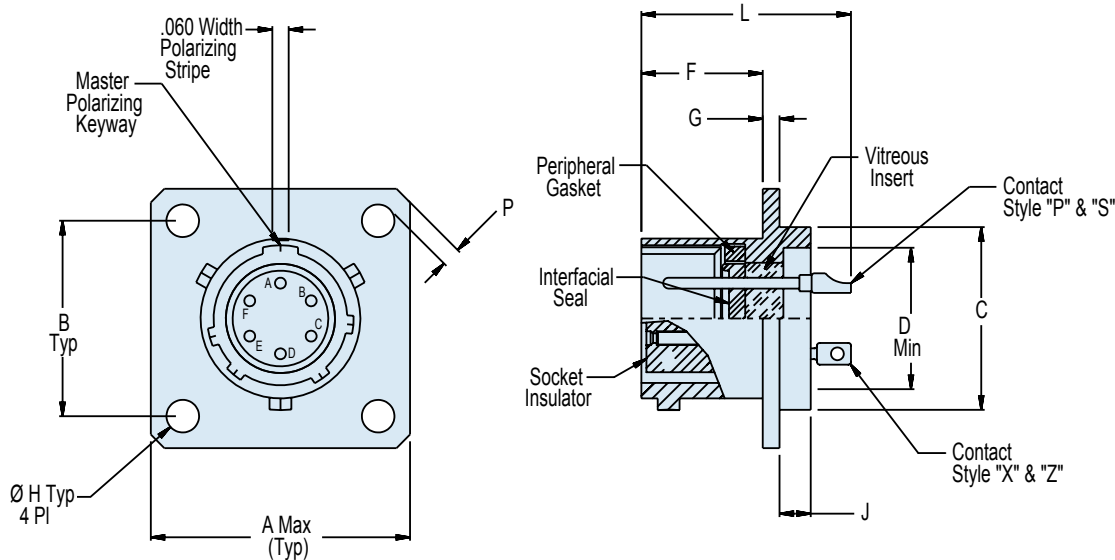
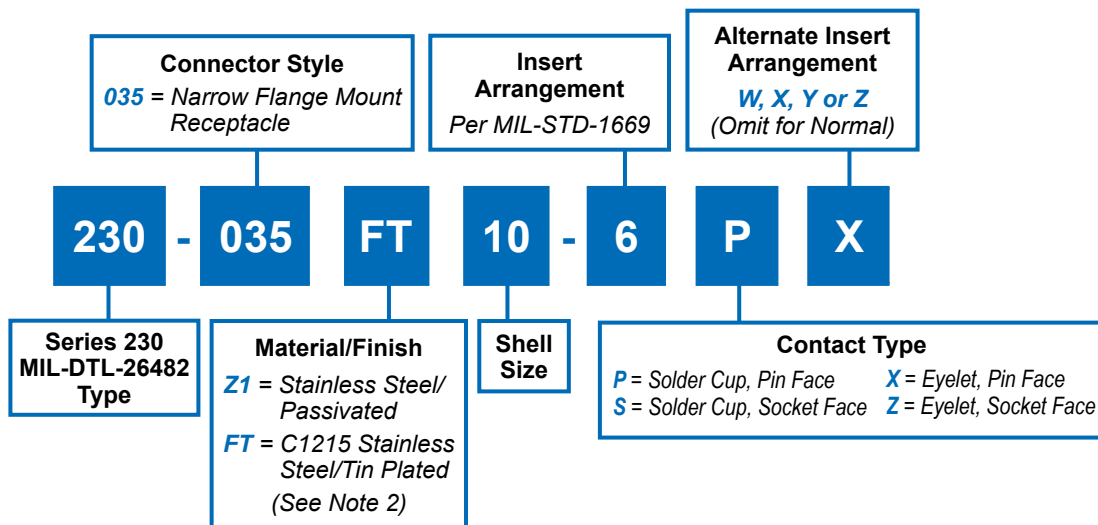
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I (Continued)

Shell Size	J Minimum	L	M Dia. ± .005
8	.460 (11.7)	.212 (5.4)	.570 (14.5)
10	.460 (11.7)	.212 (5.4)	.680 (17.3)
12	.460 (11.7)	.212 (5.4)	.789 (20.0)
14	.460 (11.7)	.212 (5.4)	.914 (23.2)
16	.460 (11.7)	.212 (5.4)	1.039 (26.4)
18	.460 (11.7)	.212 (5.4)	1.164 (29.6)
20	.428 (10.9)	.250 (6.4)	1.258 (32.0)
22	.428 (10.9)	.250 (6.4)	1.383 (35.1)
24	.428 (10.9)	.250 (6.4)	1.508 (38.3)

230-035

MIL-DTL-26482 Series I Type Hermetic Bayonet Coupling Narrow Flange Mount Receptacle MS3112 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell: Z1 - 304L stainless steel/passivate.
 FT - C1215 stainless steel/tin plated.
 Titanium and Inconel® available. Consult factory.
 Contacts - 52 Nickel alloy/gold plate.
 Bayonets - Stainless steel/passivate.
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
 Socket insulator - Rigid dielectric/N.A.
 Socket Contacts - Copper alloy/gold plated.
- Glenair 230-035 will mate with any QPL MIL-DTL-26482 Series I bayonet coupling plug of same size and insert polarization.
- Performance:
 Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atmosphere differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
 Insulation resistance - 5000 megohms min @500VDC.
- Consult factory or MIL-STD-1669 for arrangement and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

230-035
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Narrow Flange Mount Receptacle
MS3112 Type



MIL-DTL
26482 Type

HERMETIC LEAK RATE MOD CODES

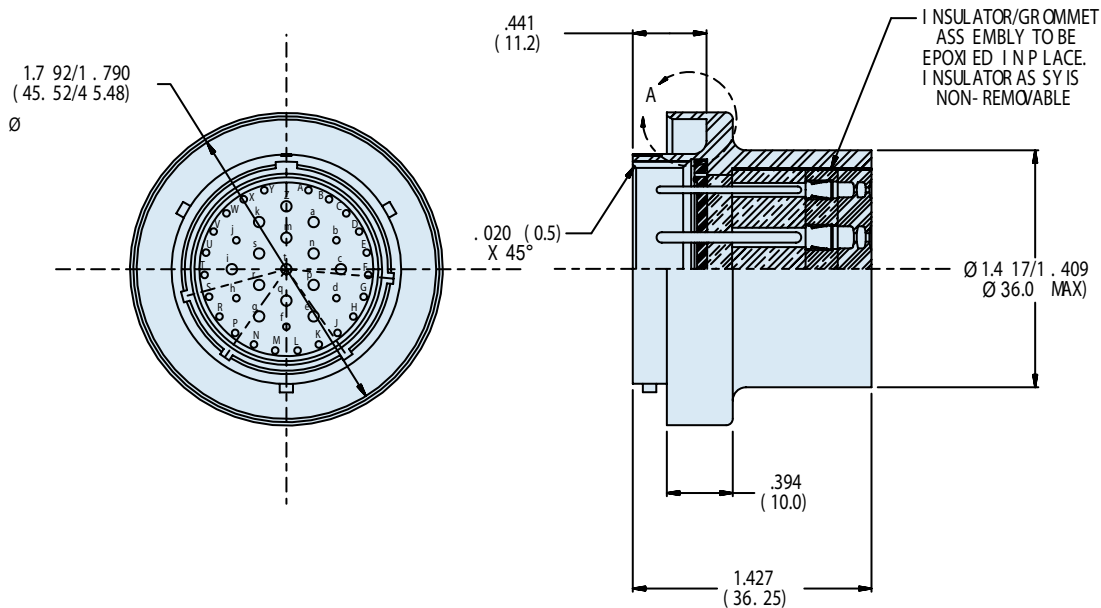
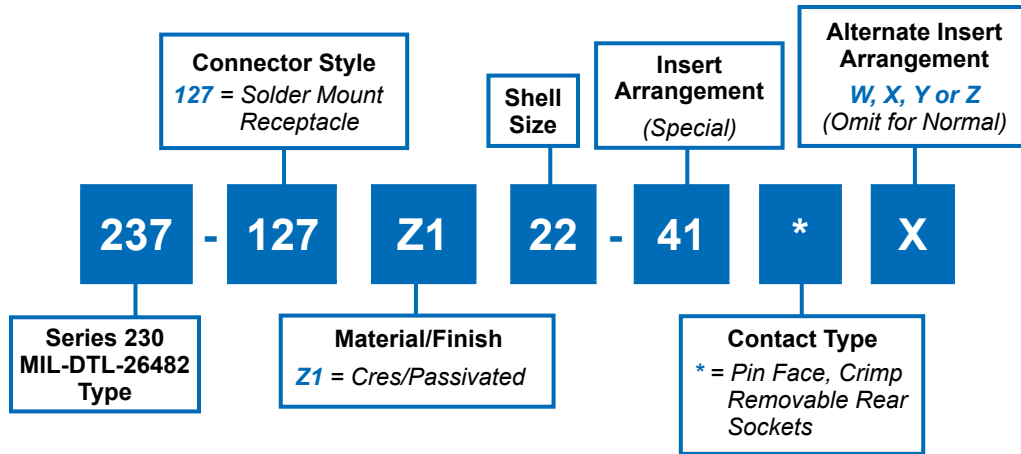
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Max Length	B Mounting Holes $\varnothing$ to $\varnothing$	C Dia Mounting Locator	D Dia Min	F Mounting Flange Location	G Flange Thickness	J Max	L Max Overall Length	P Min Edge Distance
8	.828 (21.0)	.594 (15.1)	.469/.422 (11.9/10.7)	.403 (10.2)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
10	.954 (24.2)	.719 (18.3)	.593/.546 (15.1/13.9)	.515 (13.1)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
12	1.047 (26.6)	.812 (20.6)	.719/.672 (18.3/17.1)	.630 (16.0)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
14	1.141 (29.0)	.906 (23.0)	.843/.796 (21.4/20.2)	.755 (19.2)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
16	1.234 (31.3)	.969 (24.6)	.969/.922 (24.6/23.4)	.880 (22.4)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
18	1.328 (33.7)	1.062 (27.0)	1.093/1.046 (27.8/26.6)	.980 (24.9)	.462/.431 (11.7/10.9)	.078/.046 (2.0/1.2)	.354 (9.0)	.978 (24.8)	.035
20	1.453 (36.9)	1.156 (29.4)	1.219/1.172 (31.0/29.8)	1.105 (28.1)	.587/.556 (14.9/14.1)	.110/.078 (2.8/2.0)	.417 (10.6)	1.196 (29.9)	.050
22	1.578 (40.1)	1.250 (31.8)	1.343/1.296 (34.1/32.9)	1.230 (31.2)	.587/.556 (14.9/14.1)	.110/.078 (2.8/2.0)	.417 (10.6)	1.196 (29.9)	.050
24	1.703 (43.3)	1.375 (34.9)	1.469/1.422 (37.3/36.1)	1.385 (35.2)	.587/.556 (14.9/14.1)	.110/.078 (2.8/2.0)	.445 (11.3)	1.196 (29.9)	.050

D

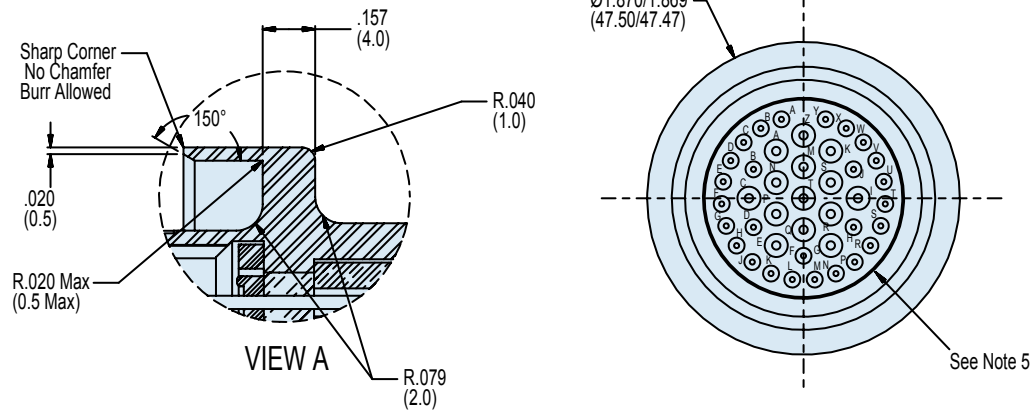
237-127
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Solder Flange Mount Receptacle
with Crimp Removable Rear Sockets (M39029/22 Type)



237-127
MIL-DTL-26482 Series I Type Hermetic
Bayonet Coupling Solder Flange Mount Receptacle
with Crimp Removable Rear Sockets (M39029/22 Type)

Glenair®

**MIL-DTL
26482 Type**



D

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell and bayonets:
 Z1 - Cres/passivated.
 Contacts - Nickel-iron alloy/gold plated.
 Hermetic Insulator - Full glass/N.A.
 Socket insulator - Rigid dielectric/N.A.
 Seals and grommet - Silicone elastomer/N.A.
 Removable sockets - Copper alloy/gold plated.
 Socket retention clips - Copper alloy/N.A.
- Glenair 237-127 is intermatable with any QPL manufacturers MIL-DTL-26482 plug, shell size 22, arrangement -41 per MIL-STD-1669, normal position and socket face.
- Connector is supplied with crimp-style removable contacts per M39029/22. Quantity will be sufficient to fully populate connector plus 1 extra each size.
- Hermetic seal is centered in this flange position.
- Performance requirements:
 Hermeticity - $<1 \times 10^{-7}$ sccHe/se @ 1 Atm. Diff.
 DWV - 1500 VAC pin-to-pin or pin-to-shell for 1 minute without breakdown (Series II requirement).
 Temperature range -40° to +100°C.
- Metric Dimensions (mm) are indicated in parentheses.



230-016

MIL-DTL-26482 Series II Type Hermetic Bayonet Coupling Narrow Flange Mount Receptacle MS3440 Type

Connector Style

016 = Hermetic Narrow Flange
Mount Receptacle

Insert Arrangement

Per MIL-STD-1669

Alternate Insert Arrangement

W, X, Y or Z
(Omit for Normal)

230

- 016

FT

10

- 6

P

X

**Series 230
MIL-DTL-26482
Type**

Material/Finish

Z1 = Stainless Steel/
Passivated

FT = C1215 Stainless
Steel/Tin Plated
(See Note 2)

Shell Size

Contact Type

P = Solder Cup, Pin Face

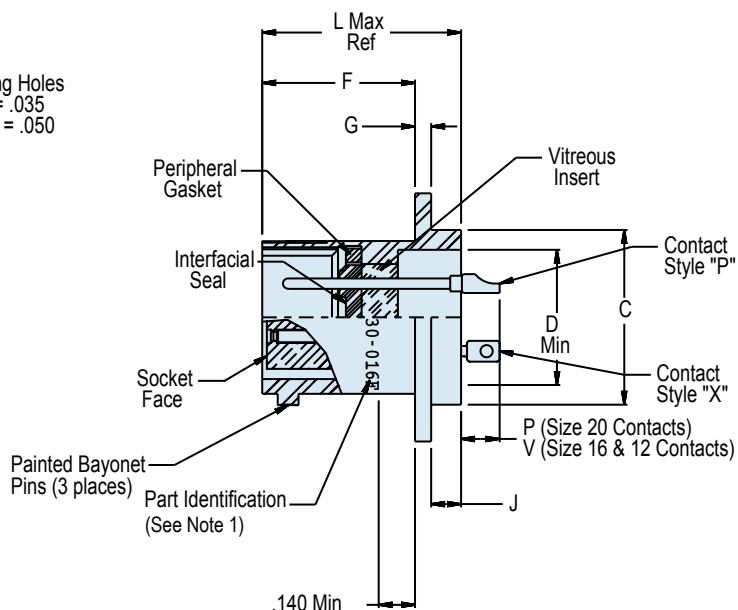
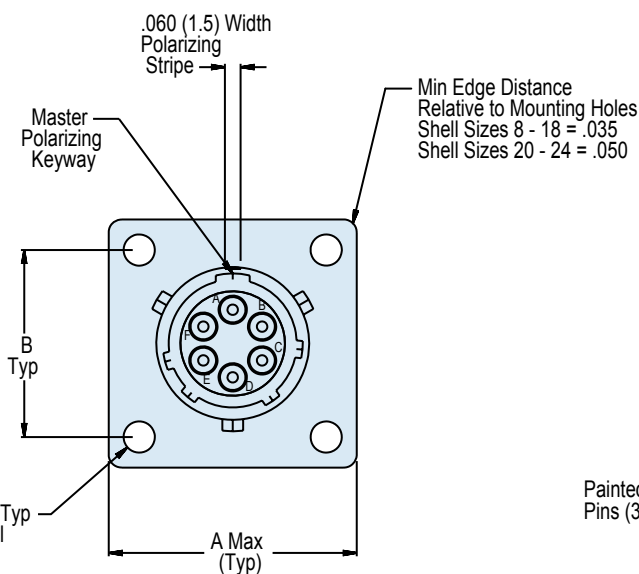
X = Eyelet, Pin Face

S = Socket, Solder Cup

Z = Socket, Eyelet

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Sockets - Copper alloy, gold plated.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Hermetic, glass/N.A.; Socket: Rigid dielectric/N.A.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-016 will mate with any QPL MIL-DTL-26482 Series II bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - <1 x 10⁻⁷ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

230-016
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Narrow Flange Mount Receptacle
MS3440 Type



MIL-DTL
26482 Type

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A	B	C Dia Mounting Locator	D Dia Min	F	G	H
8	.828 (21.03)	.594 (15.1)	.563/.557 (14.3/14.1)	.403 (10.2)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
10	.954 (24.2)	.719 (18.3)	.673/.667 (17.1/16.9)	.515 (13.1)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
12	1.047 (26.6)	.812 (20.6)	.782/.776 (19.9/19.7)	.630 (16.0)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
14	1.141 (29.0)	.906 (23.0)	.907/.901 (23.0/22.9)	.755 (19.2)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
16	1.234 (31.3)	.969 (24.6)	1.032/1.026 (26.2/26.1)	.880 (22.4)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
18	1.328 (33.7)	1.062 (27.0)	1.157/1.151 (29.4/29.2)	.980 (24.9)	.598/.578 (15.2/14.7)	.078/.04 (2.0/1.0)	.120 (3.0)
20	1.453 (36.9)	1.156 (29.4)	1.251/1.245 (31.8/31.6)	1.105 (28.1)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.120 (3.0)
22	1.578 (40.1)	1.250 (31.8)	1.376/1.371 (35.0/34.8)	1.230 (31.2)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.120 (3.0)
24	1.703 (43.3)	1.375 (34.9)	1.501/1.495 (38.1/38.0)	1.385 (35.2)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.147 (3.7)

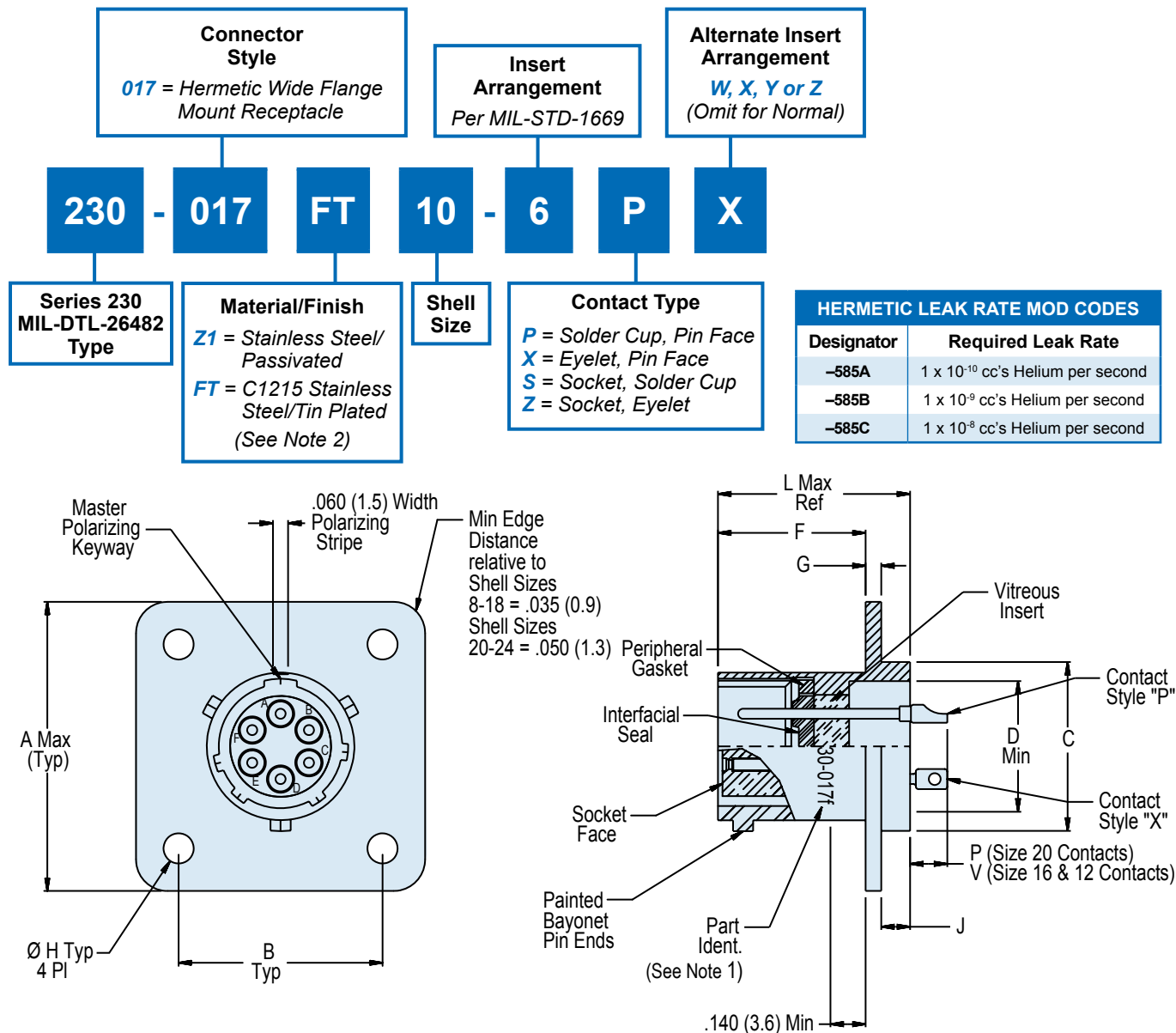
D

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	J	L	P	V	Panel Cut-Out Dia	Max. Weight (Lbs)
8	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.570 (14.5)	.038
10	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.680 (17.3)	.044
12	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.789 (20.0)	.052
14	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.914 (23.2)	.070
16	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.039 (26.4)	.085
18	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.164 (29.6)	.098
20	.125/.105 (3.2/2.7)	.863 (21.9)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.258 (32.0)	.110
22	.125/.105 (3.2/2.7)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	1.383 (35.1)	.150
24	.125/.105 (3.2/2.7)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	1.508 (38.3)	.280

Glenair.

230-017 MIL-DTL-26482 Series II Type Hermetic Bayonet Coupling Wide Flange Mount Receptacle MS3442 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Sockets - Copper alloy, gold plated.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Hermetic, glass/N.A.; Socket: Rigid dielectric/N.A.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-017 will mate with any QPL MIL-DTL-26482 Series II bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - <1 x 10⁻⁷ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

230-017
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Wide Flange Mount Receptacle
MS3442 Type



MIL-DTL
26482 Type

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

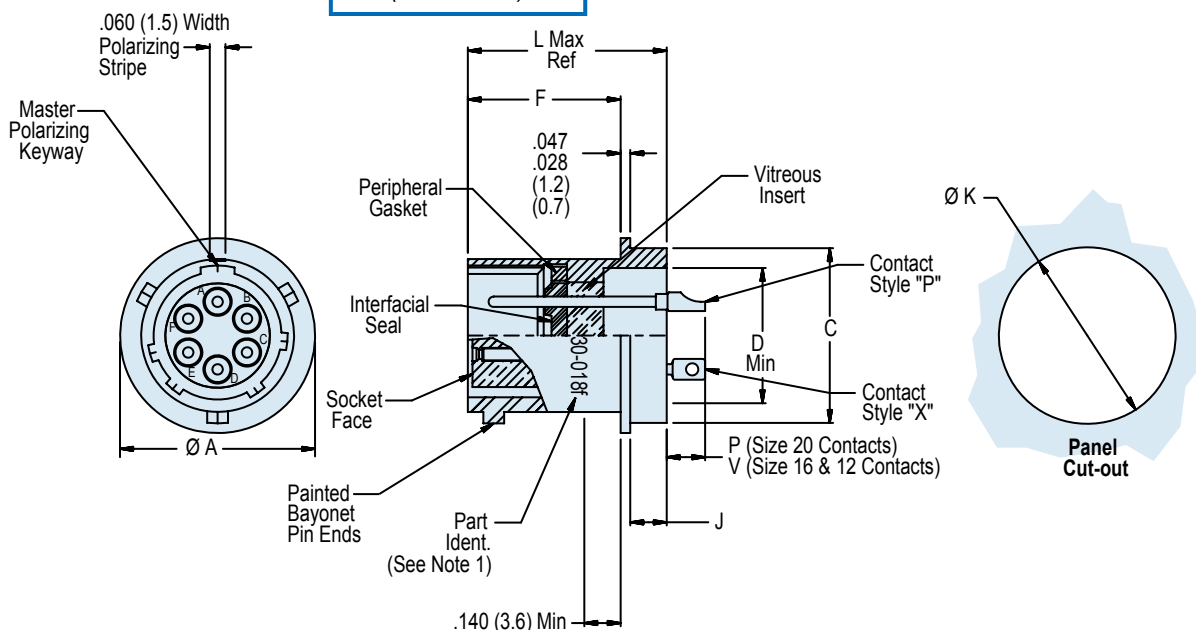
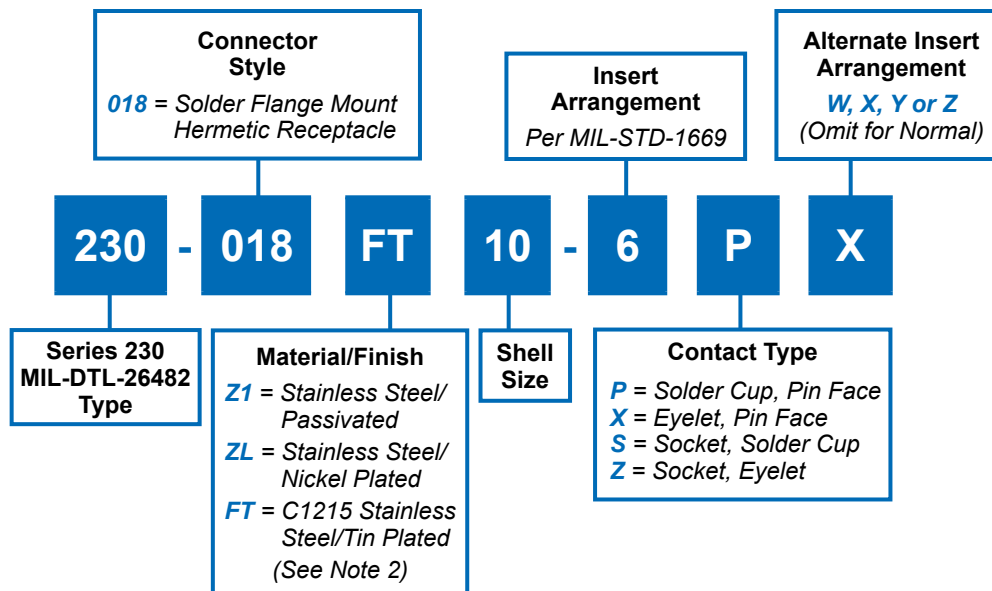
Shell Size	A	B	C Dia Mounting Locator	D Dia Min	F	G	H
8	1.065 (27.1)	.734 (18.6)	.563/.557 (14.3/14.1)	.403 (10.2)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
10	1.141 (29.0)	.812 (20.6)	.673/.667 (17.1/16.9)	.515 (13.1)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
12	1.266 (32.2)	.938 (23.8)	.782/.776 (19.9/19.7)	.630 (16.0)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
14	1.360 (34.5)	1.031 (26.2)	.907/.901 (23.0/22.9)	.755 (19.2)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
16	1.453 (36.9)	1.125 (28.6)	1.032/1.026 (26.2/26.1)	.880 (22.4)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
18	1.532 (38.9)	1.203 (30.6)	1.157/1.151 (29.4/29.2)	.980 (24.9)	.598/.578 (15.2/14.7)	.078/.046 (2.0/1.2)	.150 (3.8)
20	1.688 (42.9)	1.297 (32.9)	1.251/1.245 (31.8/31.6)	1.105 (28.1)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.150 (3.8)
22	1.766 (44.9)	1.375 (34.9)	1.376/1.371 (35.0/34.8)	1.230 (31.2)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.150 (3.8)
24	1.891 (48.0)	1.500 (38.1)	1.501/1.495 (38.1/38.0)	1.385 (35.2)	.660/.640 (16.8/16.3)	.110/.078 (2.8/2.0)	.150 (3.8)

D

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	J	L	P	V	Panel Cut-Out Dia
8	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.570 (14.5)
10	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.680 (17.3)
12	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.789 (20.0)
14	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.914 (23.2)
16	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.039 (26.4)
18	.125/.105 (3.2/2.7)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.164 (29.6)
20	.125/.105 (3.2/2.7)	.863 (21.9)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	1.258 (32.0)
22	.125/.105 (3.2/2.7)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	1.383 (35.1)
24	.125/.105 (3.2/2.7)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	1.508 (38.3)

230-018 MIL-DTL-26482 Series II Type Hermetic Bayonet Coupling Solder Flange Mount Receptacle MS3443 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Sockets - Copper alloy, gold plated.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Hermetic, glass/N.A.; Socket: Rigid Dielectric/N.A.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-018 will mate with any QPL MIL-DTL-26482 Series II bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

230-018
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Solder Flange Mount Receptacle
MS3443 Type



MIL-DTL
26482 Type

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia ± .010 (0.3)	C Dia Mounting Locator	D Dia Min	F	J	K	L	P	V	Max Weight (Lbs.)
8	.625 (15.9)	.563/.557 (14.3/14.1)	.403 (10.2)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	.570 (14.5)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0310
10	.750 (19.1)	.673/.667 (17.1/16.9)	.515 (13.1)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	.680 (17.3)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0340
12	.844 (21.4)	.782/.776 (19.9/19.7)	.630 (16.0)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	.789 (20.0)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0400
14	.969 (24.6)	.907/.901 (23.0/22.9)	.755 (19.2)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	.914 (23.2)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0510
16	1.094 (27.8)	1.032/1.026 (26.2/26.1)	.880 (22.4)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	1.039 (26.4)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0620
18	1.218 (30.9)	1.157/1.151 (29.4/29.2)	.980 (24.9)	.598/.578 (15.2/14.7)	.156/.116 (4.0/2.9)	1.164 (29.6)	.801 (20.3)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.0820
20	1.312 (33.3)	1.251/1.245 (31.8/31.6)	1.105 (28.1)	.660/.640 (16.8/16.3)	.156/.116 (4.0/2.9)	1.258 (32.0)	.863 (21.9)	.178/.118 (4.5/3.0)	.248/.188 (6.3/4.8)	.1000
22	1.438 (36.5)	1.376/1.371 (35.0/34.8)	1.230 (31.2)	.660/.640 (16.8/16.3)	.188/.148 (4.8/3.8)	1.383 (35.1)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	.1150
24	1.564 (39.7)	1.501/1.495 (38.1/38.0)	1.385 (35.2)	.660/.640 (16.8/16.3)	.188/.148 (4.8/3.8)	1.508 (38.3)	.895 (22.7)	.146/.086 (3.7/2.2)	.216/.156 (5.5/4.0)	.2680

D



230-019

MIL-DTL-26482 Series II Type Hermetic Quick Release Bayonet Receptacle Single Hole Jam-Nut Mount MS3449 Type

Connector Style

019 = Hermetic Jam-Nut
Single Hole Mount
Receptacle

Insert Arrangement
Per MIL-STD-1669

Alternate Insert Arrangement
W, X, Y or Z
(Omit for Normal)

230
- 019
FT
10
- 6
P
X

Series 230
MIL-DTL-26482
Type

Material/Finish

Z1 = Stainless Steel/
Passivated

FT = C1215 Stainless
Steel/Tin Plated
(See Note 2)

Shell Size

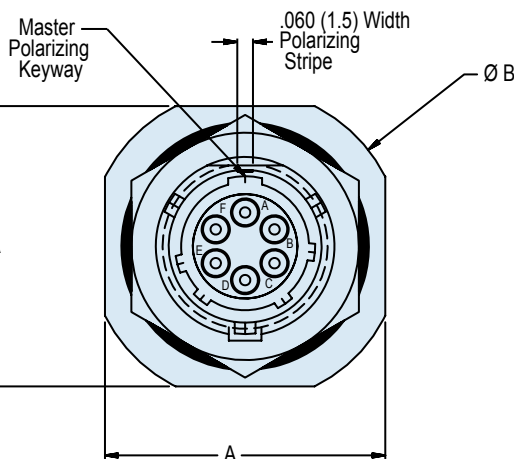
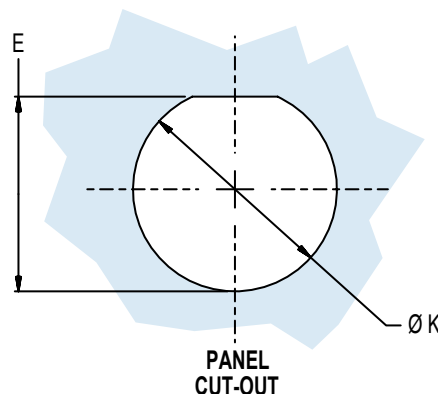
Contact Type

P = Solder Cup, Pin Face

X = Eyelet, Pin Face

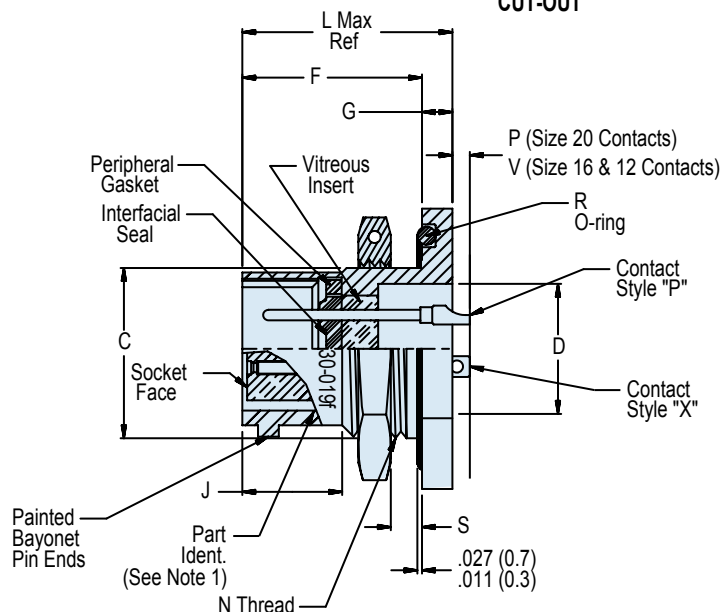
S = Socket, Solder Cup

Z = Socket, Eyelet



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Sockets - Copper alloy, gold plated.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Hermetic, glass/N.A.; Socket: Rigid dielectric/N.A.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Glenair 230-019 will mate with any QPL MIL-DTL-26482 Series II bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - <1 x 10⁻⁷ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

230-019
MIL-DTL-26482 Series II Type Hermetic
Quick Release Bayonet Receptacle
Single Hole Jam-Nut Mount MS3449 Type



MIL-DTL
26482 Type

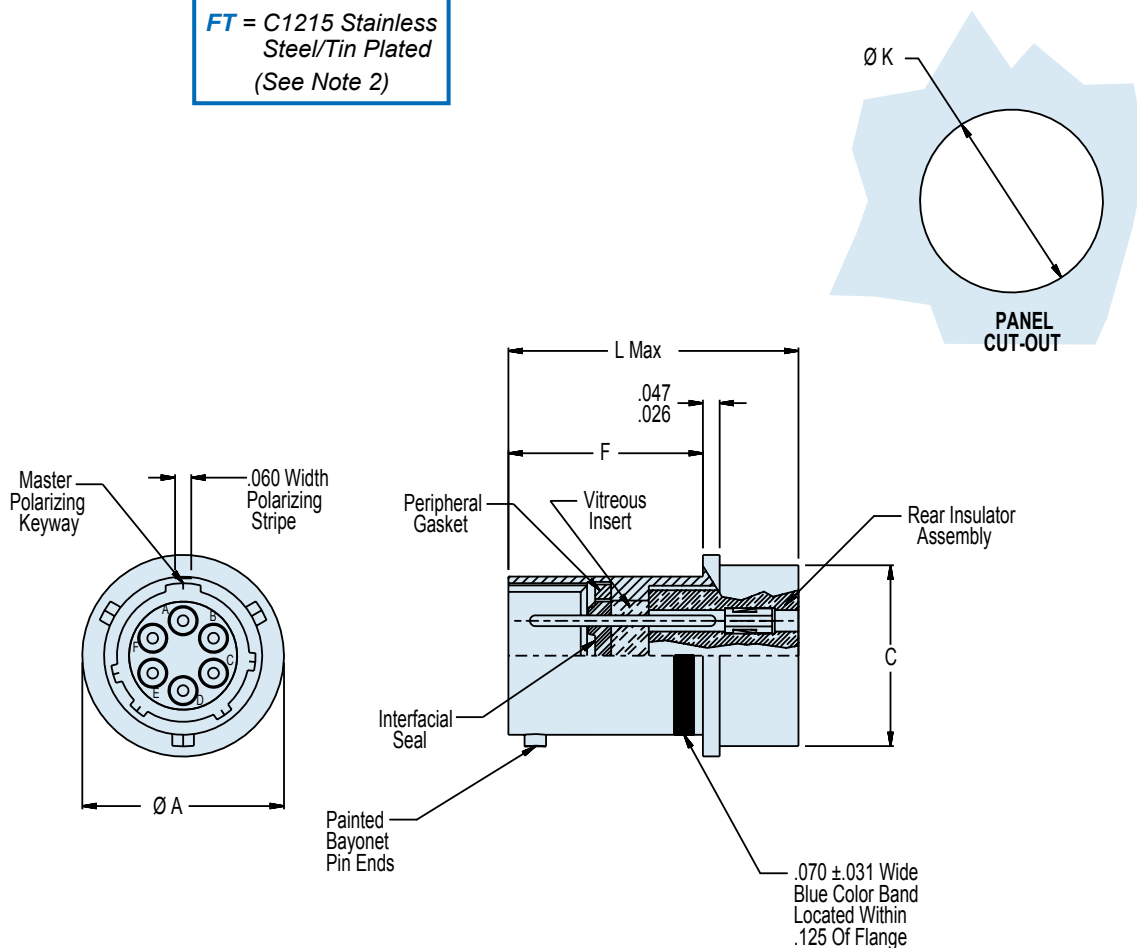
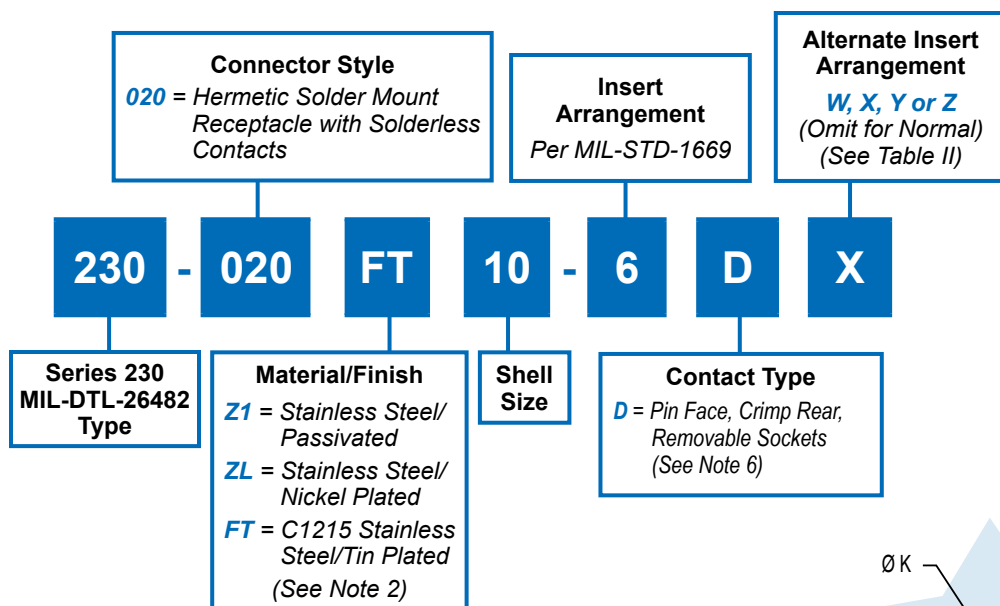
TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A Length + .000 - .031 (+0 -0.8)	B Dia + .000 - .031 (+0 -0.8) Across Flange Corner	C + .000 - .010 (+0 -0.3) Mounting Flat	D Dia Min	E Panel Flat Location	F Mounting Flange Location	G Mounting Flange Thickness	J To Thread Chamfer ± .010 (0.3)	K + .010 - .005 (+0.3 -0.1) Panel Mounting Hole
8	.954 (24.2)	1.078 (27.4)	.530 (13.5)	.403 (10.2)	.536 (13.6)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.572 (14.5)
10	1.078 (27.4)	1.203 (30.6)	.655 (16.6)	.515 (13.1)	.661 (16.8)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.697 (17.7)
12	1.266 (32.2)	1.391 (35.3)	.818 (20.8)	.630 (16.0)	.824 (20.9)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.885 (22.5)
14	1.391 (35.3)	1.516 (38.5)	.942 (23.9)	.755 (19.2)	.948 (24.1)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.010 (25.7)
16	1.516 (38.5)	1.641 (41.7)	1.062 (27.0)	.880 (22.4)	1.072 (27.2)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.135 (28.8)
18	1.641 (41.7)	1.766 (44.9)	1.191 (30.3)	.980 (24.9)	1.197 (30.4)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.260 (32.0)
20	1.828 (46.4)	1.954 (49.6)	1.316 (33.4)	1.105 (28.1)	1.322 (33.6)	.772/.754 (19.6/19.2)	.148/.128 (3.8/3.3)	.368 (9.3)	1.385 (35.2)
22	1.954 (49.6)	2.078 (52.8)	1.441 (36.6)	1.230 (31.2)	1.447 (36.8)	.772/.754 (19.6/19.2)	.148/.128 (3.8/3.3)	.368 (9.3)	1.510 (38.4)
24	2.078 (52.8)	2.203 (56.0)	1.566 (39.8)	1.385 (35.2)	1.572 (39.9)	.803/.785 (20.4/19.9)	.148/.128 (3.8/3.3)	.395 (10.0)	1.635 (41.5)

D

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	L Overall Length	N UNEF-2A Mounting Thread	P	R O-Ring Seal MS29513-	S Panel Thickness		V	Max. Weight (Lbs)
					Min	Max		
8	.820 (20.8)	.5625-24	.134/.074 (3.4/1.9)	16	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0430
10	.820 (20.8)	.6875-24	.134/.074 (3.4/1.9)	18	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0610
12	.820 (20.8)	.875-20	.134/.074 (3.4/1.9)	21	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0880
14	.820 (20.8)	1.000-20	.134/.074 (3.4/1.9)	23	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1100
16	.820 (20.8)	1.125-18	.134/.074 (3.4/1.9)	25	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1310
18	.820 (20.8)	1.250-18	.134/.074 (3.4/1.9)	27	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1720
20	.920 (23.4)	1.375-18	.099/.039 (2.5/1.0)	29	.062 (1.6)	.250 (6.4)	.169/.109 (4.3/2.8)	.2110
22	.920 (23.4)	1.500-18	.099/.039 (2.5/1.0)	30	.062 (1.6)	.250 (6.4)	.169/.109 (4.3/2.8)	.2420
24	.951 (24.2)	1.625-18	.099/.009 (2.5/0.2)	31	.062 (1.6)	.250 (6.4)	.139/.079 (3.5/2.0)	.2930



230-020
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Solder Mount Receptacle
with Crimp Removable Contacts • MS3473 Type



MIL-DTL
26482 Type

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

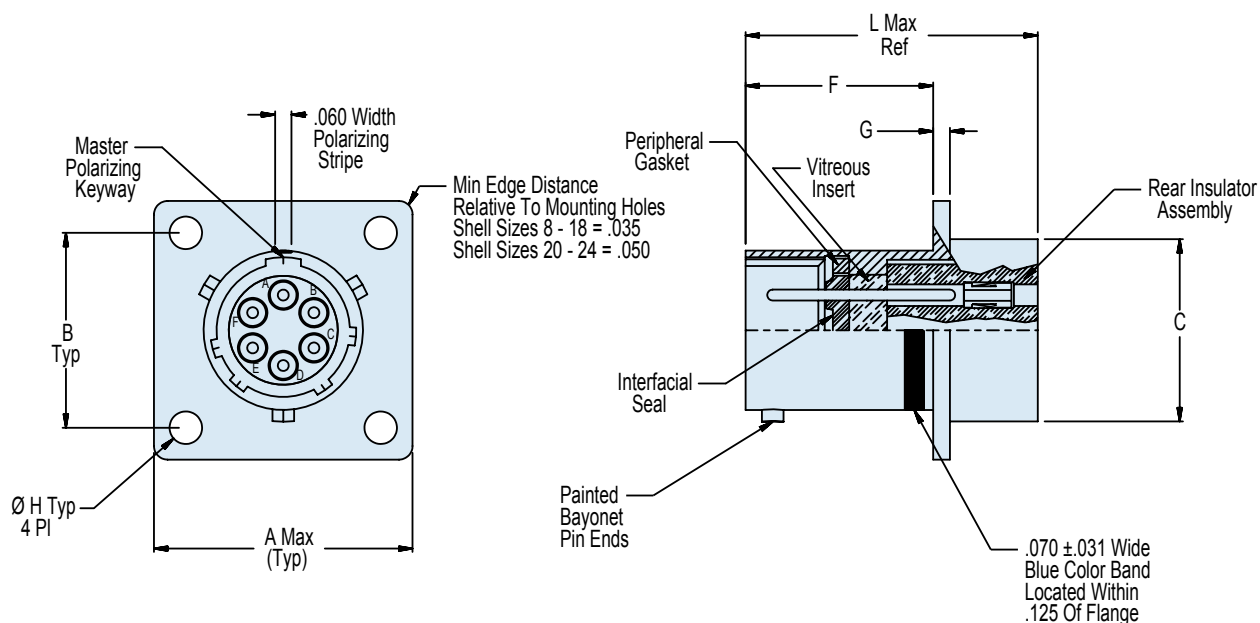
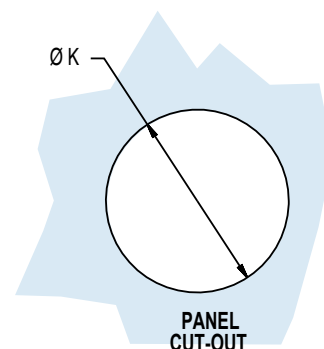
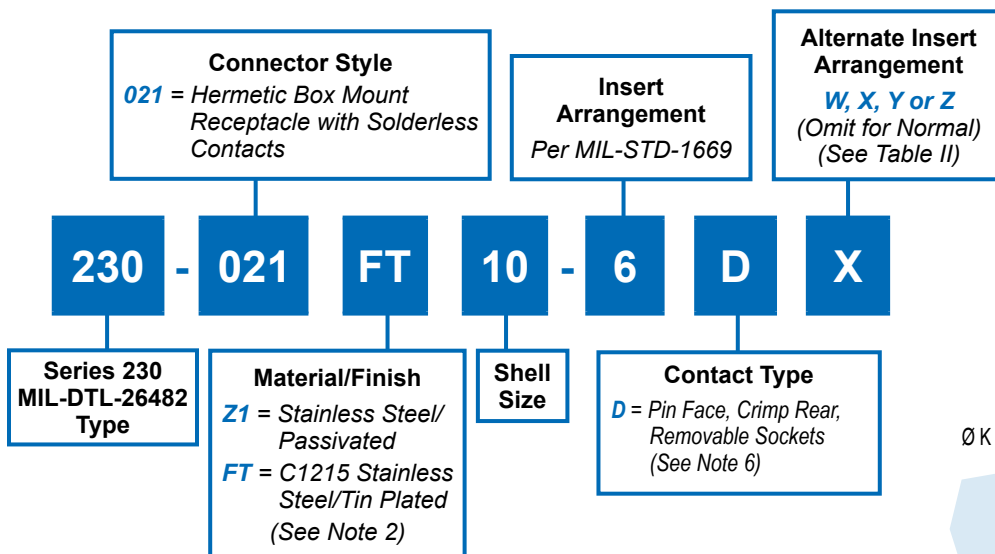
TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia Ø.010 (0.3)	C Dia	F	K	L Max
8	.625 (15.9)	.563/.557 (14.3/14.1)	.735/.711 (18.7/18.1)	.570 (14.5)	1.078 (27.4)
10	.750 (19.1)	.673/.667 (17.1/16.9)	.735/.711 (18.7/18.1)	.680 (17.3)	1.078 (27.4)
12	.844 (21.4)	.782/.776 (20.0/19.7)	.735/.711 (18.7/18.1)	.789 (20.0)	1.078 (27.4)
14	.969 (24.6)	.907/.901 (23.0/22.9)	.735/.711 (18.7/18.1)	.914 (23.2)	1.078 (27.4)
16	1.094 (27.8)	1.032/1.026 (26.2/26.1)	.735/.711 (18.7/18.1)	1.039 (26.4)	1.078 (27.4)
18	1.218 (30.9)	1.157/1.151 (29.4/29.2)	.735/.711 (18.7/18.1)	1.164 (29.6)	1.078 (27.4)
20	1.312 (33.3)	1.251/1.245 (31.8/31.6)	.823/.799 (20.9/20.3)	1.258 (32.0)	1.140 (29.0)
22	1.438 (36.5)	1.376/1.371 (35.0/34.8)	.823/.799 (20.9/20.3)	1.383 (35.1)	1.140 (29.0)
24	1.564 (39.7)	1.501/1.495 (38.1/38.0)	.823/.799 (20.9/20.3)	1.508 (38.3)	1.140 (29.0)

D

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell: Z1 - 304L stainless steel/passivate.
 FT - C1215 stainless steel/tin plated.
 Titanium and Inconel® available. Consult factory.
 Contacts - 52 Nickel alloy/gold plate.
 Bayonets - Stainless steel/passivate.
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
 Rear insulator - Rigid dielectric/N.A.
- Glenair 230-020 will mate with any QPL MIL-DTL-26482
- Performance:
 Hermeticity - <1 x 10⁻⁷ cc/sec @ 1 atm differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
 Insulation resistance - 5000 megohms min @500VDC.
- See Table II for available insert arrangement option.
- Connectors are supplied with applicable crimp socket contacts per MIL-C-39029/22-** and MS3160-** insert and removal tool.
- Metric Dimensions (mm) are indicated in parentheses.



230-021
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Box Mount Receptacle
with Crimp Removable Contacts • MS3477 Type



MIL-DTL
26482 Type

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A	B	C Dia Mounting Locator	F	G	H	K Dia Panel Cut-Out	L
8	.828 (21.0)	.594 (15.1)	.563/.557 (14.3/14.1)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	.570 (14.5)	1.078 (27.4)
10	.954 (24.2)	.719 (18.3)	.673/.667 (17.1/16.9)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	.680 (17.3)	1.078 (27.4)
12	1.047 (26.6)	.812 (20.6)	.782/.776 (20.0/19.7)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	.789 (20.0)	1.078 (27.4)
14	1.141 (29.0)	.906 (23.0)	.907/.901 (23.0/22.9)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	.914 (23.2)	1.078 (27.4)
16	1.234 (31.3)	.969 (24.6)	1.032/1.026 (26.2/26.1)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	1.039 (26.4)	1.078 (27.4)
18	1.328 (33.7)	1.062 (27.0)	1.157/1.151 (29.4/29.2)	.704/.680 (17.9/17.3)	.078/.046 (2.0/1.2)	.120 (3.0)	1.164 (29.6)	1.078 (27.4)
20	1.453 (36.9)	1.156 (29.4)	1.251/1.245 (31.8/31.6)	.756/.739 (18.9/18.8)	.110/.078 (2.8/2.0)	.120 (3.0)	1.258 (32.0)	1.140 (29.0)
22	1.578 (40.1)	1.250 (31.8)	1.376/1.371 (35.0/34.8)	.756/.739 (18.9/18.8)	.110/.078 (2.8/2.0)	.120 (3.0)	1.383 (35.1)	1.140 (29.0)
24	1.703 (43.3)	1.375 (34.9)	1.501/1.495 (38.1/38.0)	.756/.739 (18.9/18.8)	.110/.078 (2.8/2.0)	.147 (3.7)	1.508 (38.3)	1.140 (29.0)

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell: Z1 - 304L stainless steel/passivate.
 FT - C1215 stainless steel/tin plated.
 Titanium and Inconel® available. Consult factory.
 Contacts - 52 Nickel alloy/gold plate.
 Bayonets - Stainless steel/passivate.
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
 Rear insulator - Rigid dielectric/N.A.
- Glenair 230-021 will mate with any QPL MIL-DTL-26482
- Performance:
 Hermeticity - <1 x 10⁻⁷ cc/sec @ 1 atm differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
 Insulation resistance - 5000 megohms min @500VDC.
- See Table II for available insert arrangement option.
- Connectors are supplied with applicable crimp socket contacts per MIL-C-39029/22-** and MS3160-** insert and removal tool.
- Metric Dimensions (mm) are indicated in parentheses.

Connector Style
022 = Jam-Nut Mount
Receptacle with Solderless
Contacts

**Insert
Arrangement**
Per MIL-STD-1669

**Alternate Insert
Arrangement**
W, X, Y or Z
(Omit for Normal)
(See Table II)

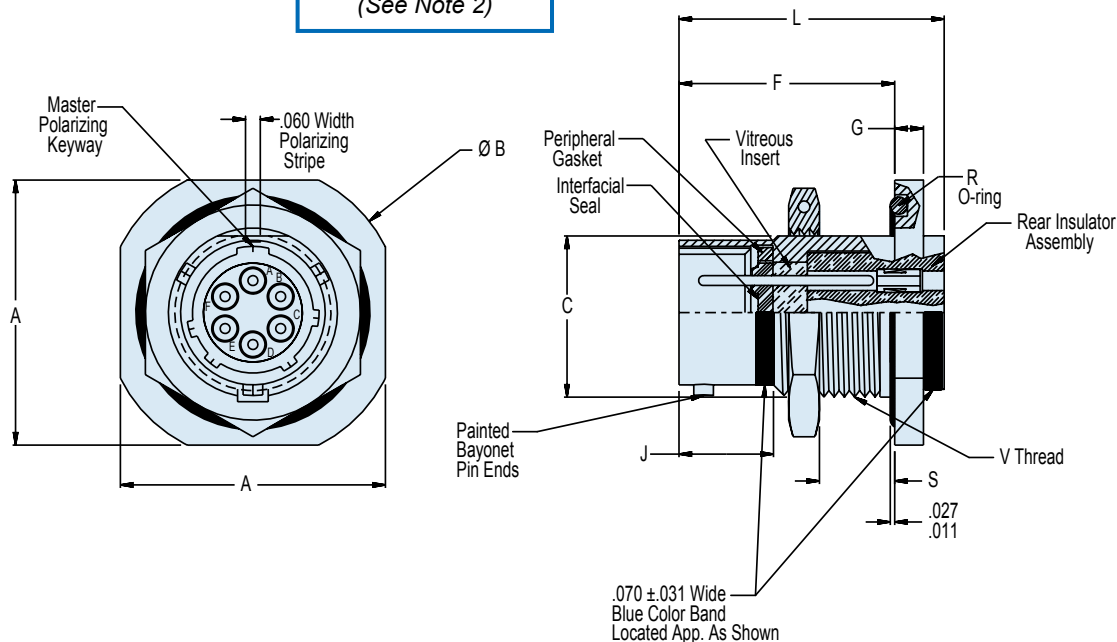
230
- 022
FT
10
- 6
D
X

Series 230
MIL-DTL-26482
Type

Material/Finish
Z1 = Stainless Steel/
Passivated
FT = C1215 Stainless
Steel/Tin Plated
(See Note 2)

**Shell
Size**

Contact Type
D = Pin Face, Crimp Rear,
Removable Sockets
(See Note 6)



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
Rear insulator - Rigid dielectric/N.A.
- Glenair 230-022 will mate with any QPL MIL-DTL-26482
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- See Table II for available insert arrangement option.
- Connectors are supplied with applicable crimp socket contacts per MIL-C-39029/22-** and MS3160-** insert and removal tool.
- Metric Dimensions (mm) are indicated in parentheses.

230-022

MIL-DTL-26482 Series II Type Hermetic Bayonet Coupling Jam Nut Mount Receptacle with Crimp Removable Contacts • MS3479 Type

Glenair®

MIL-DTL
26482 Type

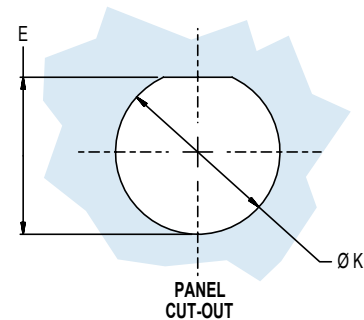
TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A Length + .000 - .031 (+0 -0.8)	B Dia + .000 - .031 (+0 -0.8) Across Flange Corner	C + .000 - .010 (+0 -0.3) Mounting Flat	E Panel Flat Location	F Mounting Flange Location	G Mounting Flange Thickness	J To Thread Chamfer ± .010 (0.3)	K + .010 - .005 (+0.3 -0.1) Panel Mounting Hole
8	.954 (24.2)	1.078 (27.4)	.530 (13.5)	.536 (13.6)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	.572 (14.5)
10	1.078 (27.4)	1.203 (30.6)	.655 (16.6)	.661 (16.8)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	.697 (17.7)
12	1.266 (32.2)	1.391 (35.3)	.818 (20.8)	.824 (20.9)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	.885 (22.5)
14	1.391 (35.3)	1.516 (38.5)	.942 (23.9)	.948 (24.1)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	1.010 (25.7)
16	1.516 (38.5)	1.641 (41.7)	1.062 (27.0)	1.072 (27.2)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	1.135 (28.8)
18	1.641 (41.7)	1.766 (44.9)	1.191 (30.3)	1.197 (30.4)	.887/.867 (22.5/22.0)	.113/.097 (2.9/2.5)	.368 (9.3)	1.260 (32.0)
20	1.828 (46.4)	1.954 (49.6)	1.316 (33.4)	1.322 (33.6)	.916/.896 (23.3/22.8)	.148/.128 (3.8/3.3)	.368 (9.3)	1.385 (35.2)
22	1.954 (49.6)	2.078 (52.8)	1.441 (36.6)	1.447 (36.8)	.916/.896 (23.3/22.8)	.148/.128 (3.8/3.3)	.368 (9.3)	1.510 (38.4)
24	2.078 (52.8)	2.203 (56.0)	1.566 (39.8)	1.572 (39.9)	.916/.896 (23.3/22.8)	.148/.128 (3.8/3.3)	.395 (10.0)	1.635 (41.5)

D

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	L Overall Length	N UNEF-2A Mounting Thread	P	R O-Ring Seal MS29513-	S Panel Thickness Min Max		Max. Weight (Lbs)
8	1.078 (27.4)	.5625-24	.134/.074 (3.4/1.9)	16	.062 (1.6)	.187 (4.7)	TBD
10	1.078 (27.4)	.6875-24	.134/.074 (3.4/1.9)	18	.062 (1.6)	.187 (4.7)	TBD
12	1.078 (27.4)	.875-20	.134/.074 (3.4/1.9)	21	.062 (1.6)	.187 (4.7)	TBD
14	1.078 (27.4)	1.000-20	.134/.074 (3.4/1.9)	23	.062 (1.6)	.187 (4.7)	TBD
16	1.078 (27.4)	1.125-18	.134/.074 (3.4/1.9)	25	.062 (1.6)	.187 (4.7)	TBD
18	1.078 (27.4)	1.250-18	.134/.074 (3.4/1.9)	27	.062 (1.6)	.187 (4.7)	TBD
20	1.140 (29.0)	1.375-18	.099/.039 (2.5/1.0)	29	.062 (1.6)	.250 (6.4)	TBD
22	1.140 (29.0)	1.500-18	.099/.039 (2.5/1.0)	30	.062 (1.6)	.250 (6.4)	TBD
24	1.140 (29.0)	1.625-18	.099/.009 (2.5/0.2)	31	.062 (1.6)	.250 (6.4)	TBD



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

230-034

MIL-DTL-26482 Series II Type Hermetic Bayonet Coupling Jam-Nut Mount Receptacle MS3449 Type

Connector Style

034 = Single Hole Jam-Nut
Mount Receptacle

**Insert
Arrangement**

Per MIL-STD-1669

**Alternate Insert
Arrangement**

W, X, Y or Z
(Omit for Normal)

230**- 034****FT****10****- 6****P****X**

Series 230
MIL-DTL-26482
Type

Material/Finish

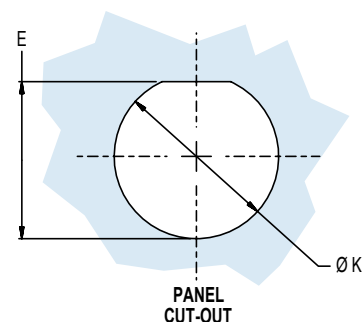
Z1 = Stainless Steel/
Passivated

FT = C1215 Stainless
Steel/Tin Plated
(See Note 2)

**Shell
Size****Contact Type**

P = Solder Cup, Pin Face

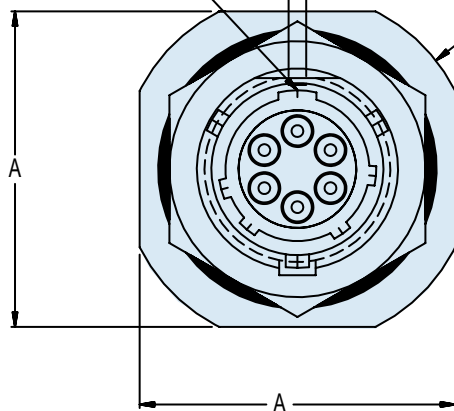
S = Solder Cup, Socket Face



Master
Polarizing
Keyway

.060 Width
Polarizing
Stripe

Ø B

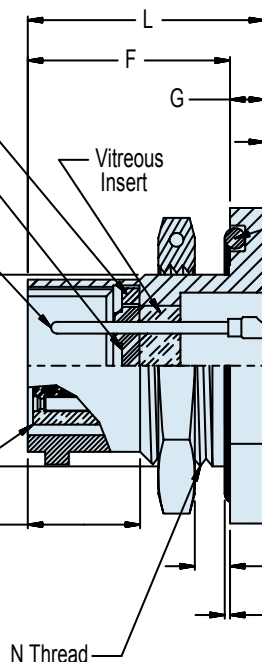


Peripheral
Gasket

Interfacial
Seal

Pin Face

Socket Face



Vitreous
Insert

P (Size 20 Contacts)

V (Size 16 & 12 Contacts)

R
O-ring

N Thread

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell: Z1 - 304L stainless steel/passivate.
FT - C1215 stainless steel/tin plated.
Titanium and Inconel® available. Consult factory.
Contacts - 52 Nickel alloy/gold plate.
Bayonets - Stainless steel/passivate.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
Socket insulator - Rigid dielectric/N.A.
- Glenair 230-034 will mate with any QPL MIL-DTL-26482 Series II bayonet coupling plug of same size and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/sec @ 1 atm differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1669.
Insulation resistance - 5000 megohms min @500VDC.
- Consult factory or MIL-STD-1669 for arrangement and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

230-034
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Jam-Nut Mount Receptacle
MS3449 Type



MIL-DTL
26482 Type

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A Length + .000 - .031 (+0 -0.8)	B Dia + .000 - .031 (+0 -0.8) Across Flange Corner	C + .000 - .010 (+0 -0.3) Mounting Flat	D Dia Min	E Panel Flat Location	F Mounting Flange Location	G Mounting Flange Thickness	J To Thread Chamfer ± .010 (0.3)	K + .010 - .005 (+0.3 -0.1) Panel Mounting Hole
8	.954 (24.2)	1.078 (27.4)	.530 (13.5)	.403 (10.2)	.536 (13.6)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.572 (14.5)
10	1.078 (27.4)	1.203 (30.6)	.655 (16.6)	.515 (13.1)	.661 (16.8)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.697 (17.7)
12	1.266 (32.2)	1.391 (35.3)	.818 (20.8)	.630 (16.0)	.824 (20.9)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	.885 (22.5)
14	1.391 (35.3)	1.516 (38.5)	.942 (23.9)	.755 (19.2)	.948 (24.1)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.010 (25.7)
16	1.516 (38.5)	1.641 (41.7)	1.062 (27.0)	.880 (22.4)	1.072 (27.2)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.135 (28.8)
18	1.641 (41.7)	1.766 (44.9)	1.191 (30.3)	.980 (24.9)	1.197 (30.4)	.707/.691 (18.0/17.6)	.113/.097 (2.9/2.5)	.368 (9.3)	1.260 (32.0)
20	1.828 (46.4)	1.954 (49.6)	1.316 (33.4)	1.105 (28.1)	1.322 (33.6)	.772/.754 (19.6/19.2)	.148/.128 (3.8/3.3)	.368 (9.3)	1.385 (35.2)
22	1.954 (49.6)	2.078 (52.8)	1.441 (36.6)	1.230 (31.2)	1.447 (36.8)	.772/.754 (19.6/19.2)	.148/.128 (3.8/3.3)	.368 (9.3)	1.510 (38.4)
24	2.078 (52.8)	2.203 (56.0)	1.566 (39.8)	1.385 (35.2)	1.572 (39.9)	.803/.785 (20.4/19.9)	.148/.128 (3.8/3.3)	.395 (10.0)	1.635 (41.5)

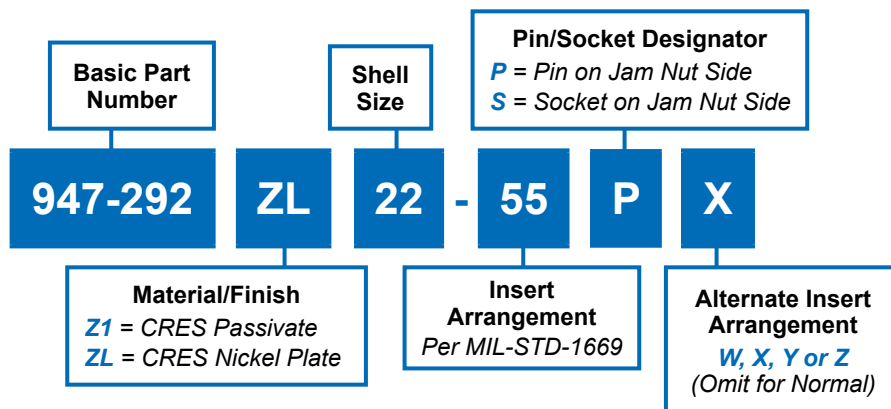
D

TABLE I (Continued): CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	L Overall Length	N UNEF-2A Mounting Thread	P	R O-Ring Seal MS29513-	S Panel Thickness		V	Max. Weight (Lbs)
					Min	Max		
8	.820 (20.8)	.5625-24	.134/.074 (3.4/1.9)	16	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0430
10	.820 (20.8)	.6875-24	.134/.074 (3.4/1.9)	18	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0610
12	.820 (20.8)	.875-20	.134/.074 (3.4/1.9)	21	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.0880
14	.820 (20.8)	1.000-20	.134/.074 (3.4/1.9)	23	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1100
16	.820 (20.8)	1.125-18	.134/.074 (3.4/1.9)	25	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1310
18	.820 (20.8)	1.250-18	.134/.074 (3.4/1.9)	27	.062 (1.6)	.187 (4.7)	.204/.144 (5.2/3.7)	.1720
20	.920 (23.4)	1.375-18	.099/.039 (2.5/1.0)	29	.062 (1.6)	.250 (6.4)	.169/.109 (4.3/2.8)	.2110
22	.920 (23.4)	1.500-18	.099/.039 (2.5/1.0)	30	.062 (1.6)	.250 (6.4)	.169/.109 (4.3/2.8)	.2420
24	.951 (24.2)	1.625-18	.099/.009 (2.5/0.2)	31	.062 (1.6)	.250 (6.4)	.169/.109 (4.3/2.8)	.2930

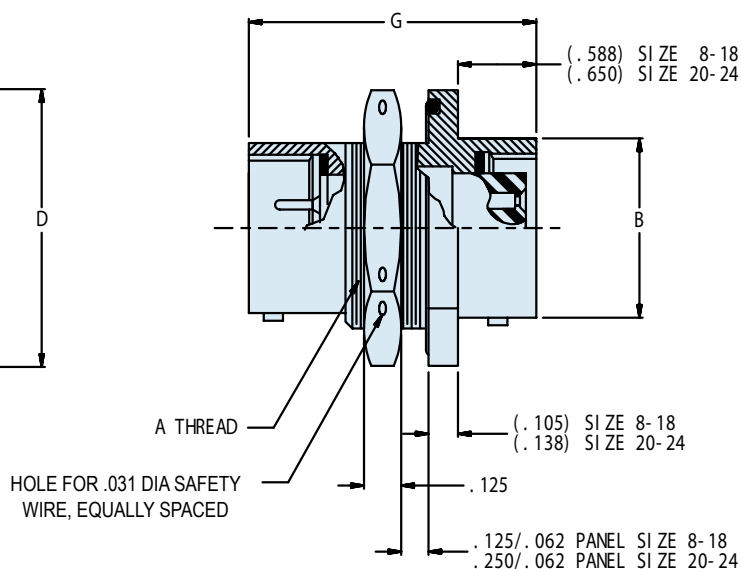
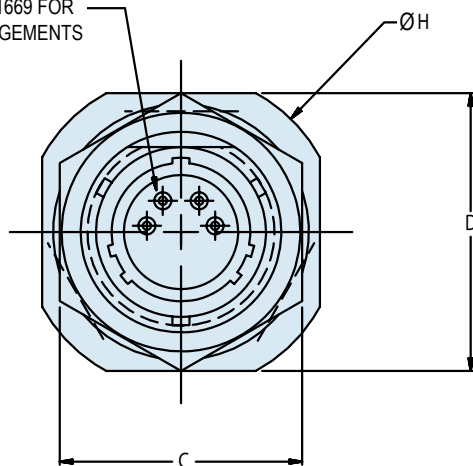
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second



D

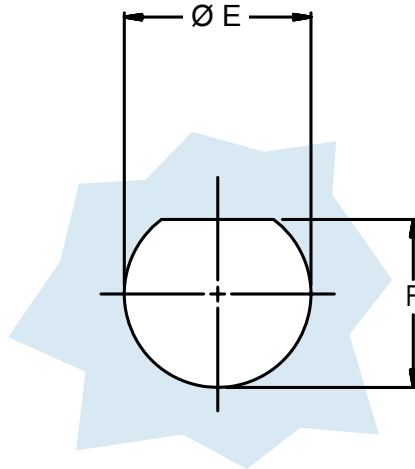
SEE MIL-STD-1669 FOR
INSERT ARRANGEMENTS



947-292
MIL-DTL-26482 Series II Type Hermetic
Bayonet Coupling Jam Nut Mount
Pin-Socket Bulkhead Feedthrough Receptacle



MIL-DTL
26482 Type



Panel Cut Out

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

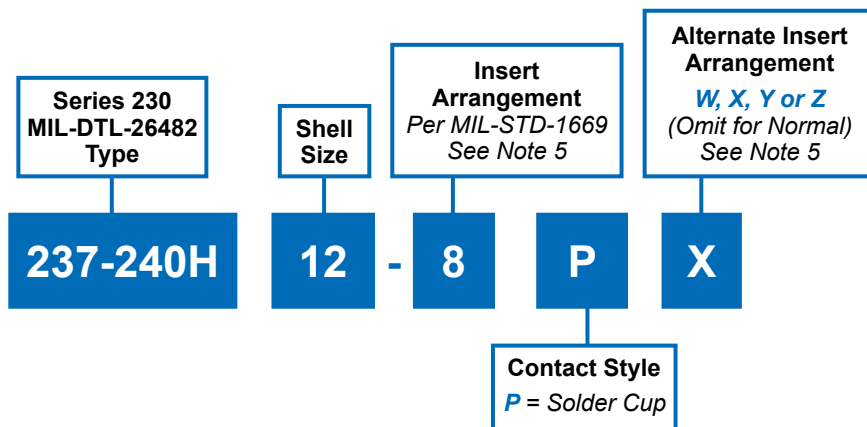
D

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

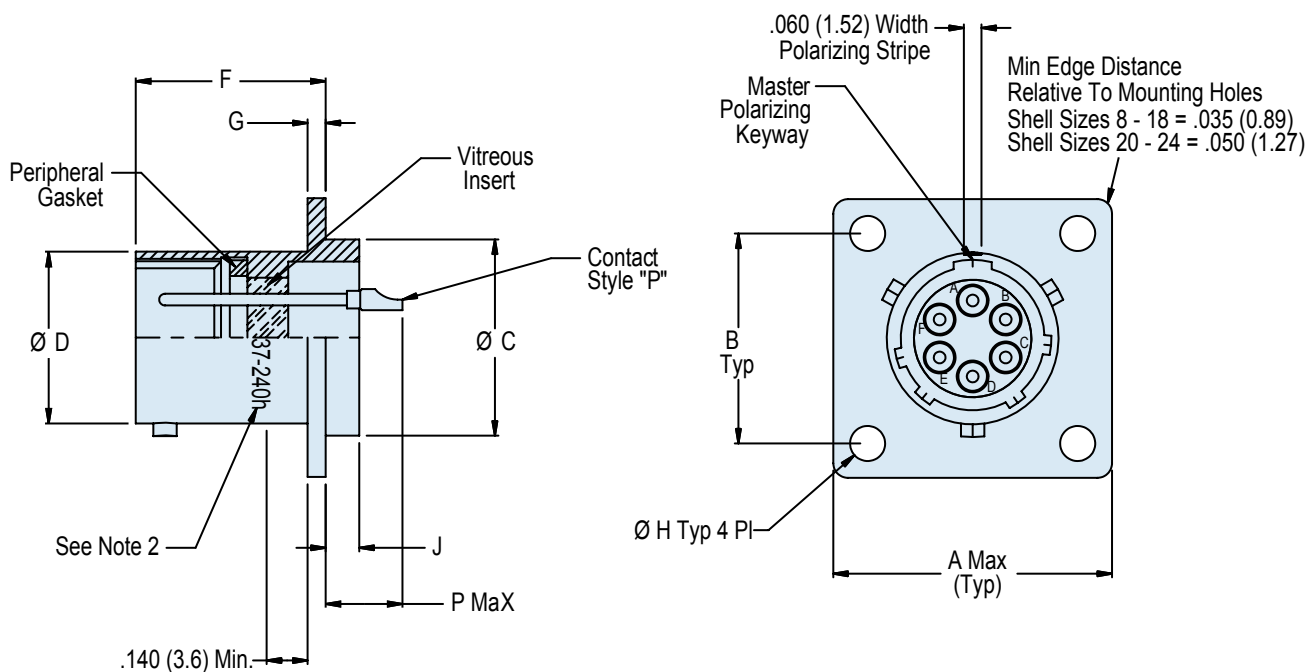
Shell Size	A Thread Class 2A	B Dia Max	C Hex	D Flats	E Dia +.010 -.005 (+.03 -.01)	F Dim +.010 -.005 (+.03 -.01)	G Max	H Dia ± .016 (0.4)
8	9/16-24 UNEF	.474 (12.0)	.750 (19.1)	.954 (24.2)	.572 (14.5)	.536 (13.6)	1.420 (36.1)	1.062 (27.0)
10	11/16-24 UNEF	.591 (15.0)	.875 (22.2)	1.078 (27.4)	.697 (17.7)	.661 (16.8)	1.420 (36.1)	1.187 (30.1)
12	7/8-20 UNEF	.751 (19.1)	1.062 (27.0)	1.266 (32.2)	.895 (22.7)	.824 (20.9)	1.420 (36.1)	1.375 (34.9)
14	1-20 UNEF	.876 (22.3)	1.188 (30.2)	1.391 (35.3)	1.010 (25.7)	.948 (24.1)	1.420 (36.1)	1.500 (38.1)
16	1 1/8-18 UNEF	1.001 (25.4)	1.312 (33.3)	1.516 (38.5)	1.135 (28.8)	1.072 (27.2)	1.420 (36.1)	1.625 (41.3)
18	1 1/4-18 UNEF	1.126 (28.6)	1.438 (37.0)	1.641 (41.7)	1.260 (32.0)	1.197 (30.4)	1.420 (36.1)	1.750 (44.5)
20	1 3/8-18 UNEF	1.251 (31.8)	1.562 (39.7)	1.828 (46.4)	1.385 (35.2)	1.322 (33.6)	1.580 (40.1)	1.938 (49.2)
22	1 1/2-18 UNEF	1.376 (35.0)	1.688 (42.9)	1.954 (49.6)	1.510 (38.0)	1.447 (36.8)	1.580 (40.1)	2.062 (52.4)
24	1 5/8-18 UNEF	1.501 (38.1)	1.812 (46.0)	2.087 (53.0)	1.635 (41.5)	1.572 (39.9)	1.620 (41.1)	2.187 (55.5)

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Hermeticity: <1x10⁻⁷ cc/sec @ 1 ATM differential
- Material/Finish:
 Shell and jam-nut: Z1 - CRES/nickel plated.
 Titanium and Inconel® available. Consult factory.
- Contacts - Alloy 52/gold plate.
 Bayonets - CRES/passivated.
 Insulator - Vitreous glass seal
 Seals - Fluorosilicone/N.A.
 Spacer - High grade rigid dielectric/N.A.
- Metric Dimensions (mm) are indicated in parentheses.



D



237-240
MIL-DTL-26482 Series I Type Hermetic
Special Square Flange Mount Receptacle
with Bayonet Coupling and Solder Cup Termination



MIL-DTL
26482 Type

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A ±.016 (0.41)	B	C Dia	D Dia	F +.025 -.015 (+.064 -.038)	G +.011 -.010 (+.028 -.025)	H ±.005 (0.13)	J ±.015 (0.38)	P Max	Panel Cut-Out Dia	Max Weight (Lbs)
8	.812 (20.62)	.594 (15.09)	.563/.557 (14.30/14.15)	.474/.468 (12.04/11.89)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	.570 (14.48)	.038
10	.938 (23.83)	.719 (18.3)	.673/.667 (17.09/16.94)	.591/.585 (15.01/14.86)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	.680 (17.27)	.044
12	1.031 (26.19)	.812 (20.6)	.782/.776 (19.86/19.71)	.751/.745 (19.08/18.92)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	.789 (20.04)	.052
14	1.125 (28.58)	.906 (23.0)	.907/.901 (23.04/22.89)	.876/.870 (22.35/22.10)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	.914 (23.22)	.070
16	1.219 (30.96)	.969 (24.6)	1.032/1.026 (26.21/26.06)	1.001/.995 (25.43/25.27)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	1.039 (26.39)	.085
18	1.312 (33.32)	1.062 (27.0)	1.157/1.151 (29.39/29.24)	1.126/1.120 (28.60/28.45)	.494 (12.55)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	1.164 (29.57)	.098
20	1.438 (36.53)	1.156 (29.4)	1.251/1.245 (31.78/31.62)	1.251/1.245 (31.78/31.62)	.556 (14.12)	.062 (1.57)	.120 (3.05)	.047 (1.19)	.344 (8.74)	1.258 (31.95)	.110
22	1.562 (39.67)	1.250 (31.8)	1.376/1.370 (34.95/34.80)	1.376/1.370 (34.95/34.80)	.556 (14.12)	.062 (1.57)	.120 (3.05)	.079 (2.01)	.377 (9.58)	1.383 (35.13)	.150
24	1.688 (42.88)	1.375 (34.9)	1.501/1.495 (38.13/37.93)	1.501/1.495 (38.13/37.93)	.588 (14.94)	.062 (1.57)	.147 (1.19)	.079 (2.01)	.377 (9.58)	1.508 (38.30)	.280

D

APPLICATION NOTES

- Material/Finish:
 Shell - C1215 CRS/pure tin plated, RoHS.
 Contacts - Nickel-iron alloy 52/pure tin plated, RoHS.
 Hermetic Insulator - Full glass/N.A.
 Bayonets - stainless steel/passivated.
 Seal - Silicone elastomer/N.A.
 Insulation - glass/N.A.
- Assembly to be identified with manufacturer's name, part number and date code, space permitting.
- Performance requirements:
 Hermeticity - $<1 \times 10^{-7}$ sccHe/se @ 1 Atm. Diff.
 DWV - Consult factory or MIL-STD-1669.
 Insulation resistance - 5000 megohms min @ 500VDC.
- Glenair 237-240 will mate with any QPL MIL-DTL-26482 Series I Bayonet Coupling Plug (MS3116) of same size and insert polarization.
- Consult factory and/or MIL-STD-1669 for arrangement and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

MIL-DTL-83723 Type Hermetic Connectors

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GLENAIR MIL-DTL-83723 TYPE HERMETIC CONNECTORS:

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MIL-DTL-83723 Type Hermetic

MIL-DTL-83723 Series III Threaded and Bayonet Coupling Hermetic Connectors

Product Applications

The MIL-DTL-83723 Series III type connector is ideally suited for use on commercial, military and aerospace interconnect systems that demand hermetic sealing and high vibration resistance in a medium density cylindrical connector. Thirty-three insert arrangements are available in both threaded and bayonet coupling styles for a wide range of applications.

Materials

Glenair MIL-DTL-83723 Series III Hermetic connectors are offered in either passivated stainless steel or fused tin over stainless steel,

Gold plated nickel-iron alloy 52 contacts—available in sizes 12, 16 and 20—depending on the layout chosen—offer a broad selection of insert arrangement options. Solder cup, straight pin and PCB contact styles are standard.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders.

<1x10⁻⁷ cc/second Helium Leak Rate @ 1 ATM Differential

Quick Release Bayonet or Threaded Coupling

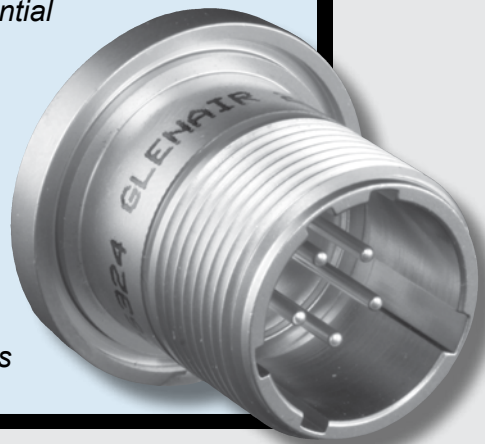
Solder Cup, Straight Pin and PCB Contacts

Space Grade Special Screening Available

*Complete Range of Materials and Finishes,
Including Titanium and Inconel® Options.*

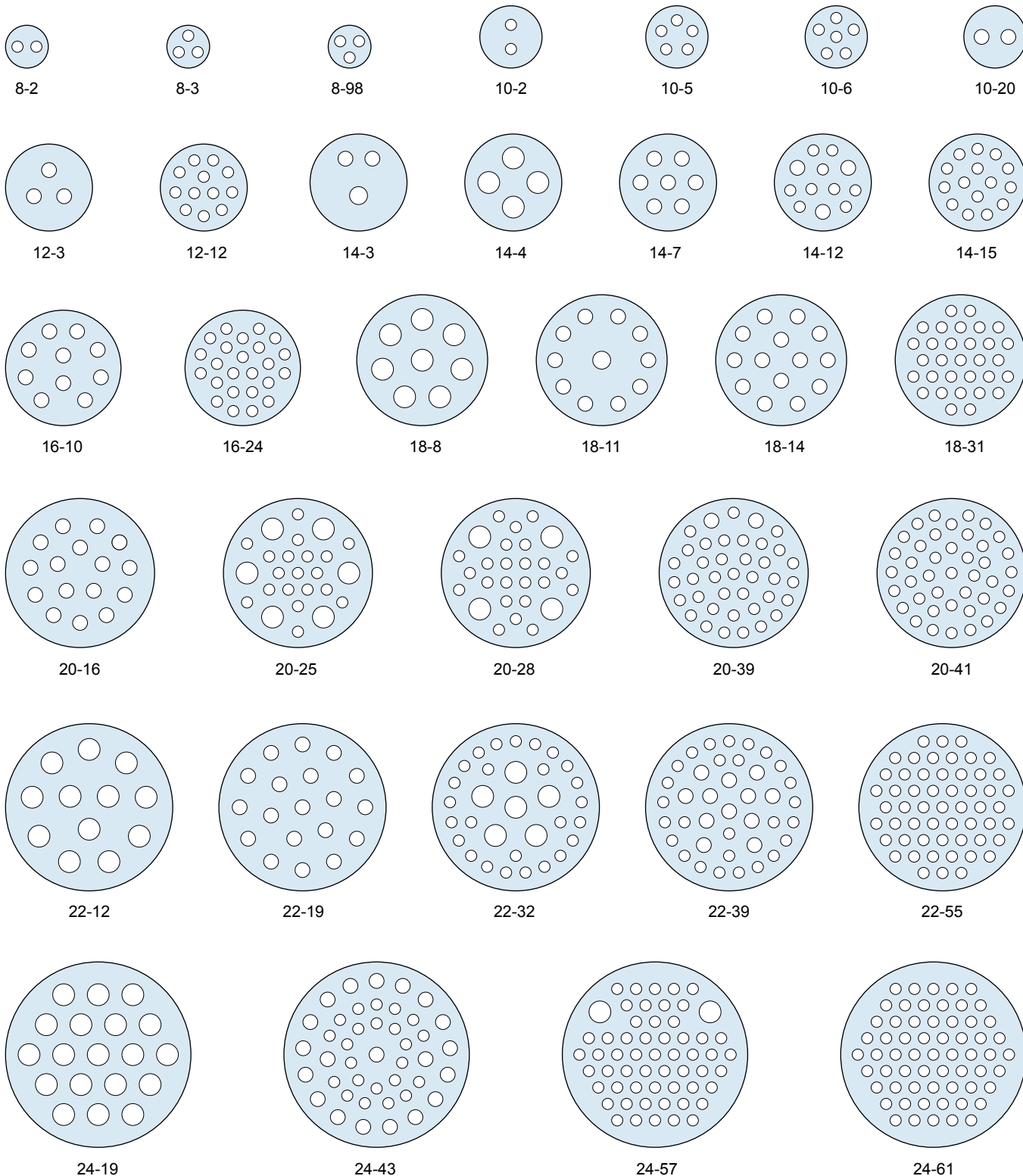
9 Shell Sizes Available with 2 to 61 Contacts

Jam Nut, Flange Mount and Solder Mount Receptacles



with glass insulators fused to the connector shell, and contacts meeting a leak rate of 1×10^{-7} cc/ Helium per second. Maximum design flexibility is built into the MIL-DTL-83723 hermetic connector—with a minimum of 2 to a maximum of 61 circuits per connector in a wide variety of contact arrangements IAW MIL-STD-1554. Fluorosilicone elastomer interfacial and peripheral seals ensure positive sealing with plug connectors.

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately to www.glenair.com.



E

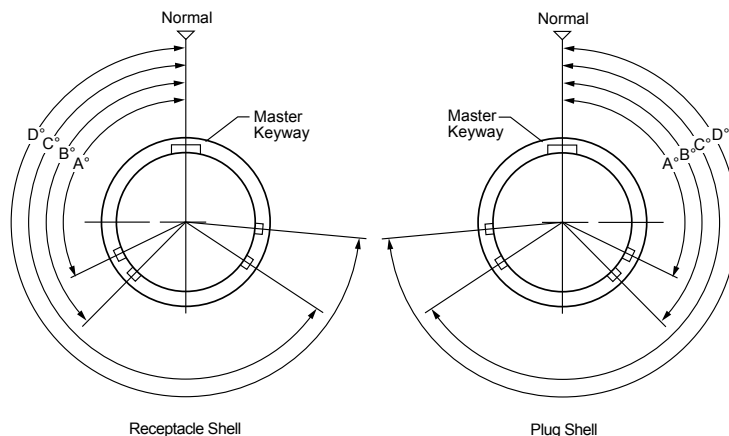
MIL-DTL-83723 Series III Type Threaded and Bayonet Coupling Insert Arrangements and Keyway Positions



MIL-DTL-
83723 TYPE

Insert Arrangements					
Shell Size Designator	Insert Arrangement Dash Number	Service Rating	Contact Size and Quantity		
			20	16	12
08	08-02	I	2		
	08-03	I	3		
	08-98	I	3		
10	10-02	I	2		
	10-05	I	5		
	10-06	I	6		
	10-20	I		2	
12	12-03	I		3	
	12-12	I	12		
14	14-03*	I		3*	
	14-04	I			4
	14-07	I		7	
	14-12	I	9	3	
	14-15	I	15		
16	16-10	I		10	
	16-24	I	24		
18	18-08	I			8
	18-11*	I		11*	
	18-14	I		14	
	18-31	I	31		
	20-16	I		16	
20	20-25	I	19		6
	20-28	I	24		4
	20-39	I	37	2	
	20-41	I	41		
	22-12	I			12
22	22-19	I		19	
	22-32	I	26		6
	22-39	I	27	12	
	22-55	I	55		
	24-19	I			19
24	24-43	I	23	20	
	24-57	I	55		2
	24-61	I	61		

*1 shielded.



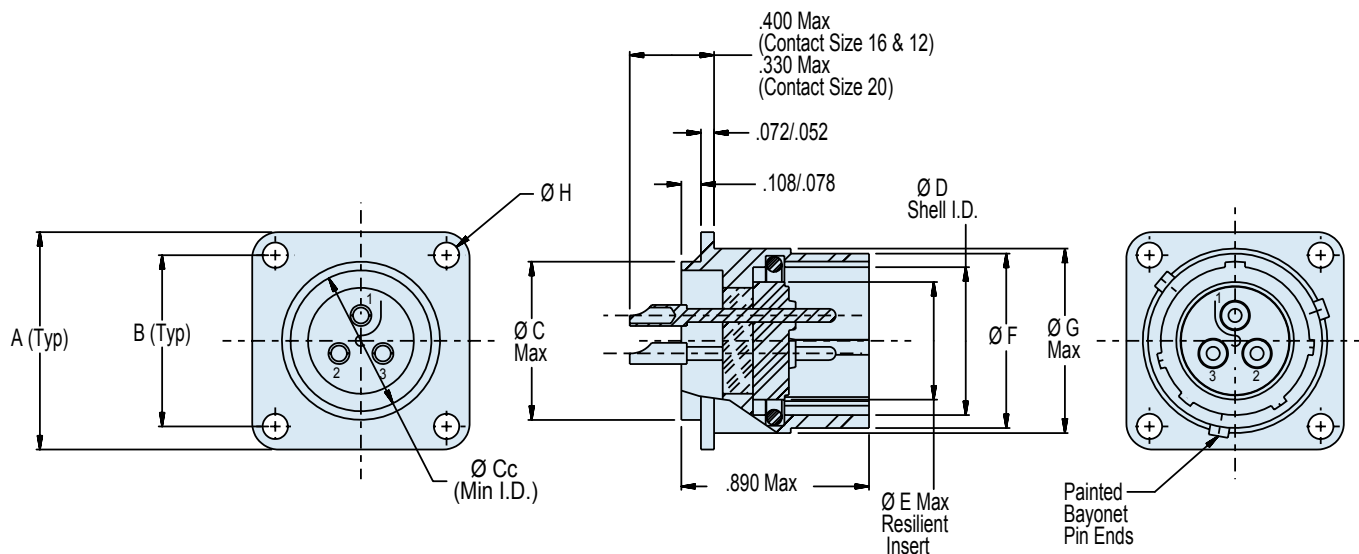
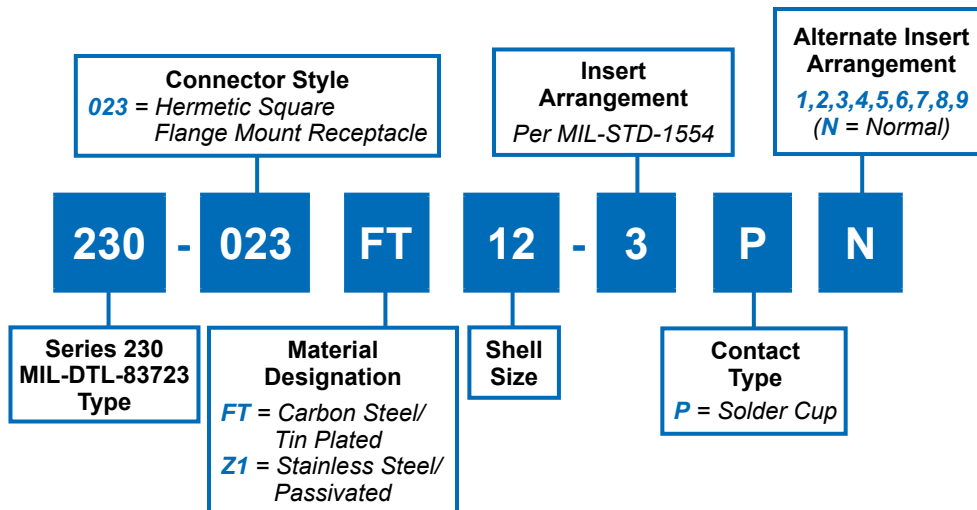
Keyway Positions (Front Face of Pin Insert)					
Shell Size	Keyway Position	A°	B°	C°	D°
08 through 10	Normal	105°	140°	215°	265°
	6	102°	132°	248°	320°
	7	80°	118°	230°	312°
	8	35°	140°	205°	275°
	9	64°	155°	234°	304°
	Y or 10	25°	115°	220°	270°
12 through 24	Normal	105°	140°	215°	265°
	6	18°	149°	192°	259°
	7	92°	152°	222°	342°
	8	84°	152°	204°	334°
	9	24°	135°	199°	240°
	Y or 10	98°	152°	268°	338°

Y Position not available for shell size 8.
Use "Y" when ordering military parts, "10" when ordering commercial parts

E

230-023

MIL-DTL-83723/79 Series III Type Hermetic Bayonet Coupling Square Flange Receptacle Connector with Solder Terminals



APPLICATION NOTES

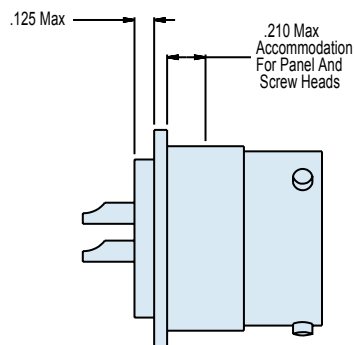
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell*:
Z1 - Stainless steel/passivated.
FT - Carbon steel/tin plated.
Contacts - 52 Nickel alloy/gold plated.
Bayonets - Stainless steel/passivated.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Glenair 230-023 will mate with any QPL MIL-DTL-83723/75 & 77 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc He/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
Insulation resistance - 5000 MegOhms min. @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-023
MIL-DTL-83723/79 Series III Type Hermetic
Bayonet Coupling Square Flange Receptacle Connector
with Solder Terminals



MIL-DTL
83723



Max Panel Thickness

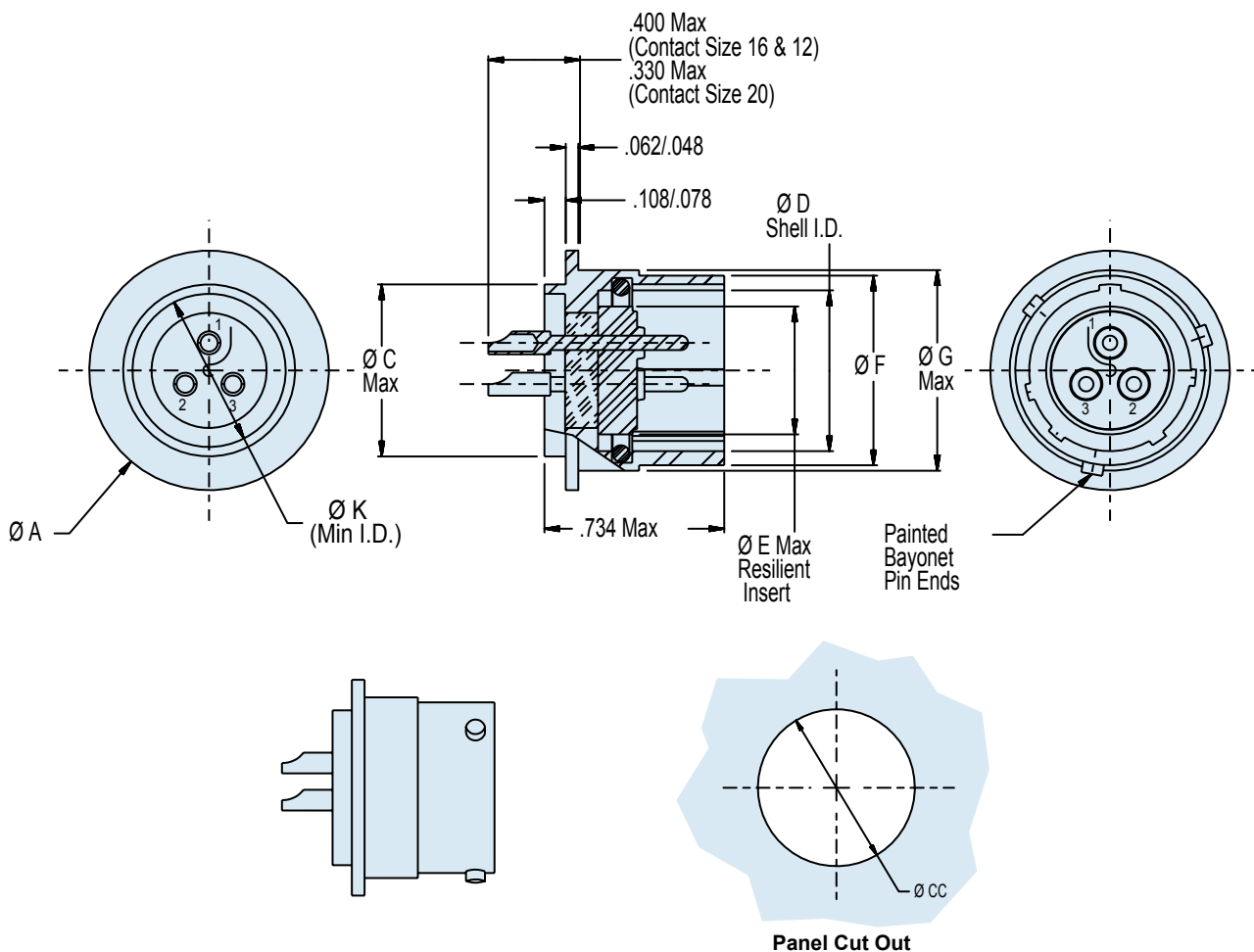
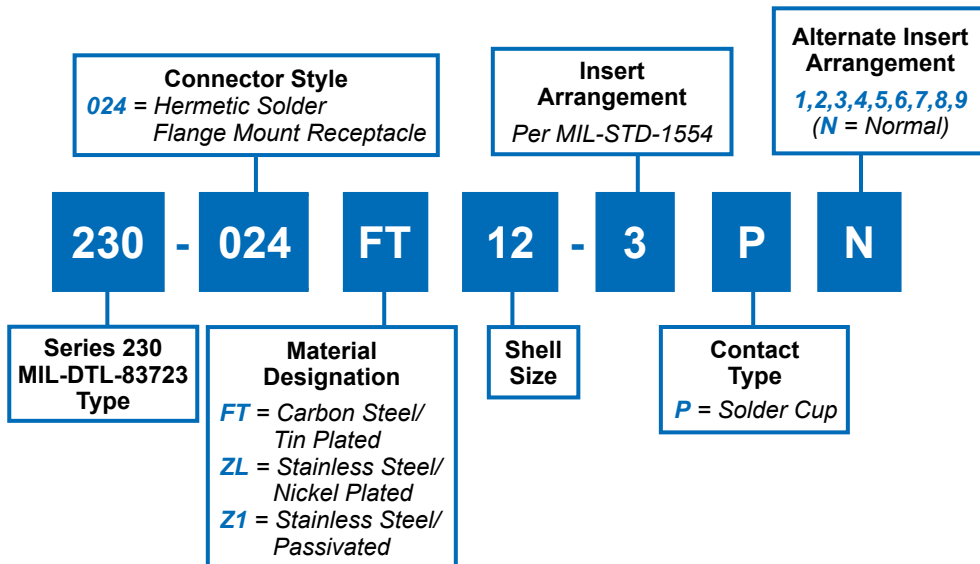
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A	B	C Dia Max	D Dia Shell I.D.	E Dia Resilient Insert	F Dia	G Dia Max	H Dia Thru 4 Pl	CC Dia Min	Panel Cut-Out Ø C	Panel Cut-Out Ø G
8	.812 (20.6)	.594 (15.1)	.500 (12.7)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.120 (3.0)	.406 (10.3)	.630/.620 (16.0/15.7)	.515/.505 (13.1/12.8)
10	.937 (23.8)	.719 (18.3)	.562 (14.3)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.120 (3.0)	.443 (11.3)	.758/.748 (19.3/19.0)	.582/.572 (14.8/14.5)
12	1.031 (26.2)	.812 (20.6)	.750 (19.1)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.120 (3.0)	.668 (17.0)	.923/.913 (23.4/23.2)	.770/.760 (19.6/19.3)
14	1.125 (28.6)	.906 (23.0)	.812 (20.6)	.774/.796 (19.7/20.2)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	.120 (3.0)	.668 (17.0)	.990/.980 (25.1/24.8)	.832/.822 (21.1/20.9)
16	1.250 (31.8)	.969 (24.6)	.937 (23.8)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	.120 (3.0)	.763 (19.4)	1.117/1.107 (28.4/28.1)	.958/.948 (24.3/24.1)
18	1.343 (34.1)	1.062 (27.0)	1.062 (27.0)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	.120 (3.0)	.862 (21.9)	1.219/1.209 (31.0/30.7)	1.082/1.072 (27.5/27.2)
20	1.437 (36.5)	1.156 (29.4)	1.187 (30.1)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	.120 (3.0)	1.108 (28.1)	1.357/1.337 (34.5/34.0)	1.202/1.192 (30.5/30.3)
22	1.562 (39.7)	1.250 (31.8)	1.312 (33.3)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	.120 (3.0)	1.204 (30.6)	1.462/1.452 (37.1/36.9)	1.332/1.322 (33.8/33.6)
24	1.107 (28.1)	1.375 (34.9)	1.437 (36.5)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	.149 (3.8)	1.388 (35.3)	1.587/1.577 (40.3/40.1)	1.452/1.442 (36.9/36.6)

E



230-024
MIL-DTL-83723/80 Series III Type Hermetic
Bayonet Coupling Solder Flange Mount Receptacle
with Solder Cup Terminals



MIL-DTL
83723

HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS								
Shell Size	A	C Dia Max	D Dia Shell I.D.	E Dia Resilient Insert	F Dia	G Dia Max	K Dia Min	Panel Cut-Out Ø CC
8	.760/.720 (19.3/18.3)	.500 (12.7)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.406 (10.3)	.515/.505 (13.1/12.8)
10	.860/.820 (21.8/20.8)	.562 (14.3)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.443 (11.3)	.582/.572 (14.8/14.5)
12	1.065/1.025 (27.1/26.0)	.750 (19.1)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.668 (17.0)	.770/.760 (19.6/19.3)
14	1.110/1.070 (28.2/27.2)	.812 (20.6)	.774/.796 (19.7/20.2)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	.668 (17.0)	.832/.822 (21.1/20.9)
16	1.230/1.190 (31.2/30.2)	.937 (23.8)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	.763 (19.4)	.958/.948 (24.3/24.1)
18	1.360/1.320 (34.5/33.5)	1.062 (27.0)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	.862 (21.9)	1.082/1.072 (27.5/27.2)
20	1.450/1.410 (36.8/35.8)	1.187 (30.1)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.108 (28.1)	1.202/1.192 (30.5/30.3)
22	1.610/1.570 (40.9/39.9)	1.312 (33.3)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.204 (30.6)	1.332/1.322 (33.8/33.6)
24	1.730/1.690 (43.9/42.9)	1.437 (36.5)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.388 (35.3)	1.452/1.442 (36.9/36.6)

E

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish*:
 Shell:
 Z1 - Stainless steel/passivated
 ZL - Stainless steel/Nickel Plated
 FT - Carbon steel/tin plated
 Contacts - 52 Nickel alloy/gold plated
 Bayonets - Stainless steel/passivated
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
- Glenair 230-024 will mate with any QPL MIL-DTL-83723/75 & 77 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
 Hermeticity <1 x 10⁻⁷ cc He/sec @ 1 atmosphere differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
 Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-025

MIL-DTL-83723/81 Series III Type Hermetic Bayonet Coupling Jam-Nut Mount Receptacle with Solder Cup Terminals

Connector Style
025 = Hermetic Single Hole
Jam-Nut Mount
Receptacle

**Insert
Arrangement**
Per MIL-STD-1554

**Alternate Insert
Arrangement**
1,2,3,4,5,6,7,8,9
(N = Normal)

230

- 025

FT

12

- 3

P

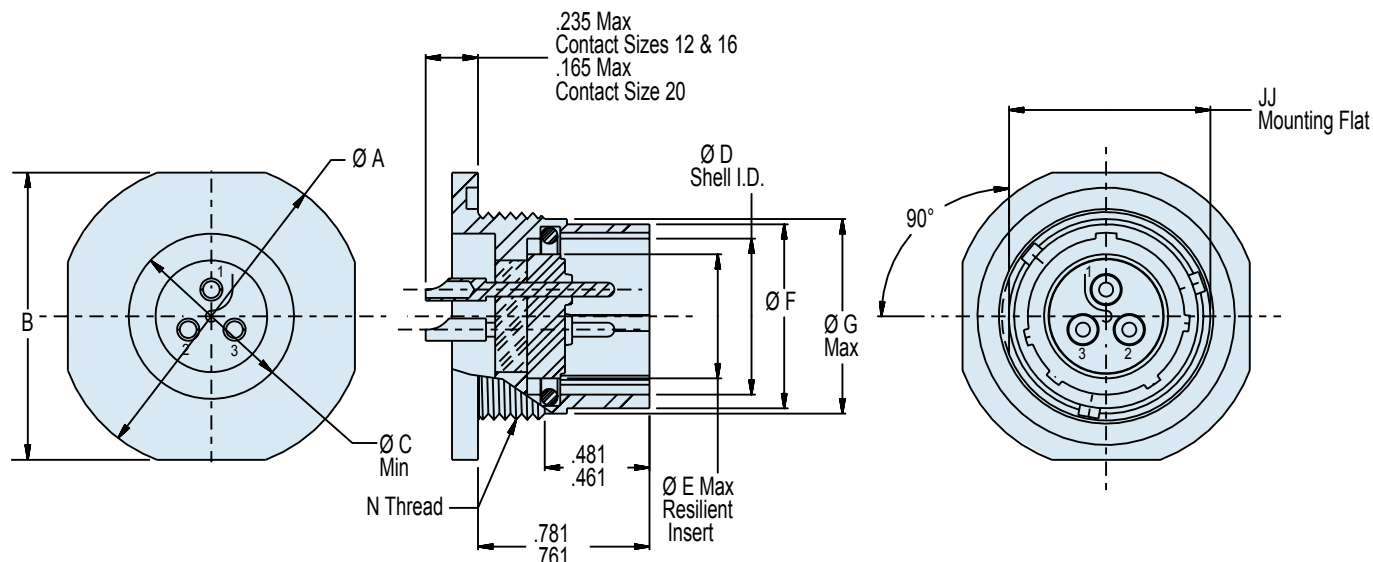
N

Series 230
MIL-DTL-83723
Type

**Material
Designation**
FT = Carbon Steel/
Tin Plated
Z1 = Stainless Steel/
Passivated

**Shell
Size**

**Contact
Type**
P = Solder Cup



APPLICATION NOTES

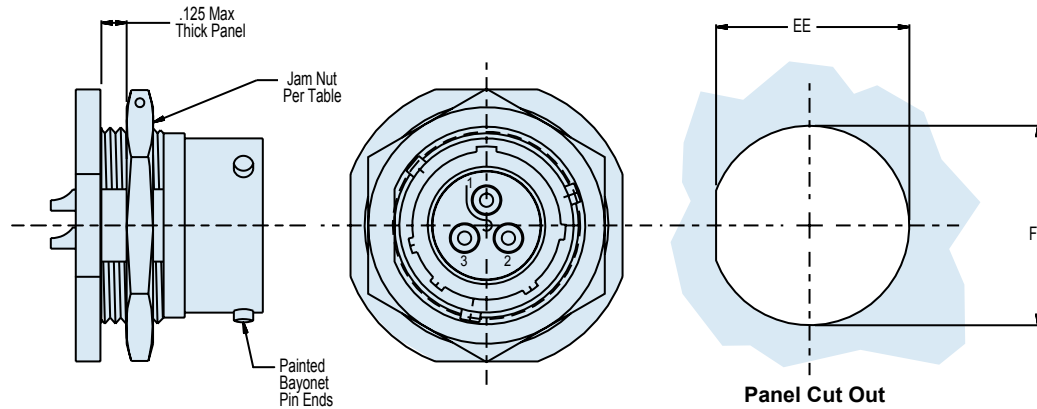
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell* and Jam-Nut:
Z1 - Stainless steel/passivated.
FT - Carbon steel/tin plated.
Contacts - 52 Nickel alloy/gold plated.
Bayonets - Stainless steel/passivated.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Glenair 230-025 will mate with any QPL MIL-DTL-83723/75 & 77 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
Hermeticity <1 x 10⁻⁷ cc He/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-025
MIL-DTL-83723/81 Series III Type Hermetic
Bayonet Coupling Jam-Nut Mount Receptacle
with Solder Cup Terminals

Glenair.

MIL-DTL
83723

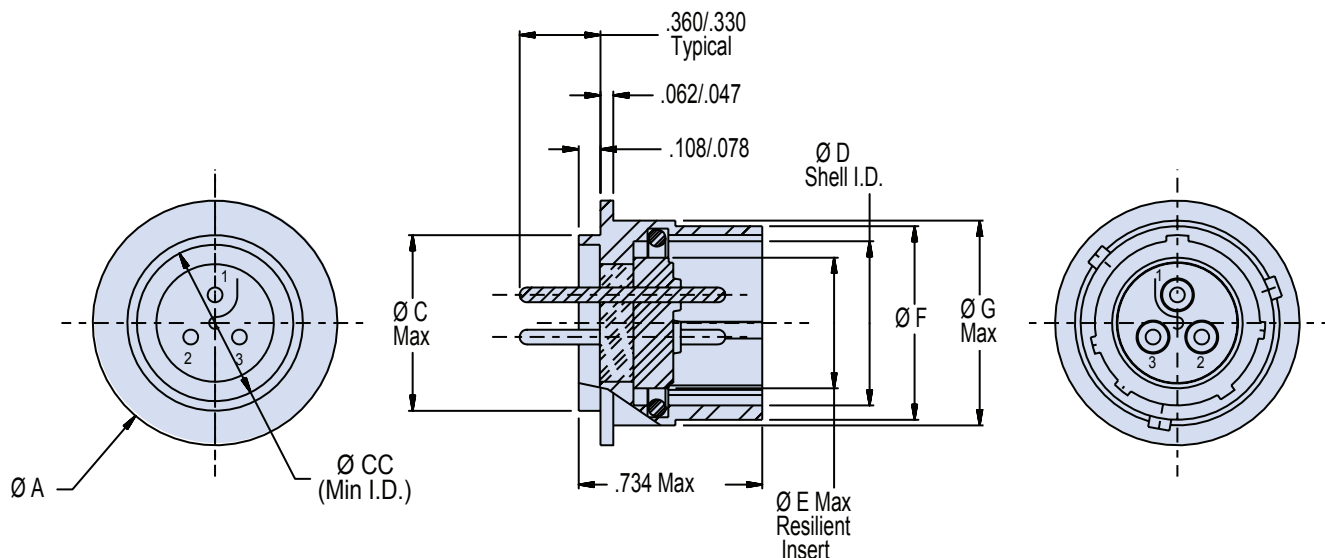
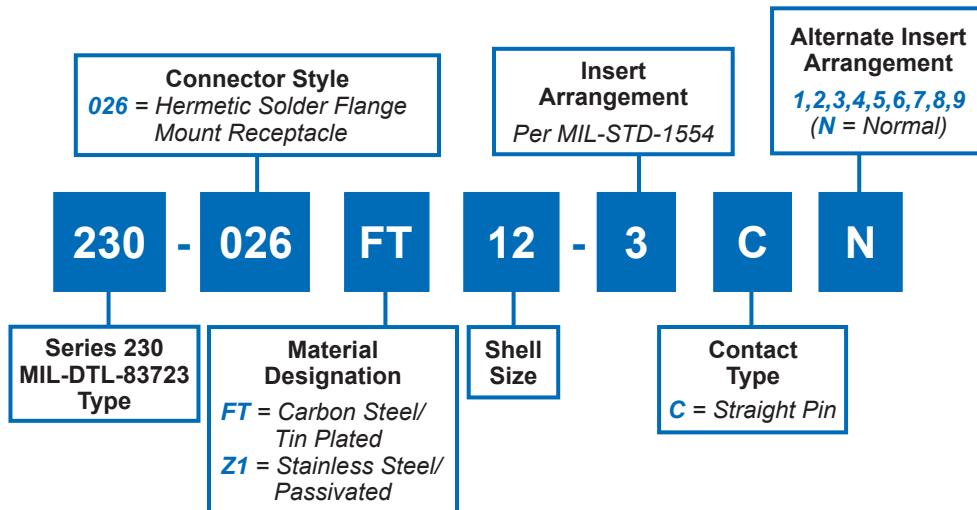


HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia Max	B	C Dia Min	D Dia Shell I.D.	E Dia Resilient Insert	F Dia	G Dia Max	N Thread	JJ Mounting Flat	Panel Cut-Out EE +.000 -.002 (.05)	Panel Cut-Out FF DIA ±.005 (0.1)	Jam Nut MS3186
8	1.068 (27.1)	.979 (24.9)	.493 (12.5)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.625-20 UN-2A	.596/.590 (15.1/15.0)	.698 (17.7)	.698 (17.7)	-105
10	1.192 (30.3)	1.104 (28.0)	.555 (14.1)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.750-20 UNEF-2A	.721/.715 (18.3/18.2)	.830 (21.1)	.830 (21.1)	-107
12	1.380 (35.1)	1.291 (32.8)	.743 (18.9)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.937-20 UNEF-2A	.908/.902 (23.1/22.9)	1.015 (25.8)	1.015 (25.8)	-110
14	1.505 (38.2)	1.391 (35.3)	.805 (20.4)	.774/.796 (19.7/20.2)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	1.000-20 UNEF-2A	.971/.965 (24.7/24.5)	1.140 (29.0)	1.140 (29.0)	-111
16	1.630 (41.4)	1.516 (38.5)	.931 (23.6)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	1.125-20 UNEF-2A	1.096/1.090 (27.8/27.7)	1.265 (32.1)	1.265 (32.1)	-112
18	1.765 (44.8)	1.641 (41.7)	1.055 (26.8)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	1.250-18 UNEF-2A	1.220/1.214 (31.0/30.8)	1.390 (35.3)	1.390 (35.3)	-116
20	1.860 (47.2)	1.766 (44.9)	1.243 (31.6)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.375-18 UNEF-2A	1.345/1.339 (34.2/34.0)	1.515 (38.5)	1.515 (38.5)	-117
22	2.068 (52.5)	1.954 (49.6)	1.305 (33.1)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.500-18 UNEF-2A	1.470/1.464 (37.3/37.2)	1.640 (41.7)	1.640 (41.7)	-120
24	2.160 (54.9)	2.079 (52.8)	1.493 (37.9)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.625-18 UNEF-2A	1.595/1.587 (40.5/40.3)	1.765 (44.8)	1.765 (44.8)	-121



APPLICATION NOTES

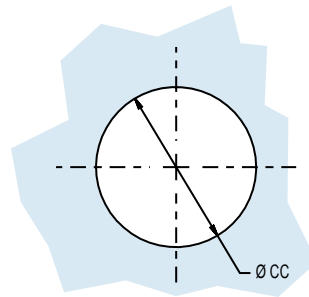
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell*:
 Z1 - Stainless steel/passivated.
 FT - Carbon steel/tin plated.
 Contacts - 52 Nickel alloy/gold plated.
 Bayonets - Stainless steel/passivated.
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
- Glenair 230-026 will mate with any QPL MIL-DTL-83723/75 & 77 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
 Hermeticity $<1 \times 10^{-7}$ cc He/sec @ 1 atmosphere differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
 Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Consult factory for PC tail footprints.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-026
MIL-DTL-83723/93 Series III Type Hermetic
Bayonet Coupling Solder Flange Mount Receptacle
with Straight Pin Contacts



MIL-DTL
83723



Panel Cut Out

HERMETIC LEAK RATE MOD CODES

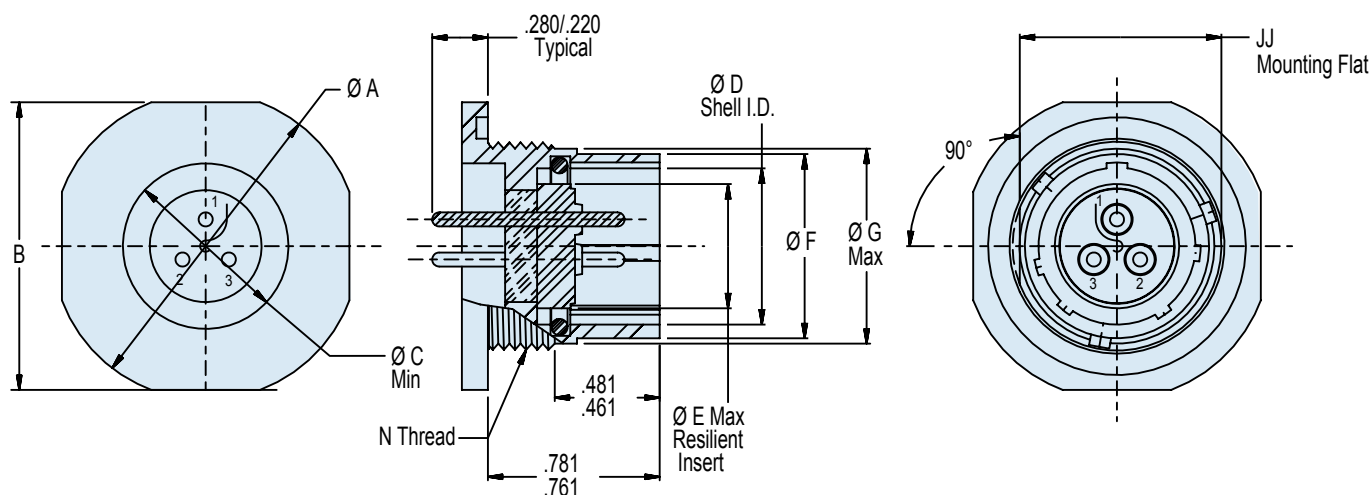
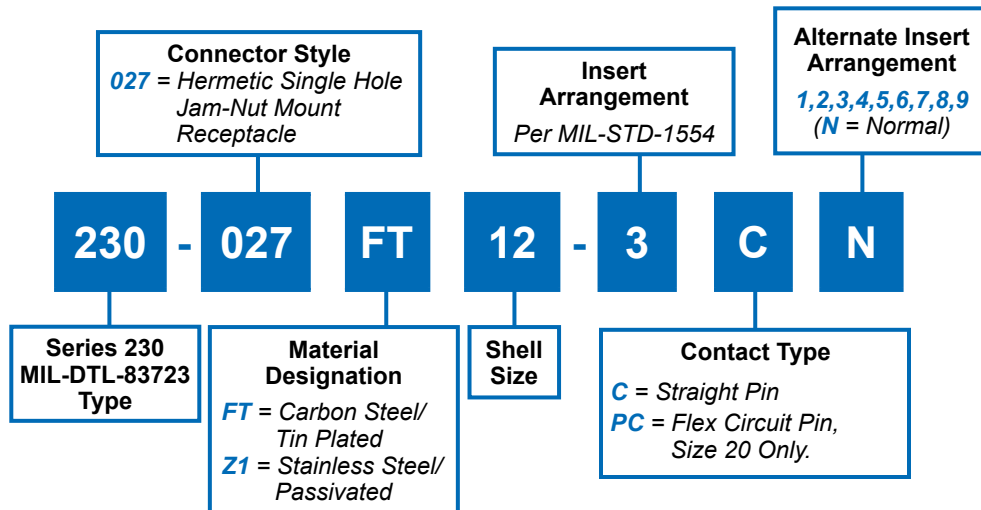
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia	C Dia Max	D Dia Shell I.D.	E Dia Resilient Insert	F Dia	G Dia Max	CC Dia Min	Ø CC Dia Panel Cut-Out
8	.760/.720 (19.3/18.3)	.500 (12.7)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.406 (10.3)	.515/.505 (13.1/12.8)
10	.860/.820 (21.8/20.8)	.562 (14.3)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.443 (11.3)	.582/.572 (14.8/14.5)
12	1.065/1.025 (27.1/26.0)	.750 (19.1)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.668 (17.0)	.770/.760 (19.6/19.3)
14	1.110/1.070 (28.2/27.2)	.812 (20.6)	.774/.796 (19.7/20.2)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	.668 (17.0)	.832/.822 (21.1/20.9)
16	1.230/1.190 (31.2/30.2)	.937 (23.8)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	.763 (19.4)	.958/.948 (24.3/24.1)
18	1.360/1.320 (34.5/33.5)	1.062 (27.0)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	.862 (21.9)	1.082/1.072 (27.5/27.2)
20	1.450/1.410 (36.8/35.8)	1.187 (30.1)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.108 (28.1)	1.202/1.192 (30.5/30.3)
22	1.610/1.570 (40.9/39.9)	1.312 (33.3)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.204 (30.6)	1.332/1.322 (33.8/33.6)
24	1.730/1.690 (43.9/42.9)	1.437 (36.5)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.388 (35.3)	1.452/1.442 (36.9/36.6)

230-027

MIL-DTL-83723/94 Series III Type Hermetic Bayonet Coupling Jam-Nut Mount Receptacle with Straight Pin (All Sizes) or PCB (Size 20 Only) Contacts



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell* and Jam-Nut:
Z1 - Stainless steel/passivated.
FT - Carbon steel/tin plated.
Contacts - 52 Nickel alloy/gold plated.
Bayonets - Stainless steel/passivated.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Glenair 230-027 will mate with any QPL MIL-DTL-83723/75 & 77 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
Hermeticity $< 1 \times 10^{-7}$ cc He/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Consult factory for PC tail footprints.
- Metric Dimensions (mm) are indicated in parentheses.

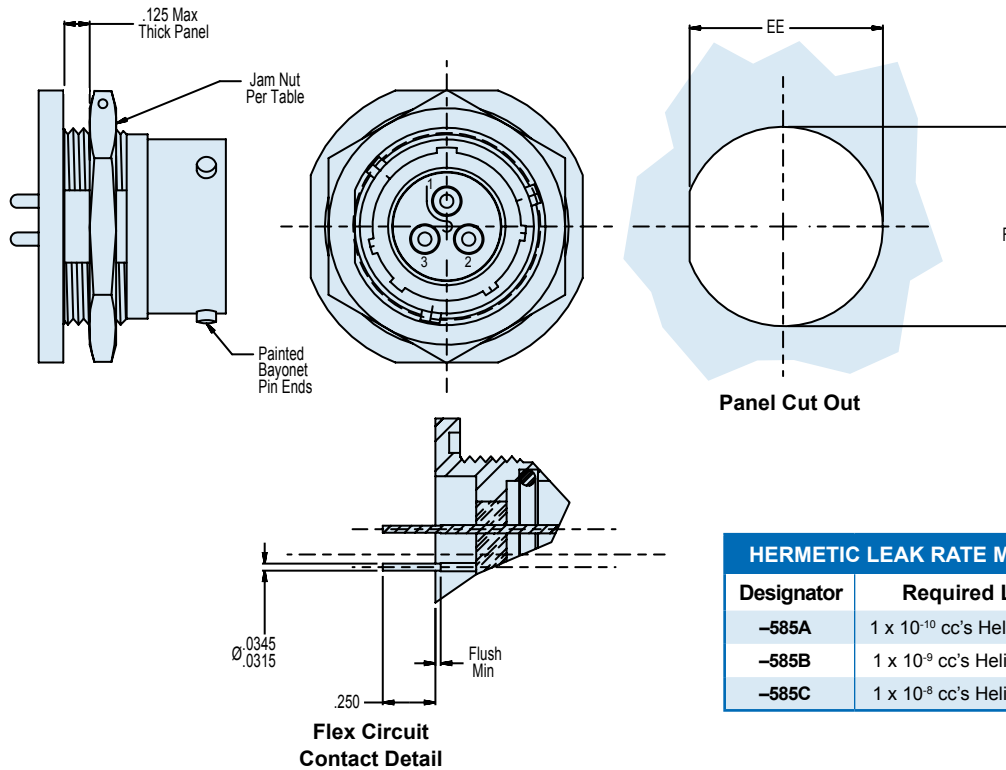
* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-027

**MIL-DTL-83723/94 Series III Type Hermetic
Bayonet Coupling Jam-Nut Mount Receptacle
with Straight Pin (All Sizes) or PCB (Size 20 Only) Contacts**

Glenair.

MIL-DTL
83723

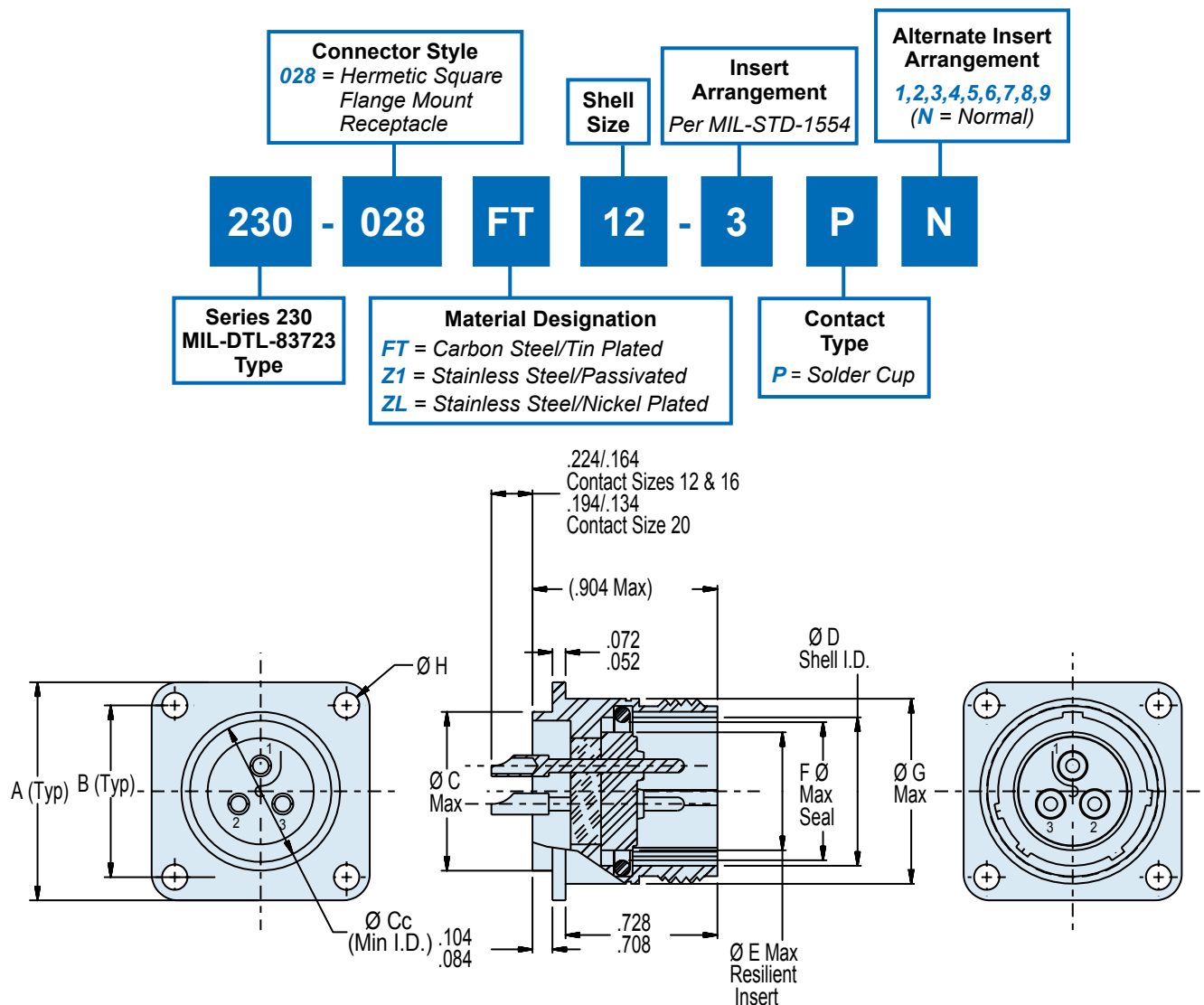


HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia Max	B	C Dia Min	D Dia Shell I.D.	E Dia Resilient Insert	F Dia	G Dia Max	N Thread	JJ Mounting Flat	Panel Cut-Out EE +.000 -.002 (.05)	Panel Cut-Out FF DIA ±.005 (0.1)	Jam Nut MS3186
8	1.068 (27.1)	.979 (24.9)	.493 (12.5)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.625-20 UN-2A	.596/.590 (15.1/15.0)	.698 (17.7)	.698 (17.7)	-105
10	1.192 (30.3)	1.104 (28.0)	.555 (14.1)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.750-20 UNEF-2A	.721/.715 (18.3/18.2)	.830 (21.1)	.830 (21.1)	-107
12	1.380 (35.1)	1.291 (32.8)	.743 (18.9)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.937-20 UNEF-2A	.908/.902 (23.1/22.9)	1.015 (25.8)	1.015 (25.8)	-110
14	1.505 (38.2)	1.391 (35.3)	.805 (20.4)	.774/.796 (19.7/20.2)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	1.000-20 UNEF-2A	.971/.965 (24.7/24.5)	1.140 (29.0)	1.140 (29.0)	-111
16	1.630 (41.4)	1.516 (38.5)	.931 (23.6)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	1.125-20 UNEF-2A	1.096/1.090 (27.8/27.7)	1.265 (32.1)	1.265 (32.1)	-112
18	1.765 (44.8)	1.641 (41.7)	1.055 (26.8)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	1.250-18 UNEF-2A	1.220/1.214 (31.0/30.8)	1.390 (35.3)	1.390 (35.3)	-116
20	1.860 (47.2)	1.766 (44.9)	1.243 (31.6)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.375-18 UNEF-2A	1.345/1.339 (34.2/34.0)	1.515 (38.5)	1.515 (38.5)	-117
22	2.068 (52.5)	1.954 (49.6)	1.305 (33.1)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.500-18 UNEF-2A	1.470/1.464 (37.3/37.2)	1.640 (41.7)	1.640 (41.7)	-120
24	2.160 (54.9)	2.079 (52.8)	1.493 (37.9)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.625-18 UNEF-2A	1.595/1.587 (40.5/40.3)	1.765 (44.8)	1.765 (44.8)	-121



APPLICATION NOTES

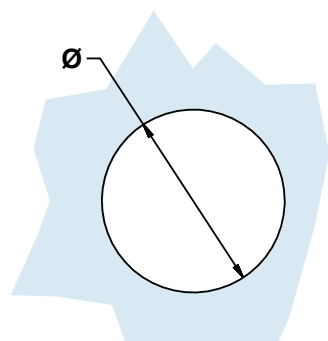
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
 Shell* and Jam-Nut:
 Z1 - Stainless steel/passivated.
 FT - Carbon steel/tin plated.
 ZL - Stainless steel/nickel plated.
 Contacts - 52 Nickel alloy/gold plated.
 Bayonets - Stainless steel/passivated.
 Seals - Silicone elastomer/N.A.
 Insulation - Glass/N.A.
- Glenair 230-028 will mate with any QPL MIL-DTL-83723/86, /91, /95 and /97 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
 Hermeticity <1 x 10⁻⁷ cc He/sec @ 1 atmosphere differential.
 Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
 Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

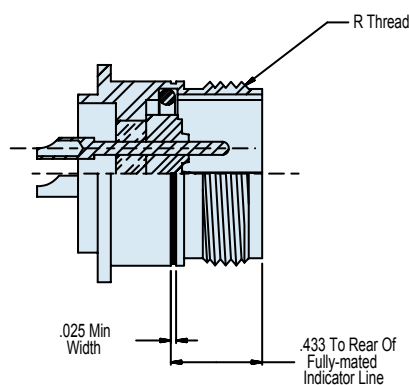
230-028
MIL-DTL-83723/88 Series III Type Hermetic
Threaded Coupling Square Flange Mount Receptacle
with Solder Cup Terminations



MIL-DTL
83723



Panel Cut Out

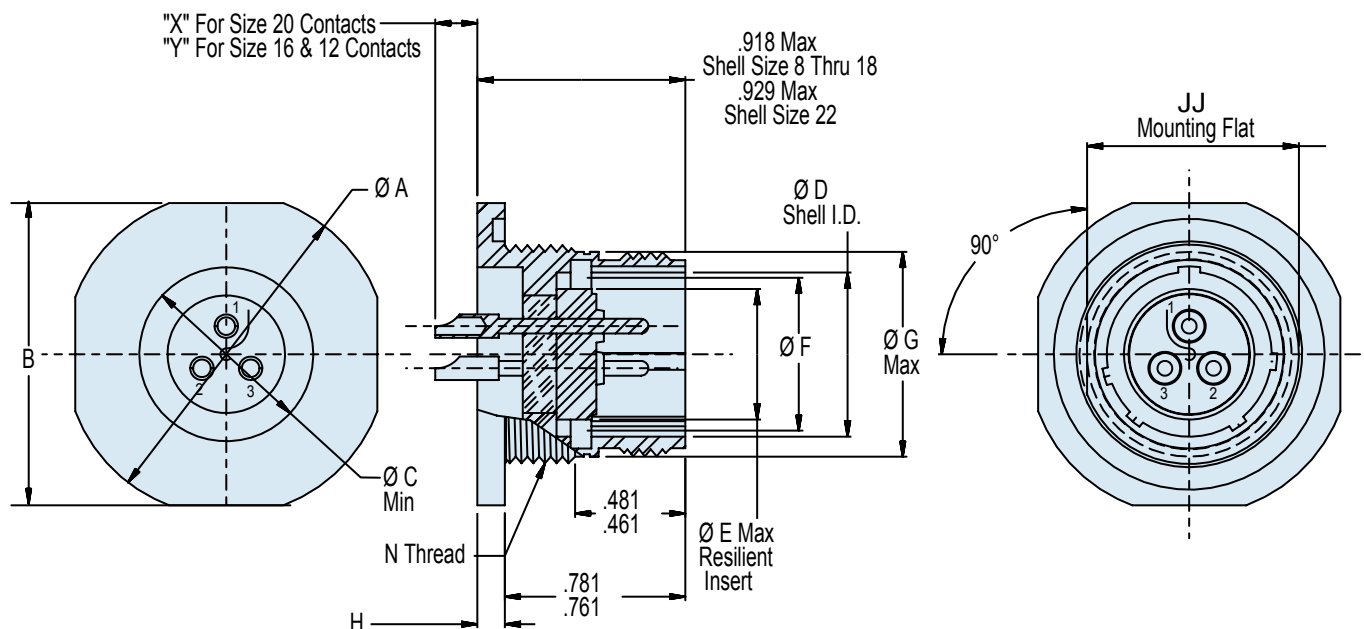
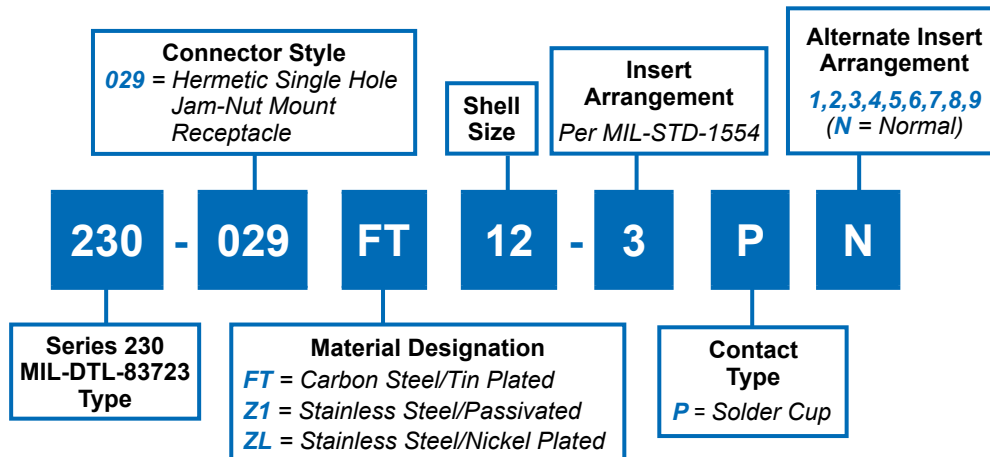


HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A	B	C Dia	D Dia Shell I.D.	E Dia Resilient Insert	F Dia Max Seal	G Dia Max	H Dia Thru 4 Pl	CC Dia Min	R Coupling Thread UNEF-2A	Panel Cut-Out
8	.812 (20.6)	.594 (15.1)	.500/.494 (12.7/12.5)	.418/.413 (10.6/10.5)	.290 (7.4)	.394 (10.0)	.562 (14.3)	.125/.116 (3.2/2.9)	.400 (10.2)	.562-24	.572 (14.5)
10	.937 (23.8)	.719 (18.3)	.562/.556 (14.3/14.1)	.535/.530 (13.6/13.5)	.388 (9.9)	.515 (13.1)	.696 (17.7)	.125/.116 (3.2/2.9)	.411 (10.4)	.688-24	.706 (17.9)
12	1.031 (26.2)	.812 (20.6)	.750/.744 (19.1/18.9)	.705/.700 (17.9/17.8)	.558 (14.2)	.685 (17.4)	.875 (22.2)	.125/.116 (3.2/2.9)	.581 (14.8)	.875-20	.885 (22.5)
14	1.125 (28.6)	.906 (23.0)	.812/.806 (20.6/20.5)	.774/.796 (19.7/20.2)	.627 (15.9)	.754 (19.2)	.935 (23.7)	.125/.116 (3.2/2.9)	.650 (16.5)	.938-20	.946 (24.0)
16	1.250 (31.8)	.969 (24.6)	.937/.931 (23.8/23.6)	.901/.896 (22.9/22.8)	.772 (19.6)	.881 (22.4)	1.062 (27.0)	.125/.116 (3.2/2.9)	.777 (19.8)	1.062-18	1.072 (27.2)
18	1.343 (34.1)	1.062 (27.0)	1.062/1.056 (27.0/26.8)	1.007/1.002 (25.6/25.5)	.860 (21.8)	.987 (25.1)	1.187 (30.1)	.125/.116 (3.2/2.9)	.864 (21.9)	1.188-18	1.197 (30.4)
20	1.437 (36.5)	1.156 (29.4)	1.187/1.181 (30.1/30.0)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.112 (28.2)	1.312 (33.3)	.125/.116 (3.2/2.9)	1.034 (26.3)	1.312-18	1.322 (33.6)
22	1.562 (39.7)	1.250 (31.8)	1.312/1.306 (33.3/33.2)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.237 (31.4)	1.437 (36.5)	.125/.116 (3.2/2.9)	1.133 (28.8)	1.438-18	1.447 (36.8)
24	1.703 (43.3)	1.375 (34.9)	1.437/1.431 (36.5/36.3)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.362 (34.6)	1.562 (39.7)	.154/.145 (3.9/3.7)	1.284 (32.6)	1.562-18	1.572 (39.9)



APPLICATION NOTES

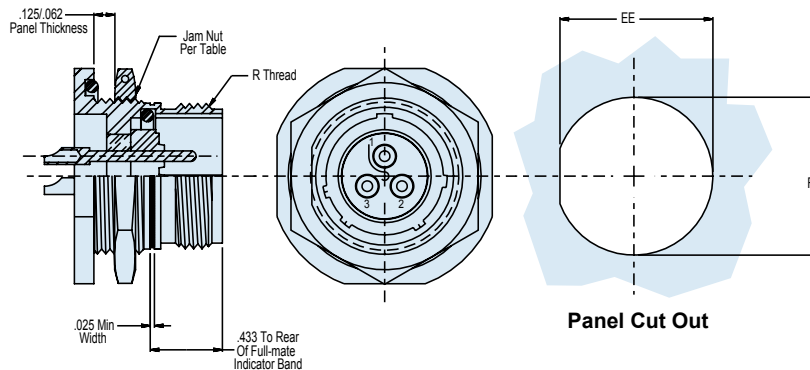
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell* and Jam-Nut:
Z1 - Stainless steel/passivated.
FT - Carbon steel/tin plated.
ZL - Stainless steel/nickel plated.
Contacts - 52 Nickel alloy/gold plated.
Bayonets - Stainless steel/passivated.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Glenair 230-029 will mate with any QPL MIL-DTL-83723/86, /91, /95 and /97 Series III bayonet coupling plug of same size, keyway, and insert polarization.
- Performance:
Hermeticity $< 1 \times 10^{-7}$ cc He/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-029 MIL-DTL-83723/89 Series III Type Hermetic Threaded Coupling Jam-Nut Mount Receptacle with Solder Cup Terminations



MIL-DTL
83723



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

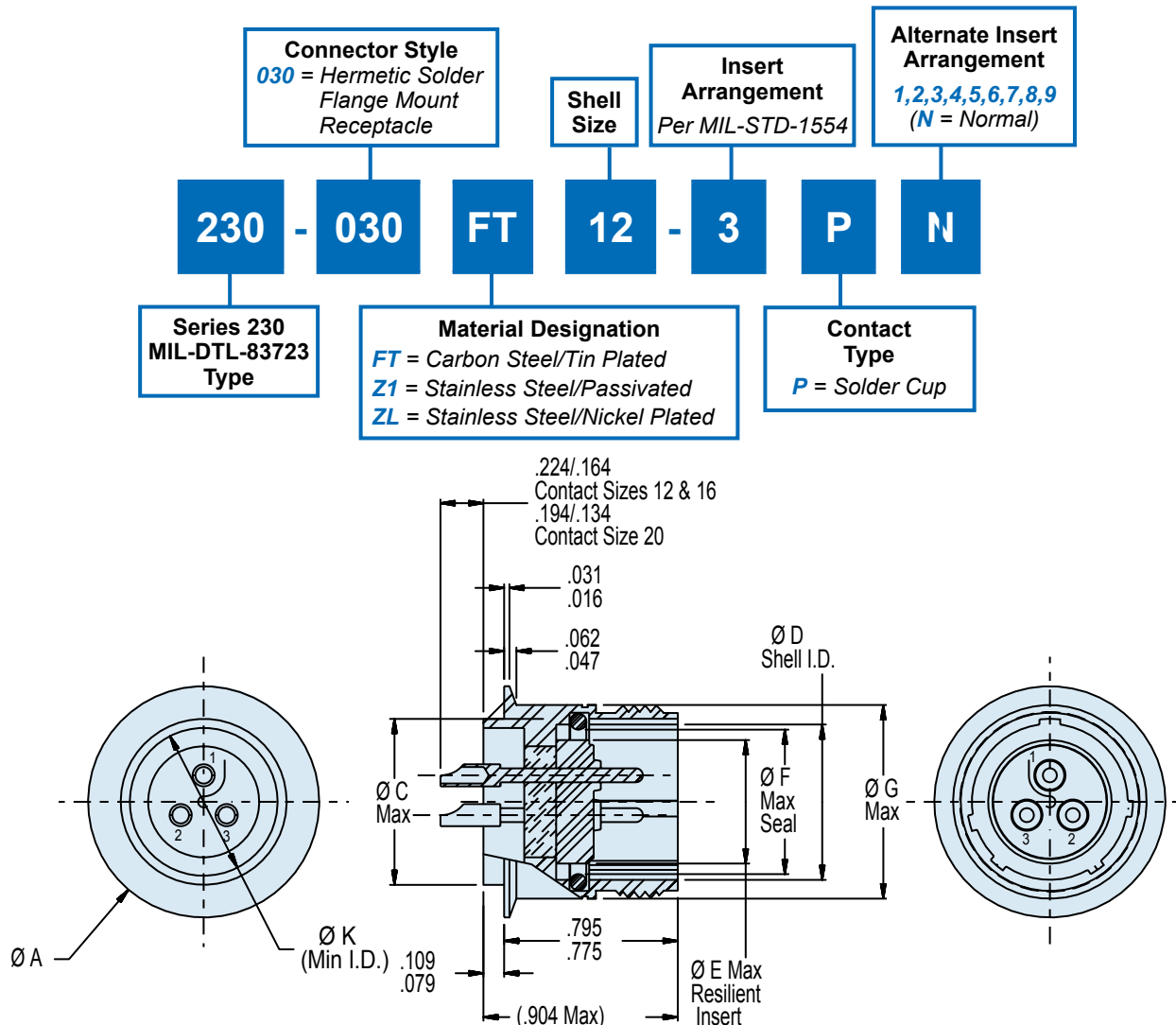
TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued Below)

Shell Size	A Dia Max	B	C Dia Min	D Dia Shell I.D.	E Dia Resilient Insert	F Dia Max Seal	G Dia Max	H Flange Thickness
8	1.078/1.047 (27.4/26.6)	.980/.949 (24.9/24.1)	.400 (10.2)	.418/.413 (10.6/10.5)	.290 (7.4)	.394 (10.0)	.562 (14.3)	.137/.097 (3.5/2.5)
10	1.192/1.162 (30.3/29.5)	1.104/1.073 (28.0/27.3)	.411 (10.4)	.535/.530 (13.6/13.5)	.388 (9.9)	.515 (13.1)	.696 (17.7)	.137/.097 (3.5/2.5)
12	1.380/1.349 (35.1/34.3)	1.291/1.260 (32.8/32.0)	.581 (14.8)	.705/.700 (17.9/17.8)	.558 (14.2)	.685 (17.4)	.875 (22.2)	.137/.097 (3.5/2.5)
14	1.516/1.485 (38.5/37.7)	1.391/1.360 (35.3/34.5)	.650 (16.5)	.774/.796 (19.7/20.2)	.627 (15.9)	.754 (19.2)	.936 (23.9)	.137/.097 (3.5/2.5)
16	1.641/1.610 (41.7/40.9)	1.516/1.485 (38.5/37.7)	.777 (19.7)	.901/.896 (22.9/22.8)	.772 (19.6)	.881 (22.4)	1.062 (27.0)	.137/.097 (3.5/2.5)
18	1.766/1.735 (44.9/44.1)	1.641/1.610 (41.7/40.9)	.864 (21.9)	1.007/1.002 (25.6/25.5)	.860 (21.8)	.987 (25.1)	1.187 (30.1)	.137/.097 (3.5/2.5)
22	2.078/2.047 (52.8/52.0)	1.954/1.923 (49.6/48.8)	1.133 (28.8)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.237 (31.4)	1.437 (36.5)	.148/.128 (3.8/3.3)

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS (Continued From Above)

Shell Size	N Thread	R Thread	JJ Mounting Flat	Panel Cut-Out EE +.000 -.002 (.05)	Panel Cut-Out FF DIA ±.005 (0.1)	Jam Nut MS3186	X	Y
8	.625-20 UN-2A	.562-24 UNEF-2A	.596/.590 (15.1/15.0)	.830 (21.1)	.830 (21.1)	-105	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
10	.750-20 UNEF-2A	.688-24 UNEF-2A	.721/.715 (18.3/18.2)	1.015 (25.8)	1.015 (25.8)	-107	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
12	.937-20 UNEF-2A	.875-20 UNEF-2A	.908/.902 (23.1/22.9)	1.140 (29.0)	1.140 (29.0)	-110	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
14	1.000-20 UNEF-2A	.938-20 UNEF-2A	.971/.965 (24.7/24.5)	1.265 (32.1)	1.265 (32.1)	-111	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
16	1.125-20 UNEF-2A	1.062-18 UNEF-2A	1.096/1.090 (27.8/27.7)	1.390 (35.3)	1.390 (35.3)	-112	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
18	1.250-18 UNEF-2A	1.188-18 UNEF-2A	1.220/1.214 (31.0/30.8)	1.515 (38.5)	1.515 (38.5)	-116	.180/.120 (4.6/3.0)	.210/.150 (5.3/3.8)
22	1.500-18 UNEF-2A	.688-24 UNEF-2A	1.470/1.464 (37.3/37.2)	1.640 (41.7)	1.640 (41.7)	-120	.169/.109 (4.3/2.8)	.199/.139 (5.1/3.5)

230-030 MIL-DTL-83723/90 Series III Type Hermetic Threaded Coupling Solder Flange Mount Receptacle with Solder Cup Terminations



APPLICATION NOTES

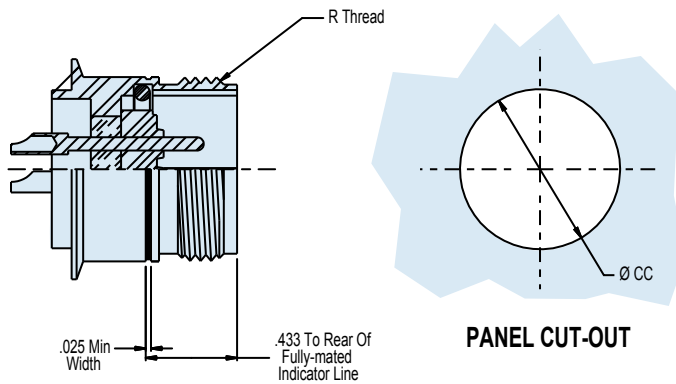
- To be identified with manufacturer's name, part number and date code, space permitting.
- Material/Finish:
Shell* and Jam-Nut:
Z1 - Stainless steel/passivated.
FT - Carbon steel/tin plated.
ZL - Stainless steel/nickel plated.
Contacts - 52 Nickel alloy/gold plated.
Bayonets - Stainless steel/passivated.
Seals - Silicone elastomer/N.A.
Insulation - Glass/N.A.
- Glenair 230-030 will mate with any QPL MIL-DTL-83723/86, /91, /95 and /97 Series III threaded coupling plug of same size, keyway, and insert polarization.
- Performance:
Hermeticity <1 x 10⁻⁷ cc He/sec @ 1 atmosphere differential.
Dielectric withstanding voltage - Consult factory or MIL-STD-1554.
Insulation resistance - 5000 MegOhms min @ 500VDC.
- Consult factory and/or MIL-STD-1554 for arrangement, keyway, and insert position options.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

230-030

MIL-DTL-83723/90 Series III Type Hermetic Threaded Coupling Solder Flange Mount Receptacle with Solder Cup Terminations

Glenair.

MIL-DTL
83723

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Dia	C Dia	D Dia Shell I.D.	E Dia Resilient Insert	F Dia Max Seal	G Dia Max	K Dia Min	Ø CC Panel Cut-Out	R Coupling Thread
8	.723/.703 (18.4/17.9)	.500/.494 (12.7/12.5)	.418/.413 (10.6/10.5)	.290 (7.4)	.394 (10.0)	.562 (14.3)	.400 (10.2)	.515/.505 (13.1/12.8)	.562-24 UNEF-2A
10	.850/.830 (21.6/21.1)	.562/.556 (14.3/14.1)	.535/.530 (13.6/13.5)	.388 (9.9)	.515 (13.1)	.696 (17.7)	.411 (10.4)	.577/.567 (14.7/14.4)	.688-24 UNEF-2A
12	1.055/1.035 (26.8/26.3)	.750/.744 (19.1/18.9)	.705/.700 (17.9/17.8)	.558 (14.2)	.685 (17.4)	.875 (22.2)	.581 (14.8)	.765/.755 (19.3/19.2)	.875-20 UNEF-2A
14	1.100/1.080 (27.9/27.4)	.812/.806 (20.6/20.5)	.774/.769 (19.7/19.5)	.627 (15.9)	.754 (19.2)	.935 (23.7)	.650 (16.5)	.827/.817 (21.0/20.8)	.938-20 UNEF-2A
16	1.220/1.200 (31.0/30.5)	.937/.931 (23.8/23.6)	.901/.896 (22.9/22.8)	.772 (19.6)	.881 (22.4)	1.062 (27.0)	.765 (19.3)	.952/.942 (24.2/23.9)	1.062-18 UNEF-2A
18	1.350/1.330 (34.3/33.8)	1.062/1.056 (27.0/26.8)	1.007/1.002 (25.6/25.5)	.860 (21.8)	.987 (25.1)	1.187 (30.1)	.864 (21.9)	1.077/1.067 (27.4/27.1)	1.188-18 UNEF-2A
22	1.600/1.580 (40.6/40.1)	1.312/1.306 (36.5/33.2)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.237 (31.4)	1.437 (36.5)	1.133 (28.8)	1.327/1.317 (33.7/33.5)	1.438-18 UNEF-2A

E

MIL-DTL-5015 Type Hermetic Connectors

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MIL-DTL-5015 Type Hermetic

Corrosion Resistant Stainless Steel Harsh Environment Hermetic Connectors for Power and Signal Applications

Product Applications

Glenair MIL-DTL-5015 type commercial hermetic connectors are general purpose, low-density circular connectors ideally suited for applications that require power and signal contacts in a glass sealed hermetic package. This series is available in a wide range of shell sizes and contact layouts that are compatible with all standard environmental MIL-DTL-5015 plug connectors.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders. Glenair also makes and stocks all the standard connector accessory backshells typically specified with 5015 type connectors.

Layouts IAW MIL-STD-1651 in Shell Sizes 8 to 48

Solder Mount, Flange Mount, Jam Nut and Bulkhead Feed-Thru Styles Available

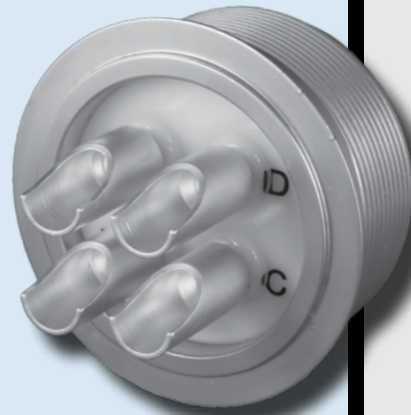
Solder Cup and Eyelet Contacts

Keyed Polarization

Space Grade Special Screening Available

$<1 \times 10^{-7}$ cc Helium per Second Leakage Rate

*Stainless Steel or Fused Tin over Steel Plate,
Plus Titanium and Inconel® Options.*



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Materials

These MIL-DTL-5015 type hermetic connectors are made from passivated stainless steel or ferrous steel shells, with glass insulators fused to the connector shell, and contacts meeting a leak rate of 1×10^{-7} cc/Helium per second. The Glenair MIL-DTL-5015 type hermetic connector is equipped with fluorosilicone elastomer interfacial and peripheral seals which provide positive sealing with plug connectors.

Gold plated nickel-iron alloy 52 contacts are available in sizes 0, 4, 8, 10, 12 and 16, depending on the layout chosen. Solder cup and eyelet contact styles are standard.

Errata

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately to www.glenair.com.



MIL-DTL-5015 Type Hermetic Power and Signal Connectors Insert Arrangements per MIL-STD-1651

Insert Arrangements						
Pattern Number	Contact Size and Quantity					Service Rating
	16	12	8	4	0	
8S-1	1					A
10S-2	1					A
10SL-3	3					INST
10SL-4	2					A
12S-3	2					A
12S-4	1					D
12-5		1				D
14S-1	3					A
14S-2	4					INST
14-3			1			A
14S-4	1					O
14S-5	5					INST
14S-6	6					INST
14S-7	3					A
14S-9	2					A
16S-1	7					A
16-2		1				E
16S-3	1					B
16S-4	2					D
16S-5	3					A
16S-6	3					A
16-7	2					A
16S-8	5					A
16-9	2	2				A
16-10		3				A
16-11		2				A
16-12				1		A
16-13		2				A
18-1	10					A/INST
18-3		2				D
18-4		4				D
18-5	1	2				D
18-6				1		D
18-7			1			B
18-8	7	1				A
18-9	5	2				INST
18-10		4				A
18-11		5				A
18-12	6					A
18-13		3	1			A
18-14	1			1		A
18-15		4				A

Insert Arrangements						
Pattern Number	Contact Size and Quantity					Service Rating
	16	12	8	4	0	
18-16		1				C
18-20	5					A
18-22	3					D
18-29	5					A
20-2					1	D
20-3		3				D
20-4		4				D
20-5	2					E
20-6	3					D
20-7	8					D/A
20-8	4					INST
20-9	7	1				D/A
20-11	13					INST
20-12	1			1		A
20-13	4					A
20-14		3				A
20-15		7				A
20-16	7	2				A
20-17	1	5				A
20-18	6	3				A
20-19			3			A
20-22	3		3			A
20-23			2			A
20-24	2		2			A
20-27	14					A
20-29	17					A
20-31	11					A
20-33	11					A
22-1			2			D
22-2			3			D
22-3	1			1		D
22-4		2	2			A
22-5	4	2				D
22-6	1		2			D
22-7					1	E
22-8		2				E
22-9		3				E
22-10	4					E
22-11	2					B
22-12	3		2			D
22-13	1	4				D
22-14	19					A

**MIL-DTL-5015 Type Hermetic
Power and Signal Connectors
Insert Arrangements per MIL-STD-1651**



MIL-DTL
5015 Type

Insert Arrangements						
Pattern Number	Contact Size and Quantity					Service Rating
	16	12	8	4	0	
22-15	1	5				E/A
22-17	8	1				D/A
22-18	8					A/D
22-19	14					A
22-20	9					A
22-21	2				1	A
22-22			4			A
22-23		8				D/A
22-24	4	2				D/A
22-25	2				1	A
24-1		1			1	D
24-2		7				D
24-3	5	2				D
24-4	3					D
24-5	16					A
24-6		8				D/A
24-7	14	2				A
24-9				2		A
24-10			7			A
24-11		6	3			A
24-12		3		2		A
24-14		2			1	A
24-16	3	3	1			D/A
24-17	3	2				D
24-19	12					A
24-20	9	2				D
24-21	9		1			D
24-22			4			D
24-23	2		3			D
24-27	7					E
24-28	24					INST
24-80	23					INST
28-1		6	3			D/A
28-2	12	2				D
28-3			3			E
28-4	7	2				E/D
28-5	2	1		2		D
28-6				3		D
28-8	10	2				E/D/A
28-9	6	6				D
28-10		3	2	2		D/A
28-11	18	4				A

Insert Arrangements						
Pattern Number	Contact Size and Quantity					Service Rating
	16	12	8	4	0	
28-12	26					A
28-14	11					D
28-15	35					A
28-16	20					A
28-17	15					B/D/A
28-18	12					D/C/A/N
28-19	6	4				D/B/A
28-20	4	10				A
28-21	37					A
28-22	3			3		D
32-1		3			2	E/D
32-2	2			3		E
32-3	4	2		2	1	D
32-4	12	2				D/A
32-5					2	D
32-6	3	2	3	2		A
32-7	28	7				INST/A
32-8	24	6				A
32-9	12			2		
32-10	3		2	2		E/D/B/A
32-12	10	5				D/A
32-13	18	5				D
32-14		5		2		D
32-15		6			6	D
32-17				4		D
32-22	54					A
32-63				5		D
32-73	46					A
36-1	18	4				D
36-3		3			3	D
36-4					3	D/A
36-5					4	A
36-6				4	2	A
36-7	40	7				A
36-8	46	1				A
36-9	14	14	2	1		A
36-10	48					A
36-13	15	2				E/A
36-14	6	5	5			D
36-15	35					D/A
36-19	10	5		1	1	D
36-52	52					A

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MIL-DTL-5015 Type Hermetic Power and Signal Connectors Insert Arrangements per MIL-STD-1651

Insert Arrangements						
Pattern Number	Contact Size and Quantity					Service Rating
	16	12	8	4	0	
36-66	52	4				A
40-1	24	6				D
40-2	23					D/B
40-3	18	4		1		D
40-4	16	2	3	2		D
40-5		6	4	2	3	A
40-6	24	1			1	D
40-7	18	2			2	D/A
40-9	24	22	1			A
40-10	16		9	4		A
40-11	18	4	1	1	1	D
40-56	85					A
40-62	60					A
44-1	36	6				D
44-2	14	14	2	1		D
44-3	24	3	2	2		D
44-4	31	8			2	D
44-52	104					A
48-1		6	4	2	3	E/D
48-2	46	1				E/D
48-3	18	1	3		3	D
48-4	47	16	3		2	D/A
48-62	85					D

MIL-DTL-5015 Type Hermetic Power and Signal Connectors Alternate Key Positions



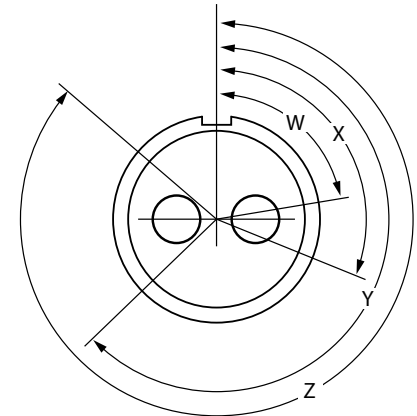
MIL-DTL
5015 Type

Alternate Key Positions

Dash Number	W°	X°	Y°	Z°
8S-1	—	—	—	—
10S-2	—	—	—	—
10SL-3	—	—	—	—
10SL-4	—	—	—	—
12S-3	70	145	215	290
12S-4	—	—	—	—
14S-1	—	—	—	—
14S-2	—	120	240	—
14S-4	—	—	—	—
14S-5	—	110	—	—
14S-6	—	—	—	—
14S-7	90	180	270	—
14S-9	70	145	215	290
16S-1	80	—	—	280
16S-3	—	—	—	—
16S-4	35	110	250	325
16S-5	70	145	215	290
16S-6	90	180	270	—
16S-8	—	170	265	—
16-9	35	110	250	325
16-10	90	180	270	—
16-11	35	110	250	325
18-1	70	145	215	290
18-4	35	110	250	325
18-8	70	—	—	290
18-9	80	110	250	280
18-10	—	120	240	—
18-11	—	170	265	—
18-12	80	—	—	280
20-4	45	110	250	—
20-7	80	110	250	280
20-8	80	110	250	280
20-14	80	110	250	280
20-15	80	—	—	280
20-16	80	110	250	280
20-17	90	180	270	—
20-18	35	110	250	325
20-19	90	180	270	—

Alternate Key Positions

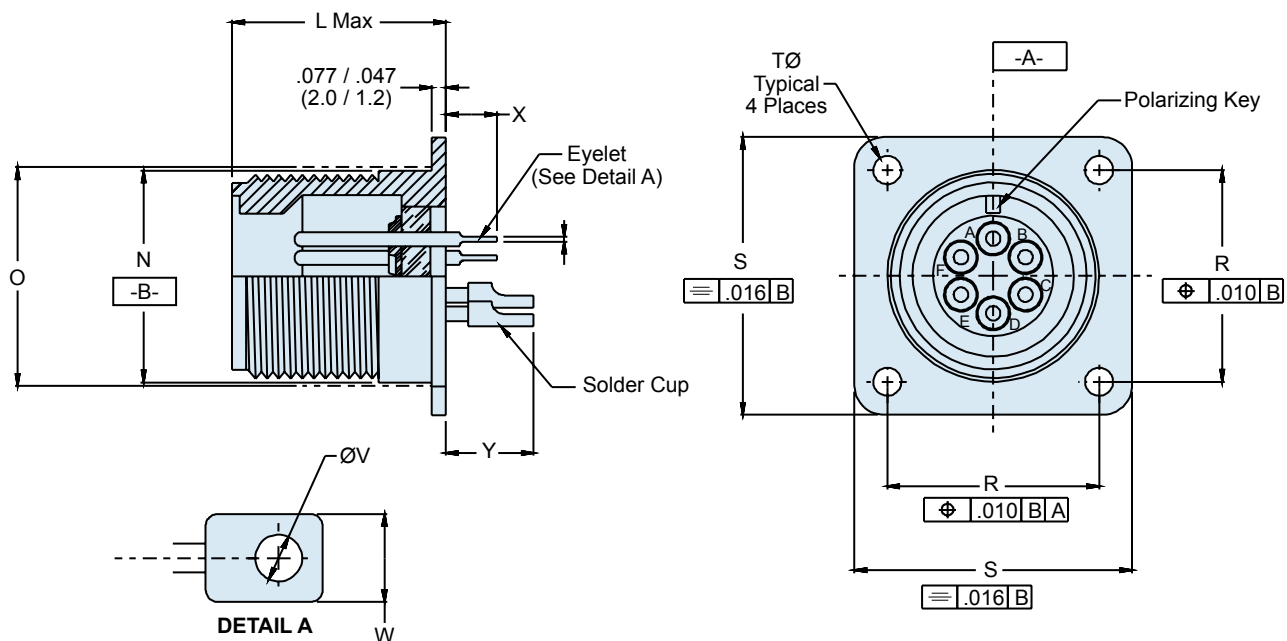
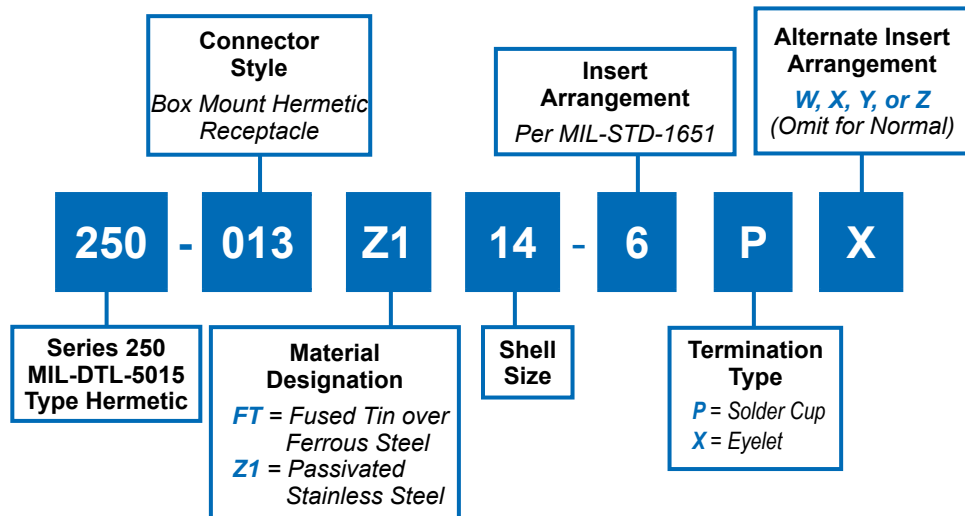
Dash Number	W°	X°	Y°	Z°
20-22	80	110	250	280
20-24	35	110	250	325
20-27	35	110	250	325
20-29	80	—	—	280
20-33	—	—	—	—
22-2	70	145	215	290
22-5	35	110	250	325
22-9	70	145	215	290
22-14	80	—	—	280
22-18	80	110	250	280
22-19	80	110	250	280
22-20	35	110	250	325
22-22	—	110	250	—
22-23	35	—	250	—
24-2	80	—	—	280
24-4	80	110	250	280
24-7	80	110	250	280
24-10	80	—	—	280
24-11	35	110	250	325
24-19	—	—	—	—
24-20	80	110	250	280
24-27	80	—	—	280
24-28	80	110	250	280
28-9	80	110	250	280
28-11	80	110	250	280
28-12	90	180	280	—
28-15	80	110	250	280
28-17	80	110	250	280
28-20	80	110	250	280
28-21	80	110	250	280
32-6	80	110	250	280
32-7	80	125	235	280
32-8	80	125	235	280
32-15	35	110	250	280
32-17	45	110	250	—
36-5	—	120	240	—
36-7	80	110	250	280
36-9	80	125	235	280
36-10	80	125	235	280



Pin Insert Face View
Normal Insert
Keying Shown

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250-013 MIL-DTL-5015 Type Hermetic Threaded Coupling Box Mount Receptacle Connector MS3142 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Front panel mount square flange receptacle with through mounting holes.
- Material/Finish:
Shell* - Fused tin over ferrous steel/Z1 passivated stainless steel.
Contacts - 52 Nickel alloy/gold plate
Seals - Silicone elastomer/N.A.
Insulation - Glass beads, NOIBN/N.A.
- Glenair 250-013 will mate with any MIL-DTL-5015 Series threaded coupling plug of same size and insert polarization.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ cc/Sec @ 1 Atm. differential.
Dielectric Withstanding Voltage - See Table II.
Insulation Resistance - 5000 Megohms min @ 500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

250-013
MIL-DTL-5015 Type Hermetic
Threaded Coupling Box Mount Receptacle Connector
MS3142 Type



MIL-DTL
5015 Type

TABLE I: CONTACT DIMENSIONS

Contact Size	X Max	Y Max	Z Min	V Min	W Max
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	-	.719 (18.3)	-	-	-
4	-	.980 (24.9)	-	-	-
0	-	.980 (24.9)	-	-	-

TABLE II: SERVICE RATING

Service Rating	Working Voltage (Volts RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

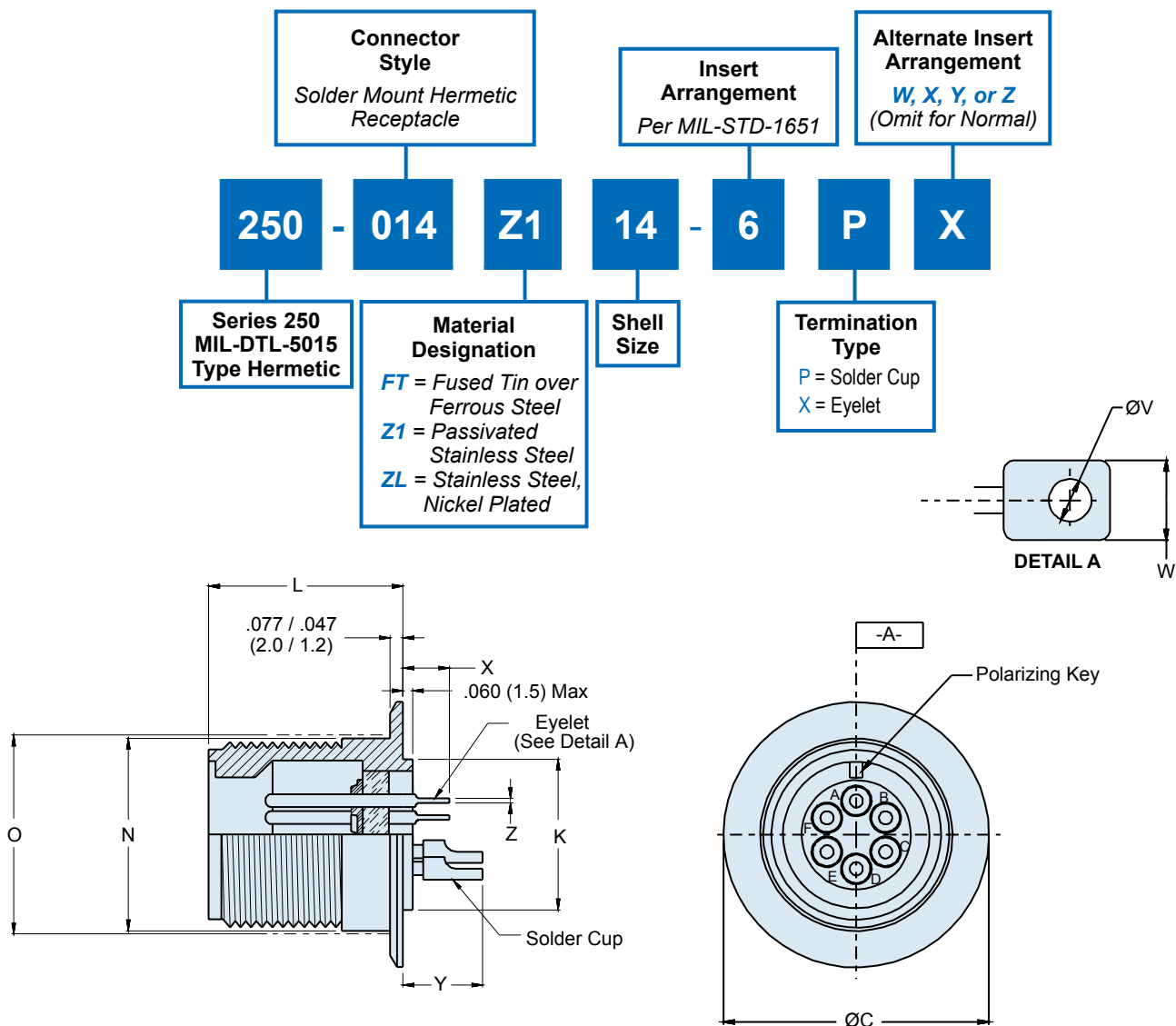
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE III: CONNECTOR DIMENSIONS

Size	L Maximum Contact Size		ØN +.000 -.062 (+ 0 -1.6)	ØO (Ref) Mounting Hole	R T.P C — C	S ±.031 (0.8)	ØT ±.005 (0.1)
	16, 12, 8	4, 0					
8S	.730 (18.5)	-	.532 (13.5)	.562 (14.3)	.594 (15.1)	.875 (22.2)	.120 (3.0)
10S	.730 (18.5)	-	.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	.120 (3.0)
10SL	.730 (18.5)	-	.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	.120 (3.0)
12S	.730 (18.5)	-	.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	.120 (3.0)
12	.915 (23.2)	-	.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	.120 (3.0)
14S	.730 (18.5)	-	.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	.120 (3.0)
14	.915 (23.2)	-	.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	.120 (3.0)
16S	.730 (18.5)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	.120 (3.0)
16	.915 (23.2)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	.120 (3.0)
18	.915 (23.2)	1.040 (26.4)	1.156 (29.4)	1.188 (30.2)	1.062 (27.0)	1.375 (34.9)	.120 (3.0)
20	.915 (23.2)	1.040 (26.4)	1.282 (32.6)	1.312 (33.3)	1.156 (29.4)	1.500 (38.1)	.120 (3.0)
22	.915 (23.2)	1.040 (26.4)	1.406 (35.7)	1.483 (36.5)	1.250 (31.8)	1.625 (41.3)	.120 (3.0)
24	.915 (23.2)	1.040 (26.4)	1.532 (38.9)	1.562 (39.7)	1.375 (34.9)	1.750 (44.5)	.147 (3.7)
28	.915 (23.2)	1.040 (26.4)	1.782 (45.3)	1.812 (46.0)	1.562 (39.7)	2.000 (50.8)	.147 (3.7)
32	.915 (23.2)	1.040 (26.4)	2.032 (51.6)	2.062 (52.4)	1.750 (44.5)	2.250 (57.2)	.173 (4.4)
36	.915 (23.2)	1.040 (26.4)	2.282 (58.0)	2.312 (58.7)	1.938 (49.2)	2.500 (63.5)	.173 (4.4)
40	.915 (23.2)	1.040 (26.4)	2.532 (64.3)	2.562 (65.1)	2.188 (55.6)	2.750 (69.9)	.173 (4.4)
44	.915 (23.2)	1.040 (26.4)	2.782 (70.7)	2.812 (71.4)	2.375 (60.3)	3.000 (76.2)	.173 (4.4)
48	.915 (23.2)	1.040 (26.4)	3.032 (77.0)	3.062 (77.8)	2.625 (66.7)	3.250 (82.6)	.173 (4.4)

250-014 MIL-DTL-5015 Type Hermetic Threaded Coupling Solder Mount Receptacle Connector MS3143 Type



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Front panel mount square flange receptacle with through mounting holes.
- Material/Finish:
 Shell* - Fused tin over ferrous steel; Z1 passivated stainless steel; Nickel Plated Stainless Steel
 Contacts - 52 Nickel alloy/gold plate
 Seals - Silicone elastomer/N.A.
 Insulation - Glass beads, NOIBN/N.A.
- Glenair 250-014 will mate with any MIL-DTL-5015 Series threaded coupling plug of same size and insert polarization.
- Performance:
 Hermeticity - $<1 \times 10^{-7}$ cc/Sec @ 1 ATM.
 Dielectric Withstanding Voltage - See Table II.
 Insulation Resistance - 5000 Megohms min @ 500VDC.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

250-014
MIL-DTL-5015 Type Hermetic
Threaded Coupling Solder Mount Receptacle Connector
MS3143 Type



MIL-DTL
5015 Type

TABLE I: CONTACT DIMENSIONS

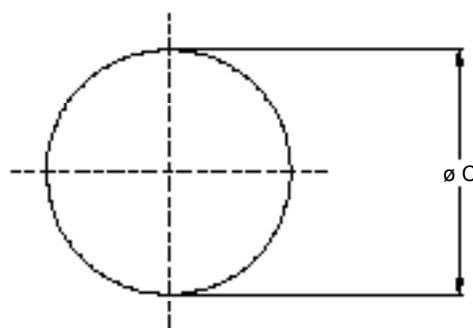
Contact Size	X Max	Y Max	Z Min	V Min	W Max
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	-	.719 (18.3)	-	-	-
4	-	.980 (24.9)	-	-	-
0	-	.980 (24.9)	-	-	-

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE II: SERVICE RATING

Service Rating	Working Voltage (Volts RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

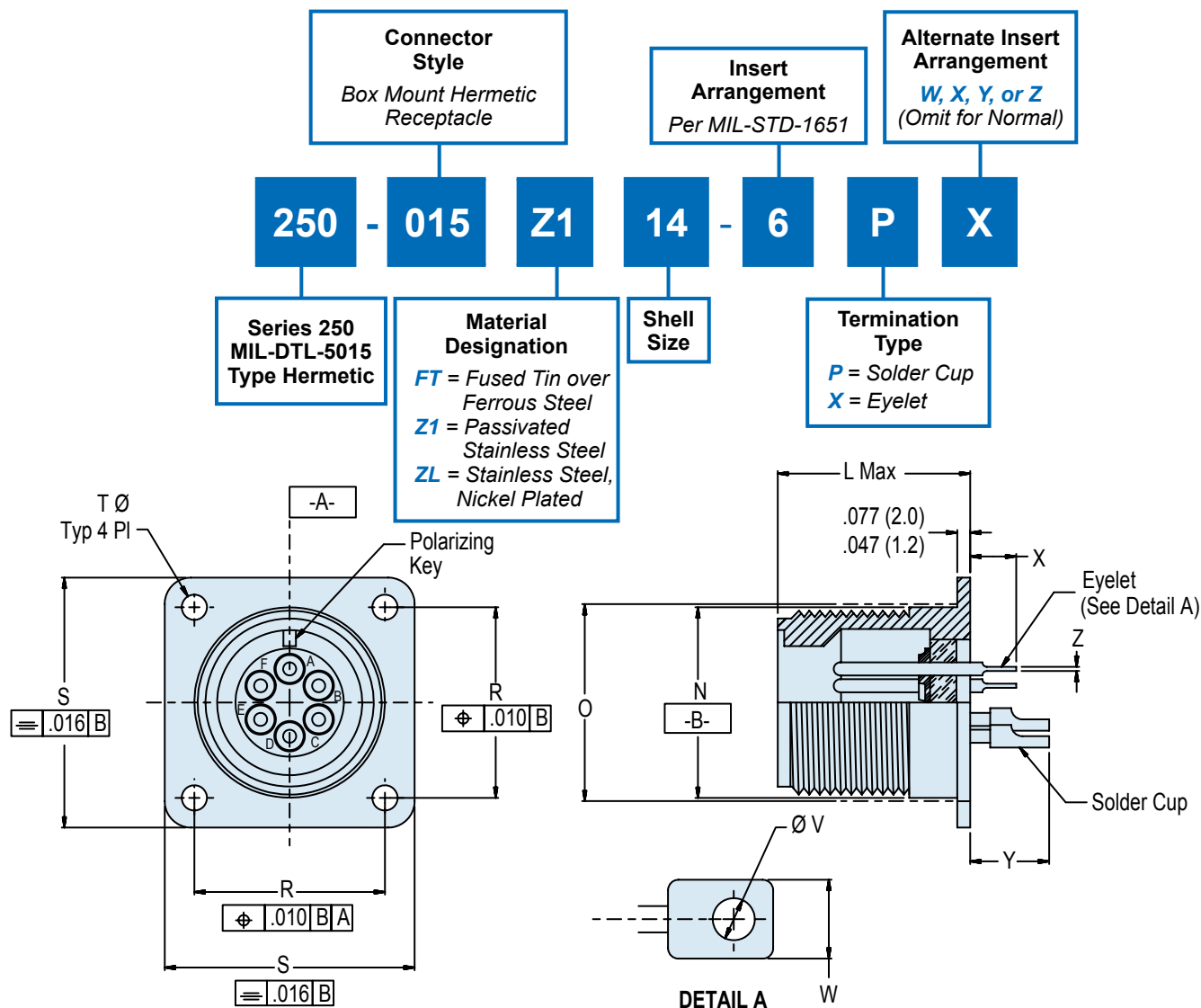


Recommended Panel
Cut-Out

TABLE III: CONNECTOR DIMENSIONS

Size	C Dia ±.010 (0.25)	K Dia ±.010 (0.25)	L Max Contact Size		N Dia +.000 -.062 (+.000 -.1.6)	O Dia (Ref) Mtg Hole
			16, 12 & 8	4 & 0		
8S	.750 (19.1)	.428 (10.9)	.730 (18.5)	-	.532 (13.5)	.562 (14.3)
10S	.875 (22.2)	.490 (12.4)	.730 (18.5)	-	.656 (16.7)	.688 (17.5)
10SL	.875 (22.2)	.490 (12.4)	.730 (18.5)	-	.656 (16.7)	.688 (17.5)
12S	1.000 (25.4)	.646 (16.4)	.730 (18.5)	-	.782 (19.9)	.812 (20.6)
12	1.000 (25.4)	.646 (16.4)	.915 (23.2)	-	.782 (19.9)	.812 (20.6)
14S	1.125 (28.6)	.709 (18.0)	.730 (18.5)	-	.906 (23.0)	.938 (23.8)
14	1.125 (28.6)	.709 (18.0)	.915 (23.2)	-	.906 (23.0)	.938 (23.8)
16S	1.250 (31.8)	.834 (21.2)	.730 (18.5)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)
16	1.250 (31.8)	.834 (21.2)	.834 (21.2)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)
18	1.375 (34.9)	.959 (24.4)	.915 (23.2)	1.040 (26.4)	1.156 (29.4)	1.188 (30.2)
20	1.500 (38.1)	1.146 (29.1)	.915 (23.2)	1.040 (26.4)	1.282 (32.6)	1.312 (33.3)
22	1.625 (41.3)	1.240 (31.5)	.915 (23.2)	1.040 (26.4)	1.406 (35.7)	1.438 (36.5)
24	1.750 (44.5)	1.365 (34.7)	.915 (23.2)	1.040 (26.4)	1.532 (38.9)	1.562 (39.7)
28	2.000 (50.8)	1.615 (41.0)	.915 (23.2)	1.040 (26.4)	1.782 (45.3)	1.812 (46.0)
32	2.250 (57.2)	1.865 (47.4)	.915 (23.2)	1.040 (26.4)	2.032 (51.6)	1.062 (27.0)
36	2.500 (63.5)	2.115 (53.7)	.915 (23.2)	1.040 (26.4)	2.282 (58.0)	2.500 (63.5)
40	2.750 (69.9)	2.365 (60.1)	.915 (23.2)	1.040 (26.4)	2.532 (64.3)	2.750 (69.9)
44	3.000 (76.2)	2.615 (66.4)	.915 (23.2)	1.040 (26.4)	2.782 (70.7)	3.000 (76.2)
48	3.250 (82.6)	2.865 (72.8)	.915 (23.2)	1.040 (26.4)	3.032 (77.0)	3.250 (82.6)

250-015 MIL-DTL-5015 Type Hermetic Threaded Coupling Box Mount Receptacle Connector MS3142 Type



APPLICATION NOTES

- Material/Finish:
Shell: FT - Fused Tin over Carbon Steel
Z1 - Passivated Stainless Steel
ZL - Nickel Plated Stainless Steel
- Assembly to be identified with Glenair's name, part number and date code, space permitting.
- Performance:
Hermeticity - <1_X10^-7 SCCHE/Sec @ 1 atmosphere differential.
Dielectric Withstanding Voltage - See Table II.
Insulation Resistance - 5000 Megohms minimum @ 500VDC.
- Glenair 250-015 will mate with any MIL-DTL-5015 threaded coupling plug of same size and insert polarization.
- Metric dimensions (mm) are in parenthesis.

250-015
MIL-DTL-5015 Type Hermetic
Threaded Coupling Box Mount Receptacle Connector
MS3142 Type



MIL-DTL
5015 Type

TABLE I: CONTACT DIMENSIONS

Contact Size	X Max	Y Max	Z Min	V Min	W Max
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	-	.719 (18.3)	-	-	-
4	-	.980 (24.9)	-	-	-
0	-	.980 (24.9)	-	-	-

TABLE II: SERVICE RATING

Service Rating	Working Voltage (Volts RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

HERMETIC LEAK RATE MOD CODES

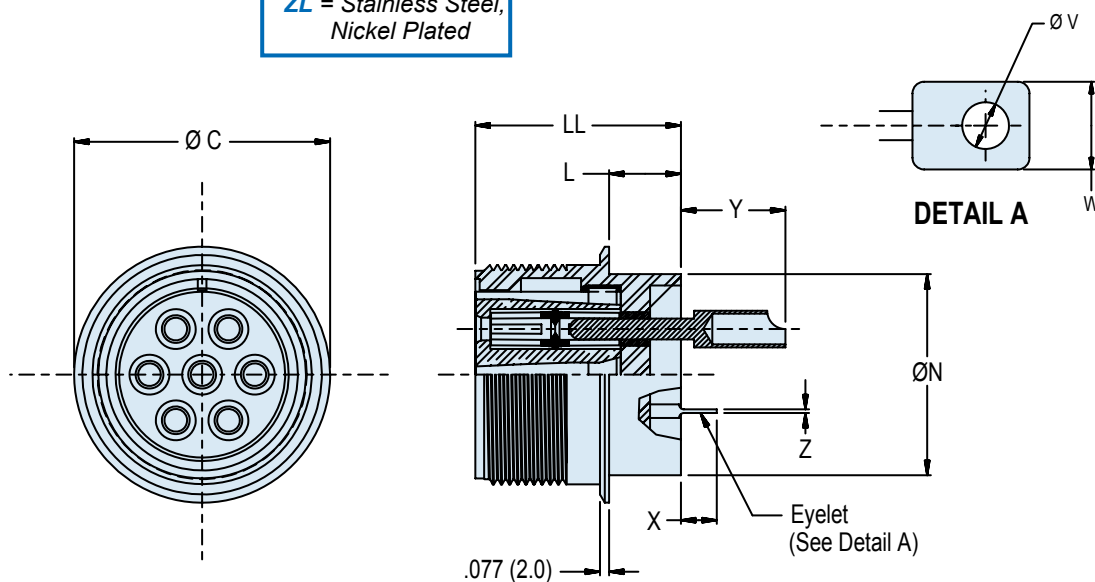
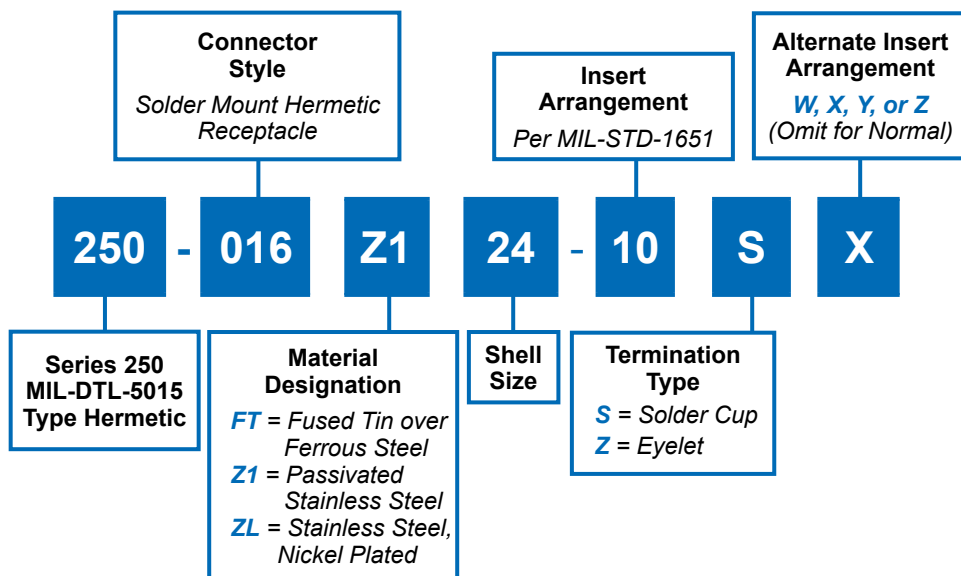
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE III: CONNECTOR DIMENSIONS

Size	L Max Contact Size		N Dia +.000 -.062 (+.000 -.1.6)	O Dia (Ref) Mtg Hole	R T.P E—E	S .031 (0.79)	T Dia ± .005 (0.13)
	16, 12 & 8	4 & 0					
8S	.730 (18.5)	-	.532 (13.5)	.562 (14.3)	.594 (15.1)	.875 (22.2)	.120 (3.0)
10S	.730 (18.5)	-	.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	.120 (3.0)
10SL	.730 (18.5)	-	.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	.120 (3.0)
12S	.730 (18.5)	-	.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	.120 (3.0)
12	.915 (23.2)	-	.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	.120 (3.0)
14S	.730 (18.5)	-	.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	.120 (3.0)
14	.915 (23.2)	-	.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	.120 (3.0)
16S	.730 (18.5)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	.120 (3.0)
16	.915 (23.2)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	.120 (3.0)
18	.915 (23.2)	1.040 (26.4)	1.156 (29.4)	1.188 (30.2)	1.062 (27.0)	1.375 (34.9)	.120 (3.0)
20	.915 (23.2)	1.040 (26.4)	1.282 (32.6)	1.312 (33.3)	1.156 (29.4)	1.500 (38.1)	.120 (3.0)
22	.915 (23.2)	1.040 (26.4)	1.406 (35.7)	1.438 (36.5)	1.250 (31.8)	1.625 (41.3)	.120 (3.0)
24	.915 (23.2)	1.040 (26.4)	1.532 (38.9)	1.562 (39.7)	1.375 (34.9)	1.750 (44.5)	.147 (3.7)
28	.915 (23.2)	1.040 (26.4)	1.782 (45.3)	1.812 (46.0)	1.562 (39.7)	2.000 (50.8)	.147 (3.7)
32	.915 (23.2)	1.040 (26.4)	2.032 (51.6)	2.062 (52.3)	1.750 (44.5)	2.250 (57.2)	.173 (4.4)
36	.915 (23.2)	1.040 (26.4)	2.282 (58.0)	2.312 (58.7)	1.938 (49.2)	2.500 (63.5)	.173 (4.4)
40	.915 (23.2)	1.040 (26.4)	2.532 (64.3)	2.562 (65.1)	2.188 (55.6)	2.750 (69.9)	.173 (4.4)
44	.915 (23.2)	1.040 (26.4)	2.782 (70.7)	2.812 (71.4)	2.375 (60.3)	3.000 (76.2)	.173 (4.4)
48	.915 (23.2)	1.040 (26.4)	3.032 (77.0)	3.062 (77.8)	2.625 (66.7)	3.250 (82.6)	.173 (4.4)

F

250-016 MIL-DTL-5015 Type Hermetic Threaded Coupling Solder Mount Receptacle Connector MS3143 Type Sockets



APPLICATION NOTES

- Material/Finish:
Shell: FT - Fused Tin over Carbon Steel
Z1 - Passivated Stainless Steel
ZL - Nickel Plated Stainless Steel
Contacts - 52 Nickel Alloy/Gold Plate
Sockets - Copper Alloy/Gold Plate
Insulator - Glass/N.A.
Socket Insulator - Rigid Dielectric/N.A.
- Assembly to be identified with Glenair's name, part number and date code, space permitting.
- Performance:
Hermeticity - $<1 \times 10^{-7}$ SCCHE/Sec @ 1 atmosphere differential.
Dielectric Withstanding Voltage - See Table II.
Insulation Resistance - 5000 Megohms minimum @ 500VDC.
- Glenair 250-016 will mate with any MIL-DTL-5015 threaded coupling plug of same size and insert polarization.
- Metric dimensions (mm) are in parenthesis.

250-016
MIL-DTL-5015 Type Hermetic
Threaded Coupling Solder Mount Receptacle Connector
MS3143 Type Sockets



MIL-DTL
5015 Type

TABLE I: CONTACT DIMENSIONS

Contact Size	X Max	Y Max	Z Min	V Min	W Max
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	-	.719 (18.3)	-	-	-
4	-	.980 (24.9)	-	-	-
0	-	.980 (24.9)	-	-	-

TABLE II: SERVICE RATING

Service Rating	Working Voltage (Volts RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

HERMETIC LEAK RATE MOD CODES

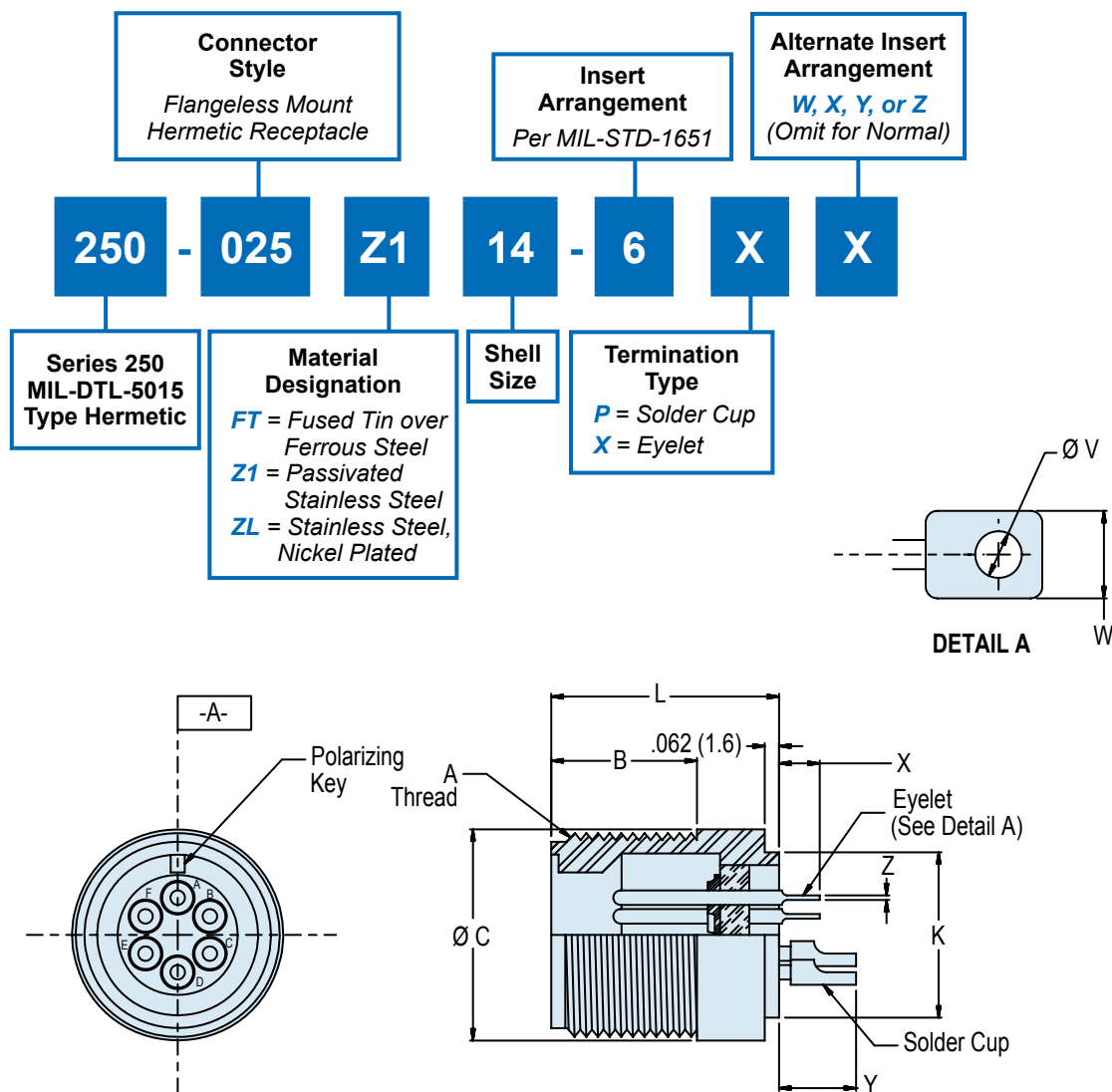
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE III: CONNECTOR DIMENSIONS

Size	C Dia ± .010 (0.3)	L ± .010 (0.3)	LL Max	N Dia + .000 - .062	O Dia (Ref) Mtg Hole
12S	1.000 (25.4)	.438 (11.1)	1.094 (27.8)	.782 (19.9)	.812 (20.6)
12	1.000 (25.4)	.438 (11.1)	1.282 (32.6)	.782 (19.9)	.812 (20.6)
14S	1.125 (28.6)	.438 (11.1)	1.094 (27.8)	.906 (23.0)	.938 (23.8)
14	1.125 (28.6)	.438 (11.1)	1.282 (32.6)	.906 (23.0)	.938 (23.8)
16S	1.250 (31.8)	.438 (11.1)	1.094 (27.8)	1.032 (26.2)	1.062 (27.0)
16	1.250 (31.8)	.438 (11.1)	1.282 (32.6)	1.032 (26.2)	1.062 (27.0)
18	1.375 (34.9)	.438 (11.1)	1.282 (32.6)	1.156 (29.4)	1.188 (30.2)
20	1.500 (38.1)	.438 (11.1)	1.282 (32.6)	1.282 (32.6)	1.312 (33.3)
22	1.625 (41.3)	.438 (11.1)	1.282 (32.6)	1.406 (35.7)	1.438 (36.5)
24	1.750 (44.5)	.563 (14.3)	1.406 (35.7)	1.532 (38.9)	1.562 (39.7)
28	2.000 (50.8)	.563 (14.3)	1.406 (35.7)	1.782 (45.3)	1.812 (46.0)
32	2.250 (57.2)	.563 (14.3)	1.406 (35.7)	2.032 (51.6)	2.062 (53.4)
36	2.500 (63.5)	.563 (14.3)	1.406 (35.7)	2.282 (58.0)	2.500 (63.5)
40	2.750 (69.9)	.563 (14.3)	1.406 (35.7)	2.532 (64.3)	2.750 (69.9)
44	3.000 (76.2)	.563 (14.3)	1.406 (35.7)	2.782 (70.7)	3.000 (76.2)
48	3.250 (82.6)	.563 (14.3)	1.406 (35.7)	3.032 (77.0)	3.250 (82.6)

F

250-025 MIL-DTL-5015 Type Hermetic Threaded Coupling Flangeless Mount Receptacle Connector MS3143 Type



APPLICATION NOTES

- Material/Finish:
Shell: FT - Fused Tin over Carbon Steel Contacts - 52 Nickel Alloy/Gold Plate
Z1 - Passivated Stainless Steel Seals - Silicone Elastomer/N.A.
ZL - Nickel Plated Stainless Steel Insulator - Full Glass
- Assembly to be identified with Glenair's name, part number and date code, space permitting.
- Performance:
Hermeticity - <1_X10⁻⁷ SCCHE/Sec @ 1 atmosphere differential.
Dielectric Withstanding Voltage - See Table II.
Insulation Resistance - 5000 Megohms minimum @ 500VDC.
- Glenair 250-016 will mate with any MIL-DTL-5015 threaded coupling plug of same size and insert polarization.
- Metric dimensions (mm) are in parenthesis.

250-025
MIL-DTL-5015 Type Hermetic
Threaded Coupling Flangeless Mount Receptacle Connector
MS3143 Type



MIL-DTL
5015 Type

TABLE I: CONTACT DIMENSIONS

Contact Size	X Max	Y Max	Z Min	V Min	W Max
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	-	.719 (18.3)	-	-	-
4	-	.980 (24.9)	-	-	-
0	-	.980 (24.9)	-	-	-

TABLE II: SERVICE RATING

Service Rating	Working Voltage (Volts RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

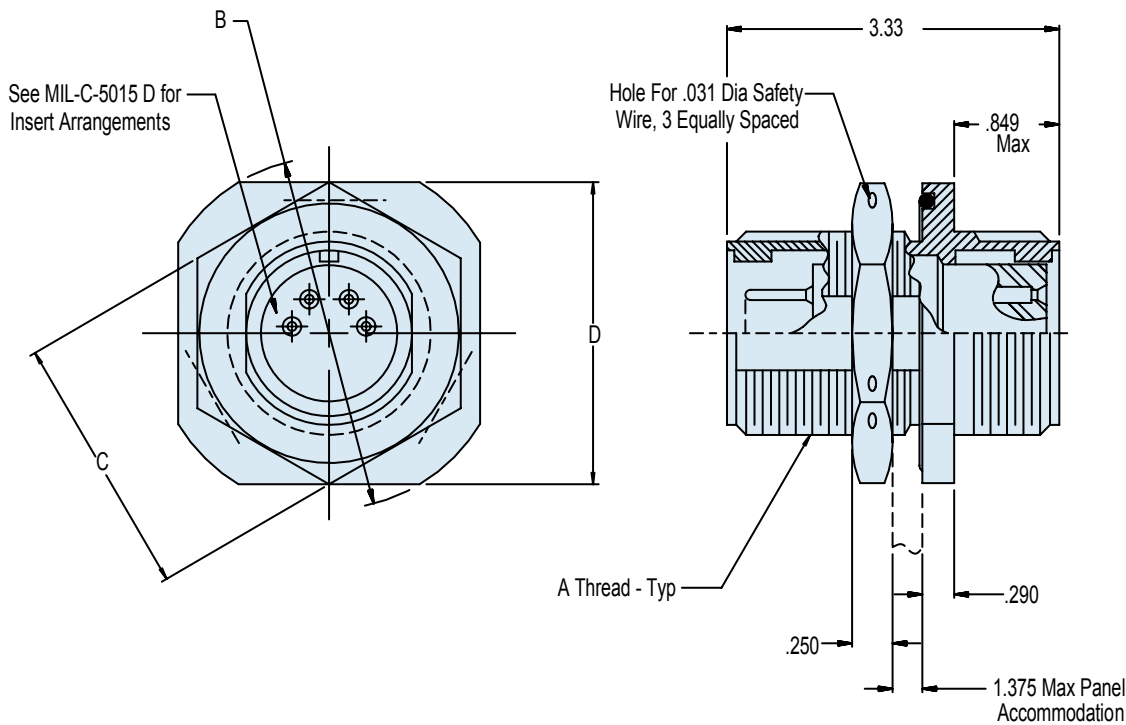
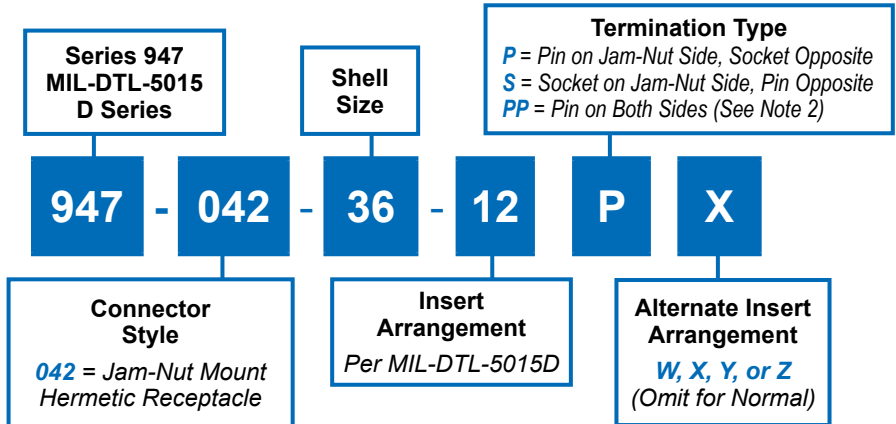
TABLE III: CONNECTOR DIMENSIONS

Size	A Thread Class 2A	B Min Thread	C Dia ± .010 (0.3)	K Dia ± .010 (0.3)	L Max Contact Size	
					16, 12, 8	4 and 0
8S	.500-28 UNEF	.375 (9.5)	.500 (12.7)	.438 (11.1)	.730 (18.5)	—
10S	.625-24 UNEF	.375 (9.5)	.625 (15.9)	.500 (12.7)	.730 (18.5)	—
10SL	.625-24 UNEF	.375 (9.5)	.625 (15.9)	.500 (12.7)	.730 (18.5)	—
12S	.750-20 UNEF	.375 (9.5)	.750 (19.1)	.656 (16.7)	.730 (18.5)	—
12	.750-20 UNEF	.625 (15.9)	.750 (19.1)	.656 (16.7)	.915 (23.2)	—
14S	.875-20 UNEF	.375 (9.5)	.875 (22.2)	.719 (18.3)	.730 (18.5)	—
14	.875-20 UNEF	.625 (15.9)	.875 (22.2)	.719 (18.3)	.915 (23.2)	—
16S	1.000-20 UNEF	.375 (9.5)	1.000 (25.4)	.844 (21.4)	.730 (18.5)	1.040 (26.4)
16	1.000-20 UNEF	.625 (15.9)	1.000 (25.4)	.844 (21.4)	.915 (23.2)	1.040 (26.4)
18	1.125-18 UNEF	.625 (15.9)	1.125 (28.6)	.969 (24.6)	.915 (23.2)	1.040 (26.4)
20	1.250-18 UNEF	.625 (15.9)	1.250 (31.8)	1.156 (29.4)	.915 (23.2)	1.040 (26.4)
22	1.375-18 UNEF	.625 (15.9)	1.375 (34.9)	1.250 (31.8)	.915 (23.2)	1.040 (26.4)
24	1.500-18 UNEF	.625 (15.9)	1.500 (38.1)	1.375 (34.9)	.915 (23.2)	1.040 (26.4)
28	1.750-18 UNS	.625 (15.9)	1.750 (44.5)	1.625 (41.3)	.915 (23.2)	1.040 (26.4)
32	2.000-18 UNS	.625 (15.9)	2.000 (50.8)	1.875 (47.6)	.915 (23.2)	1.040 (26.4)
36	2.250-16 UN	.625 (15.9)	2.250 (57.2)	2.125 (54.0)	.915 (23.2)	1.040 (26.4)
40	2.500-16 UN	.625 (15.9)	2.500 (63.5)	2.375 (60.3)	.915 (23.2)	1.040 (26.4)
44	2.750-16 UN	.625 (15.9)	2.750 (69.9)	2.625 (66.7)	.915 (23.2)	1.040 (26.4)
48	3.000-16 UN	.625 (15.9)	3.000 (76.2)	2.875 (73.0)	.915 (23.2)	1.040 (26.4)

F



947-042
MIL-DTL-5015 Type Hermetic
Jam Nut Mount Bulkhead Feed-Through D Series Connector
with Pin/Socket Contacts



APPLICATION NOTES

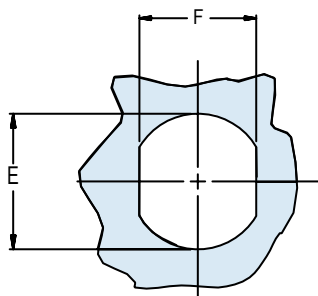
1. Material/Finish:
Jam-nut, hoods, lock-ring, shell* - Stainless steel/passivated.
Contacts - Alloy 52/gold plated.
Insulators - High-grade rigid dielectric, full glass or glass bead.
O-Rings - Silicone/N.A.
2. For pin-to-pin, symmetrical layouts only. Power to a given contact on one end will result in power to contact directly opposite regardless of identification letter.
3. Hermeticity - Less than 1×10^{-7} cc/sec at one atmosphere. Not for use in liquid atmosphere. Connector rated to 200° C and 1000 PSI max.
4. Outgas for space application.
5. To be identified with manufacturer's name, part number and date code, space permitting.
6. Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

947-042
MIL-DTL-5015 Type Hermetic
Jam Nut Mount Bulkhead Feed-Through D Series Connector
with Pin/Socket Contacts



MIL-DTL
5015 Type



RECOMMENDED PANEL CUT-OUT

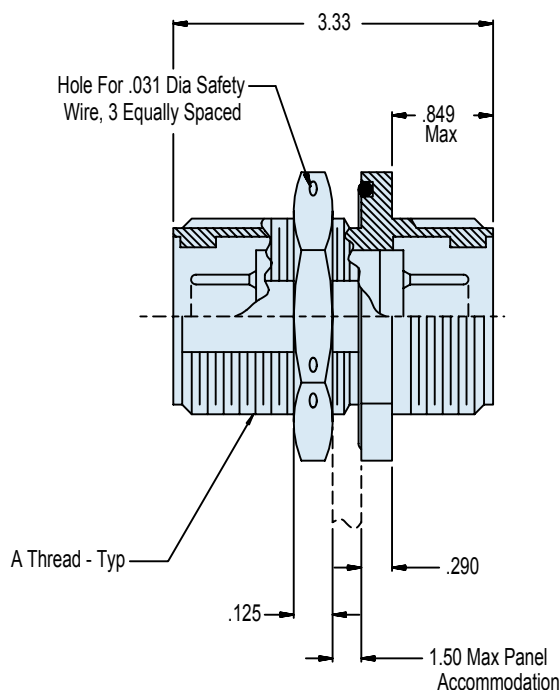
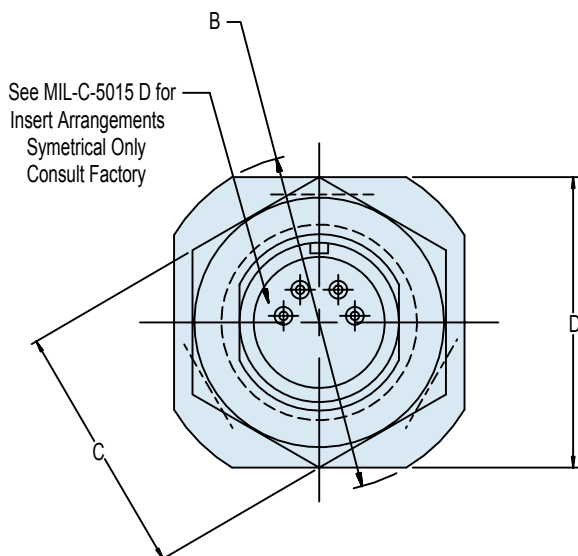
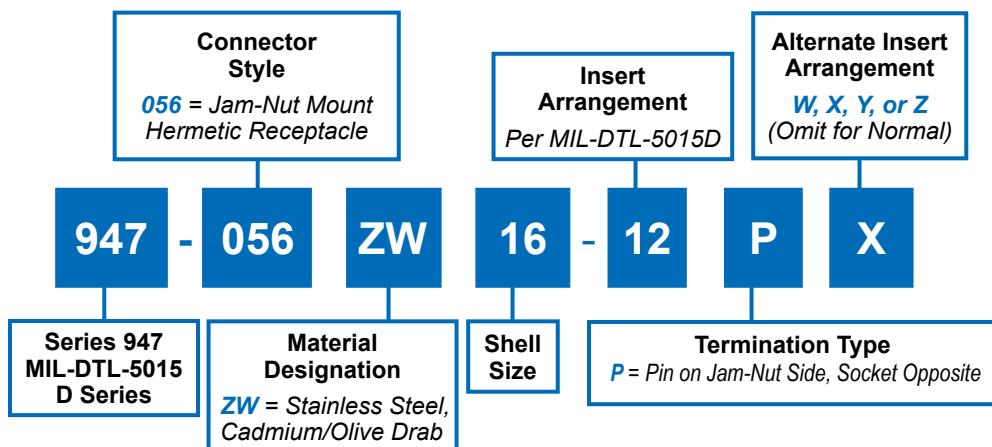
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Thread Class 2A	B Dia Max	C Hex	D Flats	E Dia ± .005 (0.1)	F + .005 -.000 (+0.1 - 0.0)
08	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.460 (11.7)
10	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.578 (14.7)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.692 (17.6)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.817 (20.8)
16	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.942 (23.9)
18	1 1/8-18 UNEF	1.750 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	1.060 (26.9)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	1.185 (30.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	1.310 (33.3)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	1.435 (36.4)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	1.687 (42.8)
32	2-18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	1.937 (48.6)
36	2 1/4-18 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	2.177 (55.3)

947-056 MIL-DTL-5015 Type Hermetic Jam Nut Mount Bulkhead Feed-Thru D Series Connector with Pin/Pin Contacts



APPLICATION NOTES

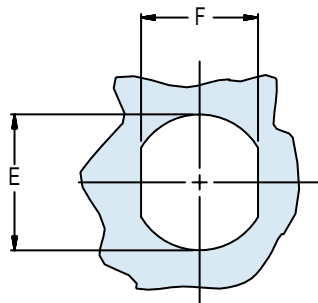
- Material/Finish:
Jam-nut, lock-ring, shell* - Stainless steel/passivated.
Contacts - Alloy 52/gold plated.
Insulators - High-grade rigid dielectric, full glass or glass bead.
O-Rings - Silicone/N.A.
- For pin-to-pin, symmetrical layouts only. Power to a given contact on one end will result in power to contact directly opposite regardless of identification letter.
- Hermeticity - Less than 1×10^{-7} cc/sec at one atmosphere. Not for use in liquid atmosphere.
- Outgas for space application.
- To be identified with manufacturer's name, part number and date code, space permitting.
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

947-056
MIL-DTL-5015 Type Hermetic
Jam Nut Mount Bulkhead Feed-Thru D Series Connector
with Pin/Pin Contacts



MIL-DTL
5015 Type



RECOMMENDED PANEL CUT-OUT

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

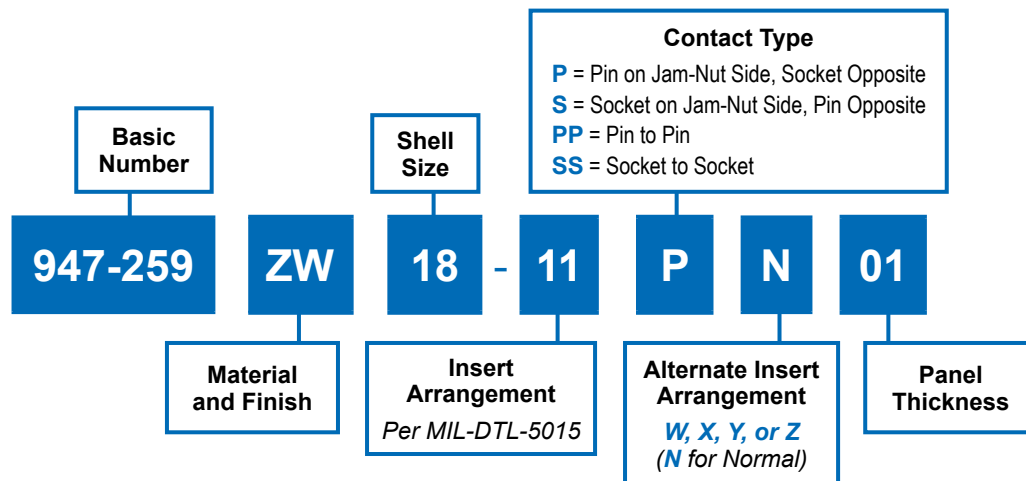
TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Thread Class 2A	B Dia Max	C Hex	D Flats	E Dia ± .005 (0.1)	F + .005 -.000 (+0.1 - 0.0)
08	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.460 (11.7)
10	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.578 (14.7)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.692 (17.6)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.817 (20.8)
16	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.942 (23.9)
18	1 1/8-18 UNEF	1.750 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	1.060 (26.9)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	1.185 (30.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	1.310 (33.3)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	1.435 (36.4)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	1.687 (42.8)
32	2-18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	1.937 (48.6)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	2.177 (55.3)

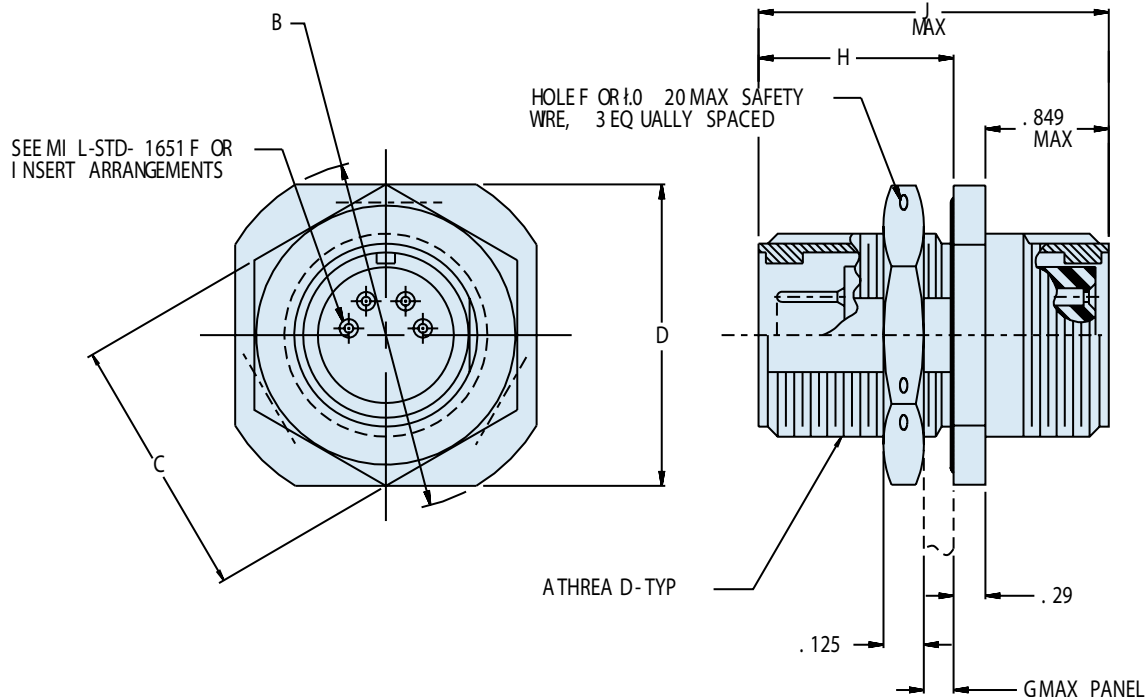
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947-259
MIL-DTL-5015 Type Hermetic
Panel Mount Bulkhead Feed-Thru



HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

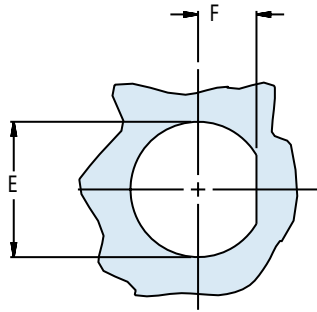


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947-259
MIL-DTL-5015 Type Hermetic
Panel Mount Bulkhead Feed-Thru

Glenair.

MIL-DTL
5015 Type



Recommended Panel Cut Out

TABLE II

Dash No.	G Max	H	J
01	.250	1.224	2.36
02	.500	1.474	2.62

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

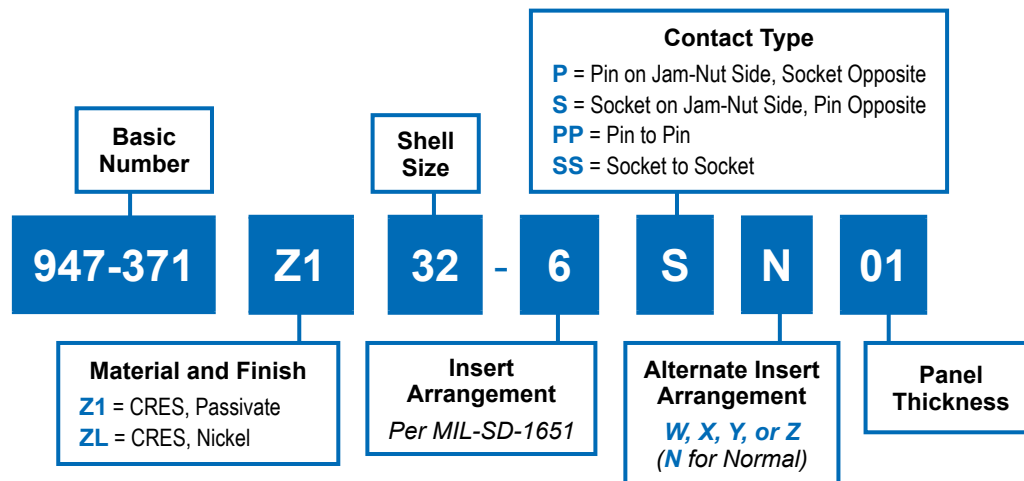
Shell Size	A Thread Class 2A	B Dia Max	C Hex	D Flats	E Dia $\pm .005$ (0.1)	F Dim. Min.
8S	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.219 (5.6)
10SL	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.281 (7.1)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
12S	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
14S	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
16	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
16S	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
18	1 1/8-18 UNEF	1.650 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	.531 (13.5)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	.594 (15.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	.656 (16.7)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	.719 (18.3)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	.844 (21.4)
32	2-18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	.969 (24.6)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	1.089 (27.7)
40	2 1/2-16 UN	3.188 (81.0)	2.750 (69.9)	3.000 (76.2)	2.510 (63.7)	1.219 (31.0)
44	2 3/4-16 UN	3.438 (87.3)	3.000 (76.2)	3.250 (82.6)	2.760 (70.1)	1.344 (34.1)
48	3-16 UN	3.688 (93.7)	3.250 (82.6)	3.500 (88.9)	3.010 (76.5)	1.469 (37.3)

F

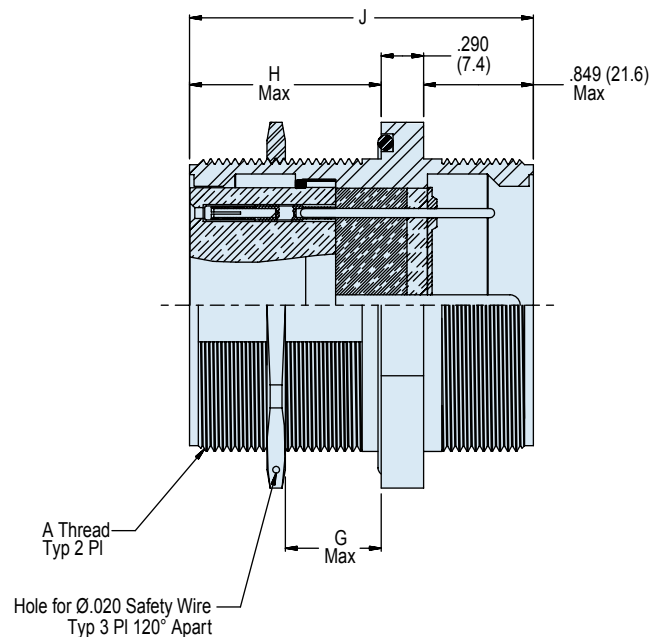
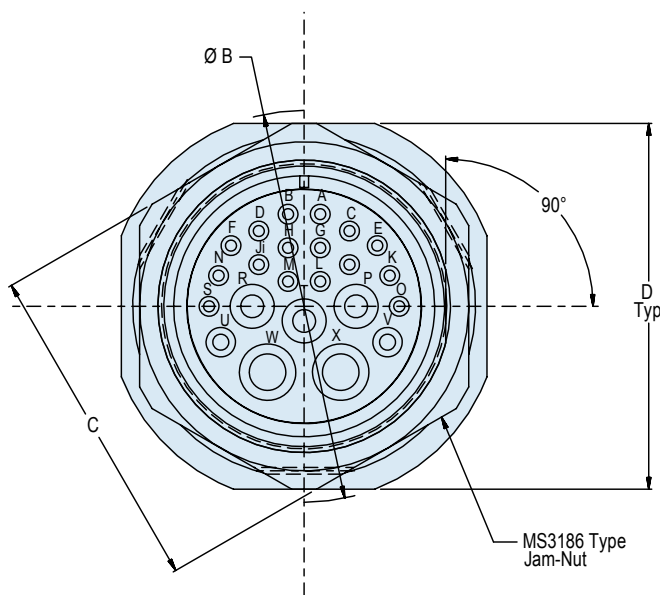
APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- For pin/pin and socket/socket symmetrical layouts only, consult factory for available insert arrangements.
- Power to a given contact on one end will result in power to contact directly opposite regardless of identification letter.
- Hermeticity - Less than 1×10^{-7} cc/sec at one atmosphere.
- Electrical safety limits must be established by the user. Peak voltage, switching surge, transient voltage, etc. should be used to determine the safety application.
- Material/Finish*:
 Jam-nut, lock-ring, shell - stainless steel/O.D. cadmium over nickel
 Contacts - copper alloy/gold plated and alloy 52/gold plate
 Insulators - High-grade rigid dielectric/N.A. and full glass
 Interfacial seals and O-rings - silicone
- Metric Dimensions (mm) are indicated in parentheses.

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.



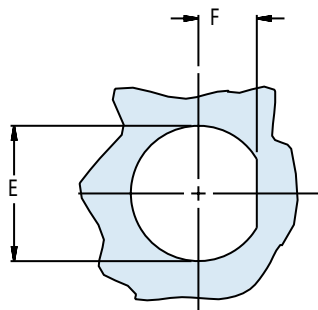
HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc Helium per second
-585B	1 x 10 ⁻⁹ cc Helium per second
-585C	1 x 10 ⁻⁸ cc Helium per second



947-371
MIL-DTL-5015 Type Hermetic Receptacle
Jam Nut Mount Bulkhead Feed-Through

Glenair.

**MIL-DTL
5015 Type**



Recommended Panel Cut Out

TABLE II			
Dash No.	G	H	J
01	.125 (3.2)	1.100 (27.9)	2.230 (56.6)
02	.250 (6.4)	1.224 (31.1)	2.360 (59.9)
03	.500 (12.7)	1.474 (37.4)	2.620 (66.5)

TABLE I: CONNECTOR AND CUT-OUT DIMENSIONS

Shell Size	A Thread Class 2A	B Dia Max	C Hex	D Flats	E Dia ± .005 (0.1)	F Dim. Min.
8S	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.219 (5.6)
10SL	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.281 (7.1)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
12S	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
14S	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
16	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
16S	1-20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
18	1 1/8-18 UNEF	1.650 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	.531 (13.5)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	.594 (15.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	.656 (16.7)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	.719 (18.3)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	.844 (21.4)
32	2-18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	.969 (24.6)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	1.089 (27.7)
40	2 1/2-16 UN	3.188 (81.0)	2.750 (69.9)	3.000 (76.2)	2.510 (63.7)	1.219 (31.0)
44	2 3/4-16 UN	3.438 (87.3)	3.000 (76.2)	3.250 (82.6)	2.760 (70.1)	1.344 (34.1)
48	3-16 UN	3.688 (93.7)	3.250 (82.6)	3.500 (88.9)	3.010 (76.5)	1.469 (37.3)

F

APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- For pin/pin and socket/socket symmetrical layouts only, consult factory for available insert arrangements.
- Power to a given contact on one end will result in power to contact directly opposite regardless of identification letter.
- Hermeticity - Less than 1×10^{-7} cc/sec at one atmosphere.
- Metric Dimensions (mm) are indicated in parentheses.
- Electrical safety limits must be established by the user. Peak voltage, switching surge, transient voltage, etc. should be used to determine the safety application.
- Material/Finish:
 Jam-nut, lock-ring, shell* - stainless steel/O.D. cadmium over nickel
 Contacts - copper alloy/gold plated and alloy 52/gold plate
 Insulators - High-grade rigid dielectric/N.A. and full glass
 Interfacial seals and O-rings - silicone

* Additional shell materials available, including titanium and Inconel®. Consult factory for ordering information.

Geo-Marine® Hermetic Connectors

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Series 22 Geo-Marine® Connectors

Corrosion Resistant Connectors Designed for Use in Harsh Geophysical, Marine and Oil-Patch Applications

Product Applications

Glenair's Series 22 Geo-Marine® connectors offer high-density insert arrangements for a variety of oceanographic, geophysical and other severe environmental applications. The Mated stainless steel plug and receptacle have a hydrostatic pressure sealing capacity of up to 5000 psi (345 bar), and feature a hermetic glass seal for extremely harsh environments.

Features

Series 22 Geo-Marine® hermetic connectors feature single-start stub-Acme threads for quick coupling of plug and receptacle, reducing thread fouling and binding as a result of dirt, grit and

5000 psi hydrostatic sealing when installed per recommended torque values. Gold plated nickel-iron alloy 52 solder cup contacts, available in sizes 8, 12, 16, 20 and 22, depending on the layout chosen, offer a wide selection of insert arrangement options.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders.

Marine Grade Naval Bronze AMS 4640 Plug Coupling Rings

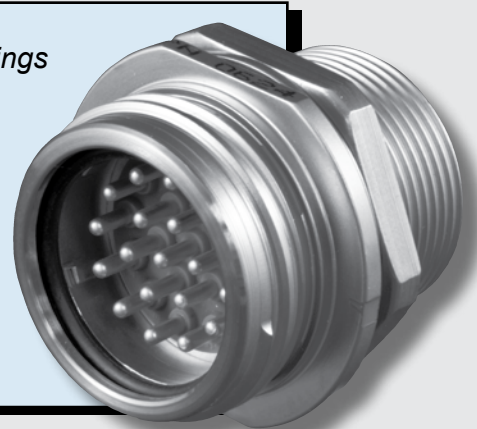
Marine Grade Alloy 316 Stainless Steel Machined Shells

Contact Layout from 2 to 128 Contacts

Anti-Vibration/Anti-Decoupling Device on All Plugs

Locksmith Keying Polarization

Full Line of Accessories: Backshells, Protective Covers and Molding Adapters

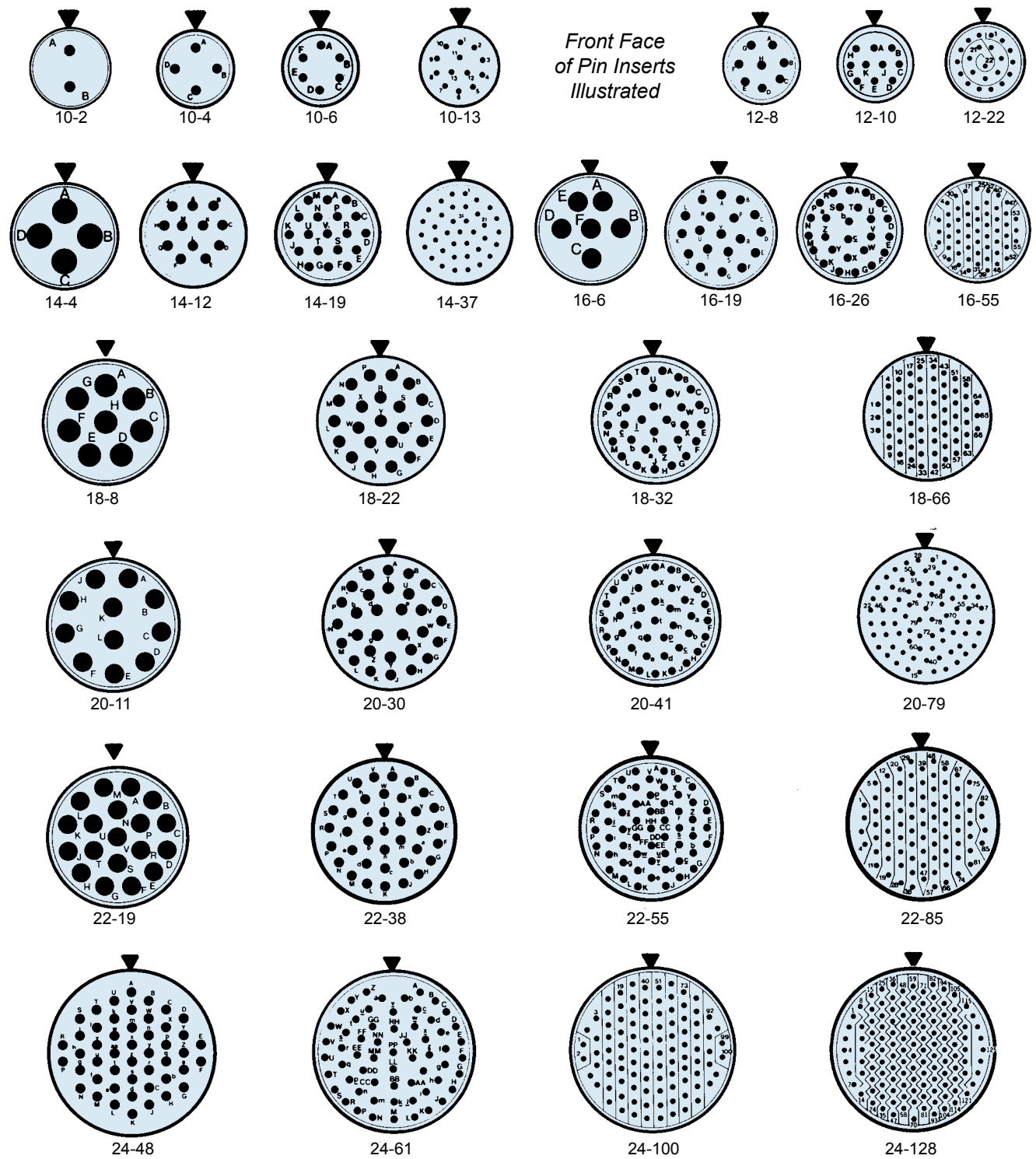


other foreign debris. Receptacles can be ordered in standard and scoop-proof shell styles for maximum design flexibility.

The full spectrum product line also includes plugs, bulkhead feed-thru connectors, connector savers and a choice of separate rear connector accessories to satisfy various cable or wire bundle termination requirements. Protective sealing covers are available for both plug and receptacle connectors and provide

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately to www.glenair.com.

Series 22 Geo-Marine® Connectors Insert Arrangements



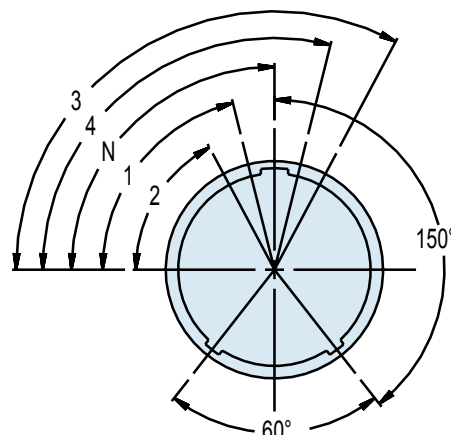
Series 22 Geo-Marine® Connectors Alternate Keyway Positions



Series 22
Geo-Marine

INSERT ARRANGEMENTS

SHELL SIZE	SERIES 22 PATTERN	Dielectric Withstanding Voltage	CONTACT SIZE/QUANTITY				
			22	20	16	12	8
10	10-02	2300 Vdc			2		
10	10-04	1800 Vdc		4			
10	10-06	1800 Vdc		6			
10	10-13	1300 Vdc	13				
12	12-08	2300 Vdc			8		
12	12-10	1800 Vdc		10			
12	12-22	1300 Vdc	22				
14	14-04	2300 Vdc				4	
14	14-12	2300 Vdc			14		
14	14-19	1800 Vdc		19			
14	14-37	1300 Vdc	37				
16	16-06	2300 Vdc				6	
16	16-19	2300 Vdc			19		
16	16-26	1800 Vdc		26			
16	16-55	1300 Vdc	55				
18	18-08	1800 Vdc		8			
18	18-22	2300 Vdc			22		
18	18-32	1800 Vdc		32			
18	18-66	1300 Vdc	66				
20	20-11	2300 Vdc				11	
20	20-30	2300 Vdc			30		
20	20-41	1800 Vdc		41			
20	20-79	1300 Vdc	79				
22	22-19	2300 Vdc				19	
22	22-38	2300 Vdc			38		
22	22-55	1800 Vdc		55			
22	22-85	1300 Vdc	85				
24	24-48	2300 Vdc			48		
24	24-61	1800 Vdc		61			
24	24-100	1300 Vdc	100				
24	24-128	1300 Vdc	128				



FACE VIEW
RECEPTACLE

SHELL SIZE	ALTERNATE KEYWAY POSITIONS				
	DESIG.	N°	1°	2°	3°
10	90	76	62	118	104
12	90	70	58	122	110
14	90	69	56	124	111
16	90	72	60	120	108
18	90	72	62	120	108
20	90	72	60	120	108
22	90	75	64	116	105
24	90	75	64	115	105

DEPTH/PRESSURE CONVERSION CHART

FEET	METERS	P.S.I.	BAR
1	.3	.4	.0296
10	3.1	4.3	.2965
50	15.2	21.7	1.4962
100	30.5	43.3	2.9854
250	76.2	108.3	7.4670
500	152.4	216.5	24.9271
1,000	304.8	433.0	29.8543
1,500	457.2	649.5	44.7814
2,500	762.0	1082.5	74.6357
5,000	1524.0	2165.0	149.2715
10,000	3048.0	4330.0	298.5430
11,547	3519.5	5000.0	344.7379



Series 22 Geo-Marine® Connectors Materials and Finishes

MATERIALS AND FINISHES

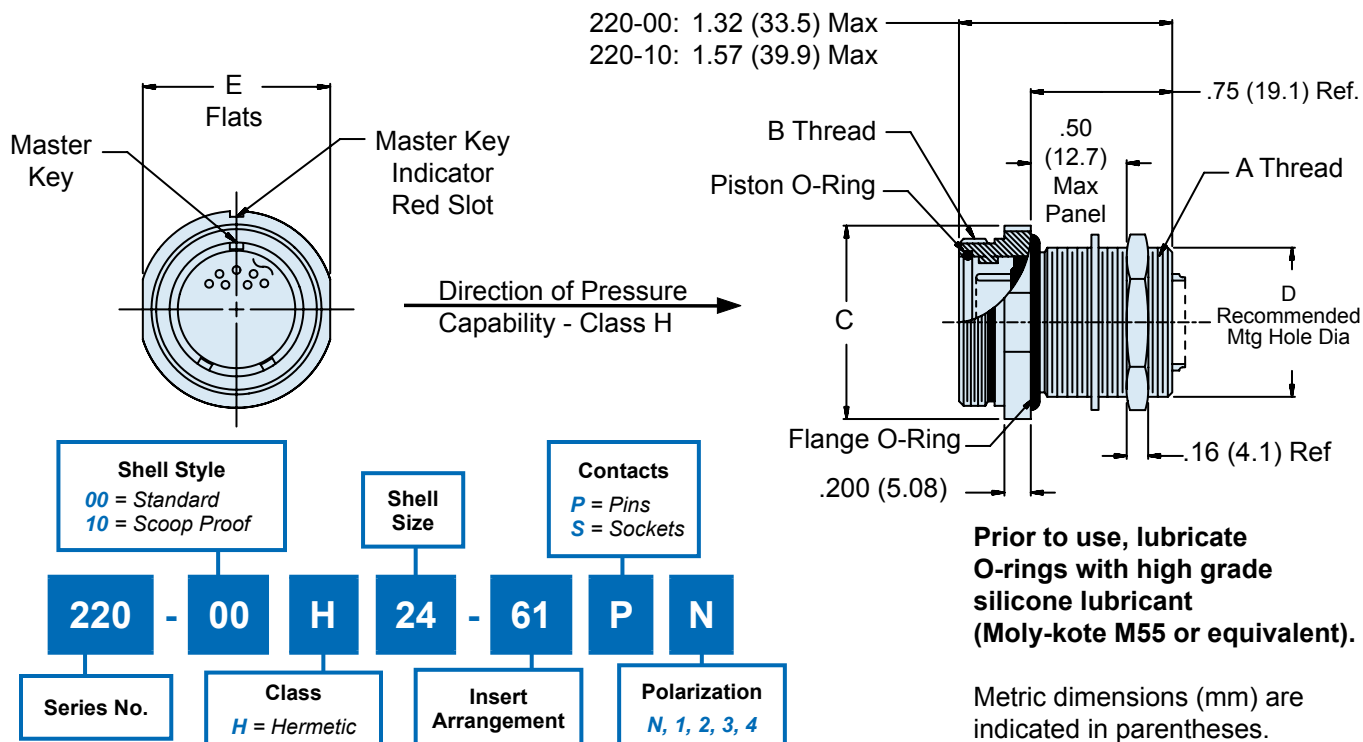
Item	Material	Finish
Connector Shells and Protective Covers	CRES Alloy QQ-S-763, AISI 316	Passivate per ASTM A967
Solder Mount Bulkhead Receptacle	CRES Alloy QQ-S-763, AISI 316	Nickel Plate per QQ-N-290, Class 2
Insulators (Class H)	Fused Vitreous Glass	None
Contacts		
Pin (Class H)	Alloy 52, MIL-I-23011, Class 2	Gold Plate per MIL-G-45204, Type II, Class 1
Socket Hood	Corrosion Resistant Steel QQ-S-763, AISI 305	Passivate per ASTM A967
Socket Contact	Beryllium Copper	Gold
O-Rings	Nitrile (Buna-N) Rubber MIL-G-21569, Class 1	None <i>Note: To maintain optimum performance, piston O-rings should be inspected/replaced as required.</i>
Interfacial and Flat Seals	Fluorosilicone Rubber MIL-R-25988	None

*Additional materials are available, including titanium and Inconel®. Consult factory for ordering information.

220-00 and 220-10
Series 22 Geo-Marine®
Front Mounted Jam-Nut Bulkhead Connector Receptacle



Series 22
Geo-Marine



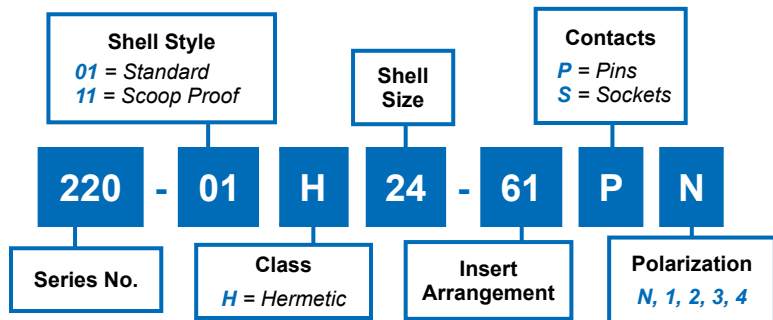
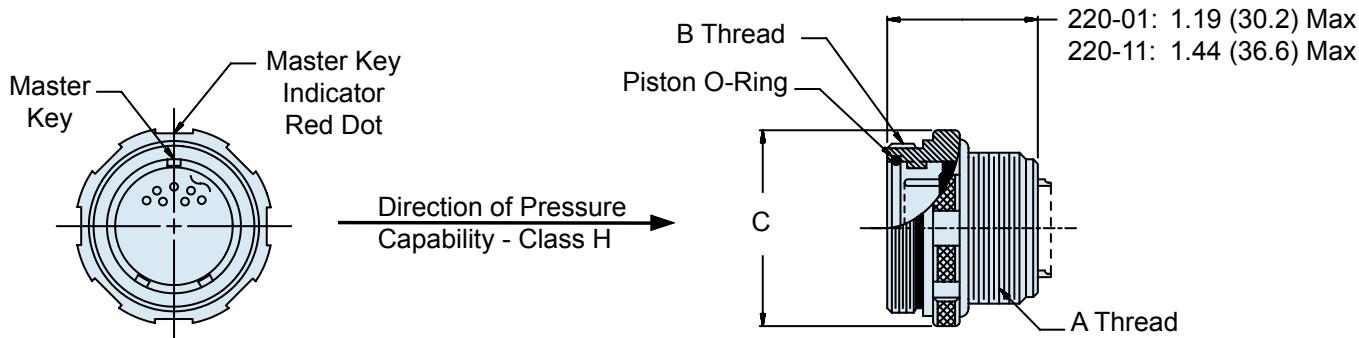
DIMENSIONS						
SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C DIA MAX	D ±.005 ±(0.1)	E FLATS	
10	5/8 - 24 UNEF	.750 - .1P - .1L	1.03 (26.2)	.635 (16.1)	.875 (22.2)	
12	3/4 - 20 UNEF	.875 - .1P - .1L	1.16 (29.5)	.760 (19.3)	1.000 (25.4)	
14	7/8 - 20 UNEF	1.000 - .1P - .1L	1.28 (32.5)	.885 (22.5)	1.125 (28.6)	
16	1 - 20 UNEF	1.125 - .1P - .1L	1.41 (35.8)	1.010 (25.7)	1.250 (31.8)	
18	1 1/8 - 16 UN	1.250 - .1P - .1L	1.66 (42.2)	1.135 (28.8)	1.500 (38.1)	
20	1 1/4 - 16 UN	1.375 - .1P - .1L	1.78 (45.2)	1.260 (32.0)	1.625 (41.3)	
22	1 3/8 - 16 UN	1.500 - .1P - .1L	1.91 (48.5)	1.385 (35.2)	1.750 (44.5)	
24	1 1/2 - 16 UN	1.625 - .1P - .1L	2.03 (51.6)	1.510 (38.4)	1.875 (47.6)	

RECOMMENDED JAM NUT INSTALLATION TORQUE VALUES		
SHELL SIZE	TORQUE ± 5%	
	INCH-POUNDS	NEWTON-METERS
10	95	10.73
12	110	12.43
14	140	15.82
16	170	19.21
18	195	22.03
20	215	24.29
22	235	26.55
24	260	29.38

REPLACEMENT O-RING PART NUMBERS *		
SHELL SIZE	PISTON O-RING	FLANGE O-RING
10	2-014	2-017
12	2-016	2-019
14	2-018	2-021
16	2-020	2-023
18	2-022	2-025
20	2-024	2-027
22	2-026	2-029
24	2-028	2-030

* Parker O-ring part numbers.
 Compound N674-70 or equivalent.

220-01 and 220-11 Series 22 Geo-Marine® In-Line Connector Receptacle



Prior to use, lubricate O-rings with high grade silicone lubricant (Moly-kote M55 or equivalent).

Metric dimensions (mm) are indicated in parentheses.

DIMENSIONS			
SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C DIA MAX
10	5/8 - 24 UNEF	.750 - .1P - .1L	.906 (23.0)
12	3/4 - 20 UNEF	.875 - .1P - .1L	1.031 (26.2)
14	7/8 - 20 UNEF	1.000 - .1P - .1L	1.156 (29.4)
16	1 - 20 UNEF	1.125 - .1P - .1L	1.281 (32.5)
18	1 1/8 - 16 UN	1.250 - .1P - .1L	1.531 (38.9)
20	1 1/4 - 16 UN	1.375 - .1P - .1L	1.656 (42.1)
22	1 3/8 - 16 UN	1.500 - .1P - .1L	1.781 (45.2)
24	1 1/2 - 16 UN	1.625 - .1P - .1L	1.906 (48.4)

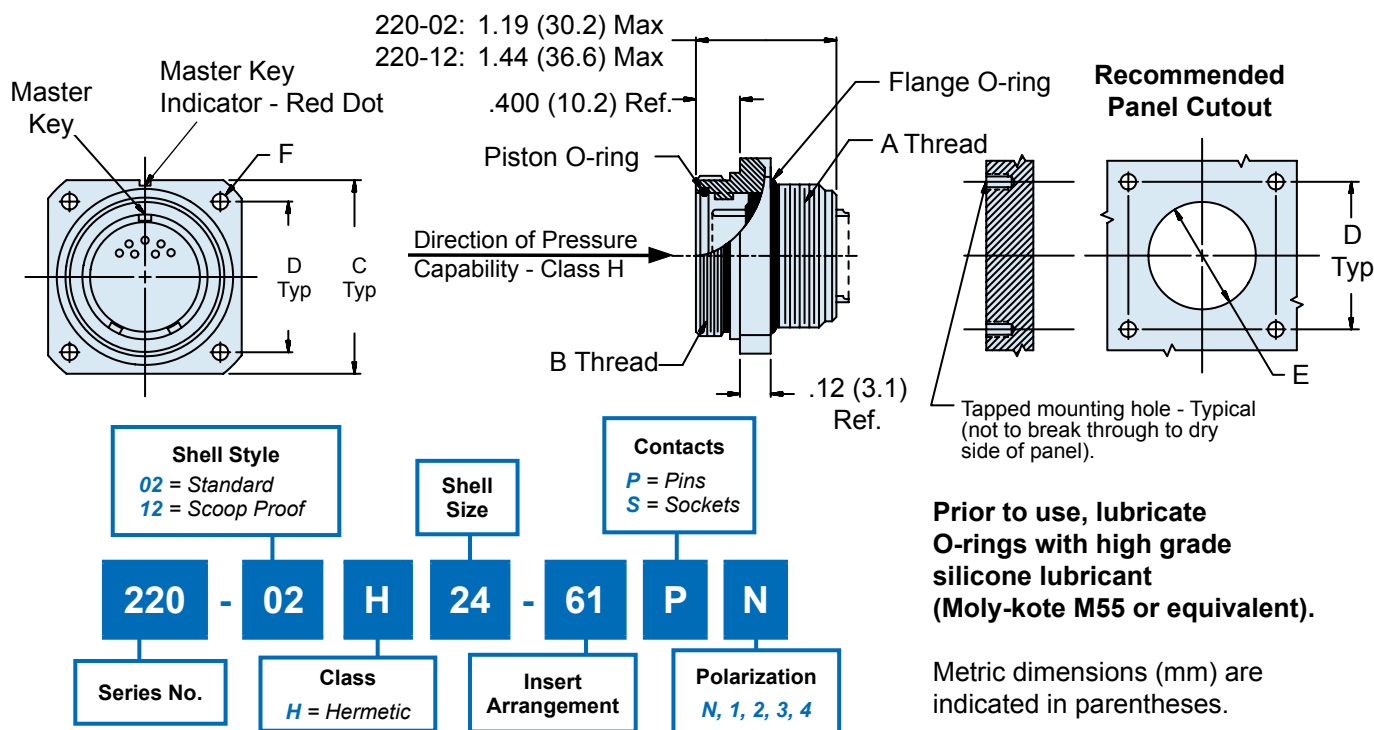
REPLACEMENT O-RING PART NUMBERS *	
SHELL SIZE	PISTON O-RING
10	2-014
12	2-016
14	2-018
16	2-020
18	2-022
20	2-024
22	2-026
24	2-028

* Parker O-ring part numbers.
Compound N674-70 or equivalent.

220-02 and 220-12 Series 22 Geo-Marine® Square Flange Mount Connector Receptacle

Glenair

Series 22
Geo-Marine



DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C DIM	D DIM	E DIA	
					+0.015 -0.000	+(0.4) -(0.0)
10	5/8 - 24 UNEF	.750 - .1P - .1L	1.188 (30.2)	.938 (23.8)	.844	(21.4)
12	3/4 - 20 UNEF	.875 - .1P - .1L	1.312 (33.3)	1.062 (27.0)	.969	(24.6)
14	7/8 - 20 UNEF	1.000 - .1P - .1L	1.438 (36.5)	1.188 (30.2)	1.078	(27.4)
16	1 - 20 UNEF	1.125 - .1P - .1L	1.562 (39.7)	1.250 (31.8)	1.219	(31.0)
18	1 1/8 - 16 UN	1.250 - .1P - .1L	1.750 (44.5)	1.375 (34.9)	1.359	(34.5)
20	1 1/4 - 16 UN	1.375 - .1P - .1L	1.875 (47.6)	1.500 (38.1)	1.515	(38.5)
22	1 3/8 - 16 UN	1.500 - .1P - .1L	2.000 (50.8)	1.625 (41.3)	1.640	(41.7)
24	1 1/2 - 16 UN	1.625 - .1P - .1L	2.125 (54.0)	1.750 (44.5)	1.765	(44.8)

MOUNTING/HARDWARE INFORMATION

SHELL SIZE	F DIA	MTG SCREW REF.
10	.125 (3.2)	No. 4
12	.125 (3.2)	No. 4
14	.125 (3.2)	No. 4
16	.125 (3.2)	No. 4
18	.125 (3.2)	No. 4
20	.125 (3.2)	No. 4
22	.125 (3.2)	No. 4
24	.156 (4.0)	No. 6

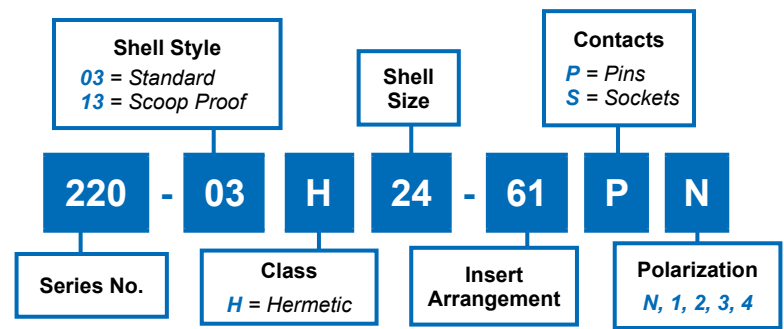
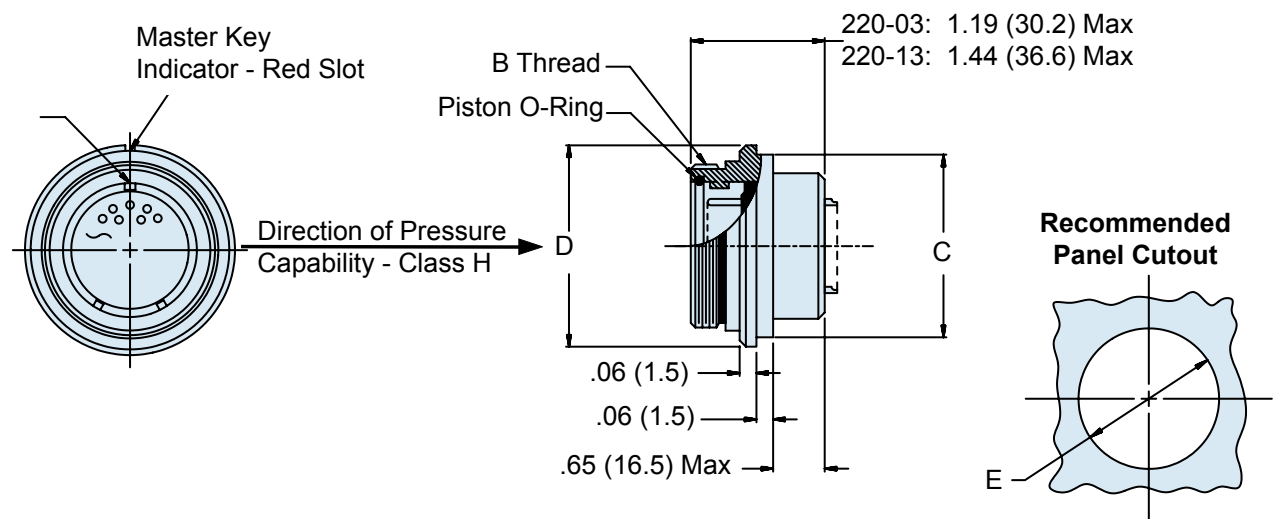
REPLACEMENT O-RING PART NUMBERS *

SHELL SIZE	PISTON O-RING	FLANGE O-RING
10	2-014	2-021
12	2-016	2-023
14	2-018	2-025
16	2-020	2-027
18	2-022	2-029
20	2-024	2-030
22	2-026	2-031
24	2-028	2-032

* Parker o-ring part numbers.
Compound N674-70 or equivalent.



220-03 and 220-13 Series 22 Geo-Marine® Solder Mount Bulkhead Connector Receptacle



Prior to use, lubricate
O-rings with high grade
silicone lubricant
(Moly-kote M55 or equivalent).

Metric dimensions (mm) are
indicated in parentheses.

DIMENSIONS					
SHELL SIZE	B THREAD CLASS 2A	C DIA MAX	D DIA	E DIA	
				+0.010 -0.000	+(0.3) -(0.0)
10	.750 - .1P - .1L	.870 (22.1)	1.00 (25.4)	.875 (22.2)	
12	.875 - .1P - .1L	.995 (25.3)	1.13 (28.7)	1.000 (25.4)	
14	1.000 - .1P - .1L	1.120 (28.4)	1.25 (31.8)	1.125 (28.6)	
16	1.125 - .1P - .1L	1.245 (31.6)	1.38 (35.1)	1.250 (31.8)	
18	1.250 - .1P - .1L	1.370 (34.8)	1.50 (38.1)	1.375 (34.9)	
20	1.375 - .1P - .1L	1.495 (38.0)	1.63 (41.4)	1.500 (38.1)	
22	1.500 - .1P - .1L	1.620 (41.1)	1.75 (44.5)	1.625 (41.3)	
24	1.625 - .1P - .1L	1.745 (44.3)	1.88 (47.8)	1.750 (44.5)	

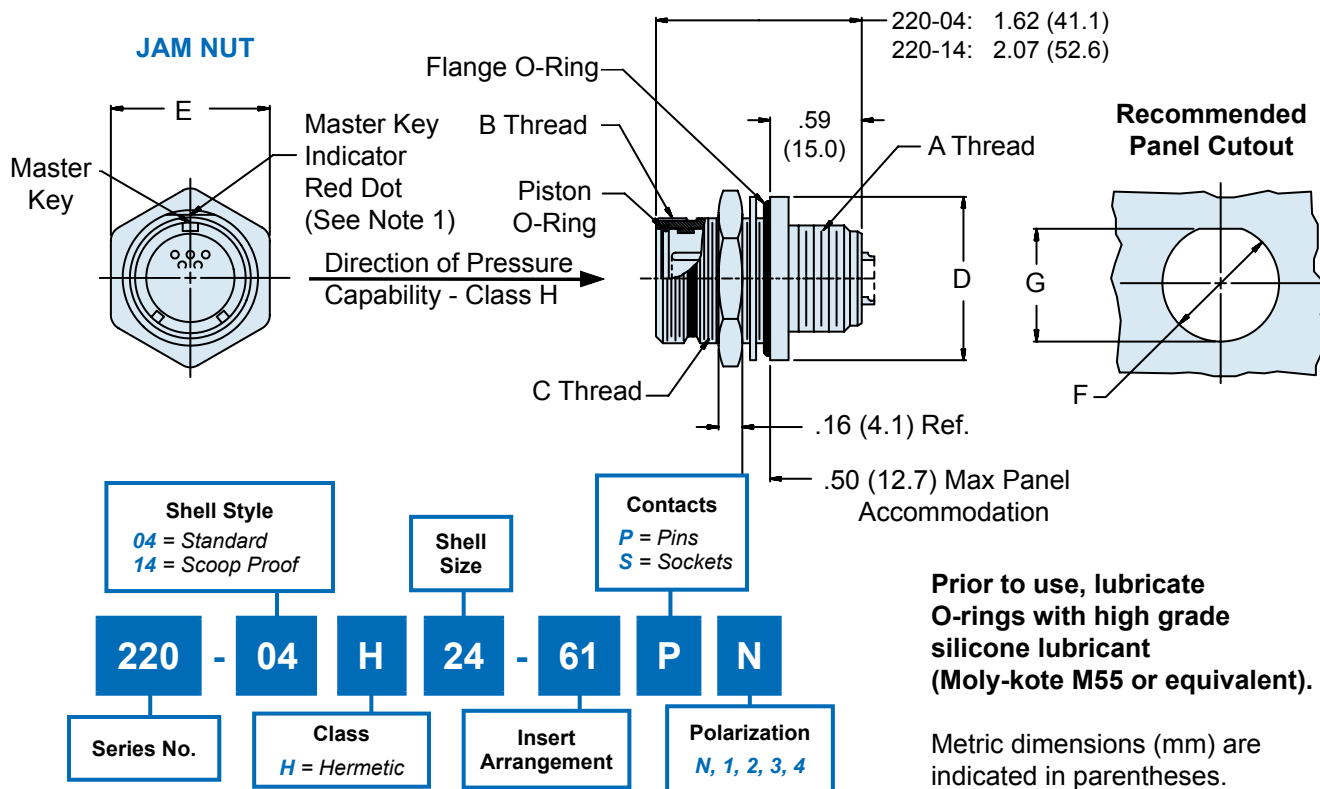
REPLACEMENT O-RING PART NUMBERS *	
SHELL SIZE	PISTON O-RING
10	2-014
12	2-016
14	2-018
16	2-020
18	2-022
20	2-024
22	2-026
24	2-028

* Parker O-ring part numbers.
Compound N674-70 or equivalent.

220-04 and 220-14 Series 22 Geo-Marine® Rear Mounted Jam Nut Wall Mount Connector Receptacle

Glenair

Series 22
Geo-Marine



DIMENSIONS								
SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C THREAD CLASS 2A	D DIA	E FLATS	F DIA ±.005 ±(0.1)	G ±.005 ±(0.1)	
10	5/8 - 24 UNEF	.750 - .1P - .1L	7/8 - 20 UNEF	1.25 (31.8)	1.125 (28.6)	.885 (22.5)	.835 (21.2)	
12	3/4 - 20 UNEF	.875 - .1P - .1L	1 - 20 UNEF	1.38 (35.1)	1.250 (31.8)	1.010 (25.7)	.960 (24.4)	
14	7/8 - 20 UNEF	1.000 - .1P - .1L	1 1/8 - 16 UN	1.50 (38.1)	1.500 (38.1)	1.135 (28.8)	1.085 (27.6)	
16	1 - 20 UNEF	1.125 - .1P - .1L	1 1/4 - 16 UN	1.63 (41.4)	1.625 (41.3)	1.260 (32.0)	1.210 (30.7)	
18	1 1/8 - 16 UN	1.250 - .1P - .1L	1 3/8 - 16 UN	1.75 (44.5)	1.750 (44.5)	1.385 (35.2)	1.335 (33.9)	
20	1 1/4 - 16 UN	1.375 - .1P - .1L	1 1/2 - 16 UN	1.88 (47.8)	1.875 (47.6)	1.510 (38.4)	1.460 (37.1)	
22	1 3/8 - 16 UN	1.500 - .1P - .1L	1 5/8 - 16 UN	2.00 (50.8)	2.000 (50.8)	1.635 (41.5)	1.585 (40.3)	
24	1 1/2 - 16 UN	1.625 - .1P - .1L	1 3/4 - 16 UN	2.12 (53.8)	2.125 (54.0)	1.760 (44.7)	1.710 (43.4)	

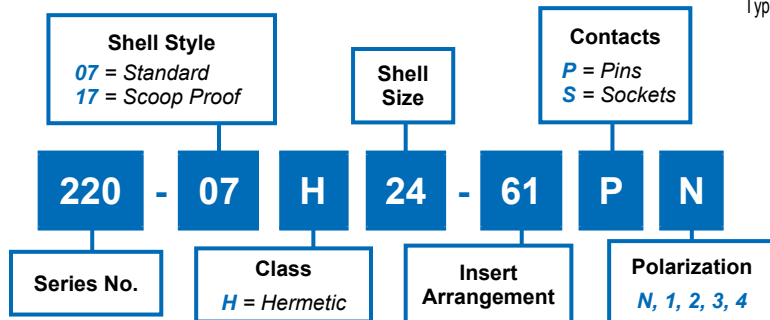
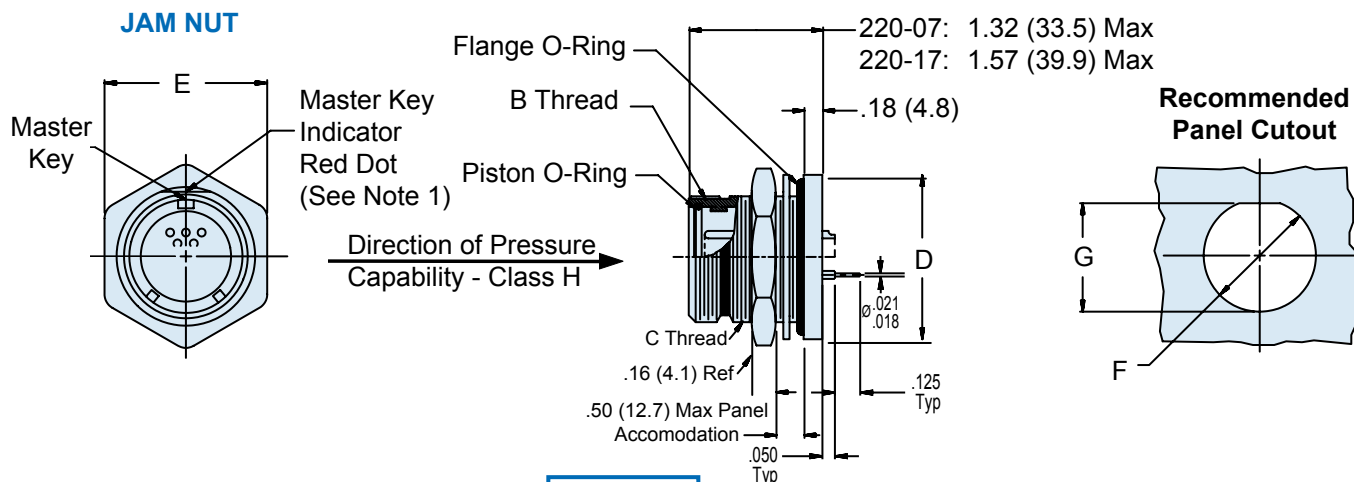
RECOMMENDED JAM NUT INSTALLATION TORQUE VALUES		
SHELL SIZE	TORQUE ± 5%	
	INCH-POUNDS	NEWTON-METERS
10	95	10.73
12	110	12.43
14	140	15.82
16	170	19.21
18	195	22.03
20	215	24.29
22	235	26.55
24	260	29.38

NOTE 1: Flat and master key indicator rotates with master key per position noted on introductory pages.

REPLACEMENT O-RING PART NUMBERS *		
SHELL SIZE	PISTON O-RING	FLANGE O-RING
10	2-014	2-021
12	2-016	2-023
14	2-018	2-025
16	2-020	2-027
18	2-022	2-029
20	2-024	2-030
22	2-026	2-031
24	2-028	2-032

* Parker O-ring part numbers.
Compound N674-70 or equivalent.

220-07 and 220-17 Series 22 Geo-Marine® Rear Mounted Jam Nut Box Mount Receptacle



Prior to use, lubricate
O-rings with high grade
silicone lubricant
(Moly-kote M55 or equivalent).

Metric dimensions (mm) are
indicated in parentheses.

DIMENSIONS						
SHELL SIZE	B THREAD CLASS 2A	C THREAD CLASS 2A	D DIA	E FLATS	F DIA ±.005 ±(0.1)	G ±.005 ±(0.1)
10	.750-.1P-.1L	7/8 - 20 UNEF	1.25 (31.8)	1.125 (28.6)	.885 (22.5)	.835 (21.2)
12	.875-.1P-.1L	1 - 20 UNEF	1.38 (35.1)	1.250 (31.8)	1.010 (25.7)	.960 (24.4)
14	1.000-.1P-.1L	1 1/8 - 16 UN	1.50 (38.1)	1.500 (38.1)	1.135 (28.8)	1.085 (27.6)
16	1.125-.1P-.1L	1 1/4 - 16 UN	1.63 (41.4)	1.625 (41.3)	1.260 (32.0)	1.210 (30.7)
18	1.250-.1P-.1L	1 3/8 - 16 UN	1.75 (44.5)	1.750 (44.5)	1.385 (35.2)	1.335 (33.9)
20	1.375-.1P-.1L	1 1/2 - 16 UN	1.88 (47.8)	1.875 (47.6)	1.510 (38.4)	1.460 (37.1)
22	1.500-.1P-.1L	1 5/8 - 16 UN	2.00 (50.8)	2.000 (50.8)	1.635 (41.5)	1.585 (40.3)
24	1.625-.1P-.1L	1 3/4 - 16 UN	2.12 (53.8)	2.125 (54.0)	1.760 (44.7)	1.710 (43.4)

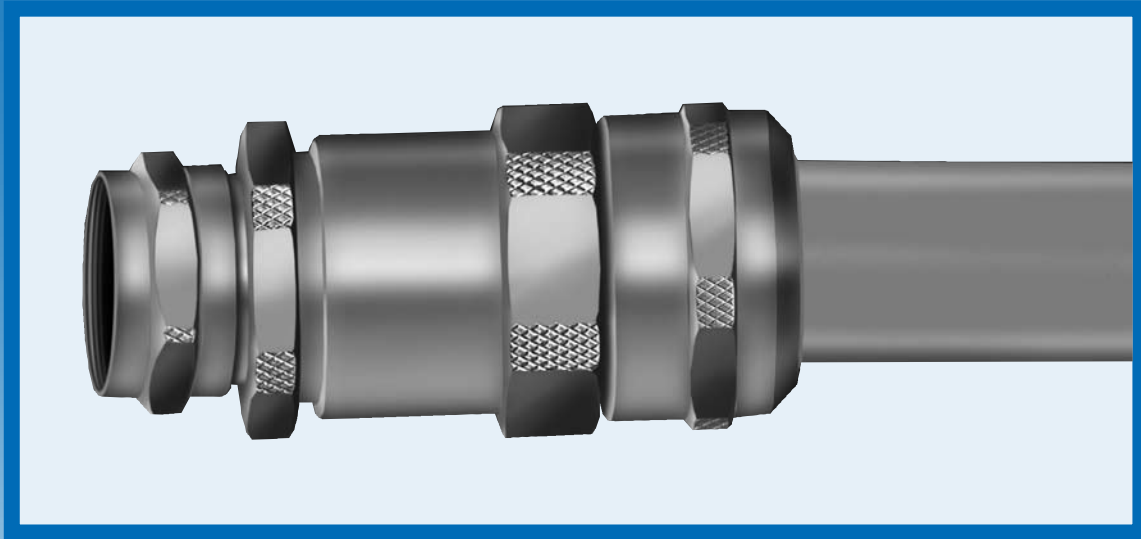
RECOMMENDED JAM NUT INSTALLATION TORQUE VALUES		
SHELL SIZE	TORQUE ± 5%	
	INCH-POUNDS	NEWTON-METERS
10	95	10.73
12	110	12.43
14	140	15.82
16	170	19.21
18	195	22.03
20	215	24.29
22	235	26.55
24	260	29.38

NOTE 1: Flat and master key indicator rotates with master key per position noted on introductory pages.

REPLACEMENT O-RING PART NUMBERS *		
SHELL SIZE	PISTON O-RING	FLANGE O-RING
10	2-014	2-021
12	2-016	2-023
14	2-018	2-025
16	2-020	2-027
18	2-022	2-029
20	2-024	2-030
22	2-026	2-031
24	2-028	2-032

* Parker O-ring part numbers.
Compound N674-70 or equivalent.

Haze Gray and Underway!

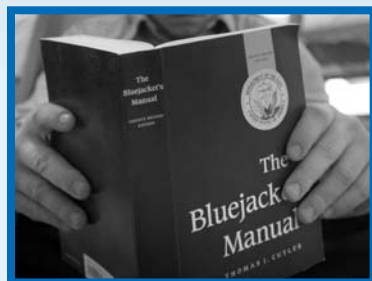


Introducing the Glenair MIL-PRF-24758A “BlueJacket” Conduit System

Most topside shipboard conduit users have simple expectations, such as conduit fittings that don't leak or corrode and will last for the full lifetime of a ship. They also want jacket materials that can withstand high heat, extreme UV radiation, demanding weather conditions and caustic chemicals and fluids.

Glenair's U.S. Navy qualified MIL-PRF-24758A conduit system delivers on these expectations—and a whole lot more. Our shielded brass conduit

meets all EMI shielding and surface transfer impedance requirements. Our jacket material, which we've named “BlueJacket” in honor of the dedicated Navy personnel



who work with these products in arduous conditions on a daily basis, is a special formula that exceeds all the specifications of MIL-PRF-24758A. These demanding requirements include UV weathering, temperature tolerance, low smoke and toxicity index, flame resistance, and halogen free (IEC754-1) ratings.

And that's not all. Our unique fitting design provides the easiest assembly and the most reliable performance ever in topside conduit systems—no more loosening, no more leaks, no more corrosion, and no more costly replacement of relatively new components that failed to withstand the harsh environmental challenges of shipboard use.

So whether your requirements call for factory terminated M24758A assemblies with lightweight soldered fittings, or field terminated bulk conduit, adapters and fittings, Glenair *BlueJacket* is “Haze Gray and Underway” and more than ready to exceed all your expectations.



1211 Air Way

Glendale, California 91201-2497

Telephone: 818-247-6000 · Facsimile: 818-500-9912 · E-Mail: sales@glenair.com

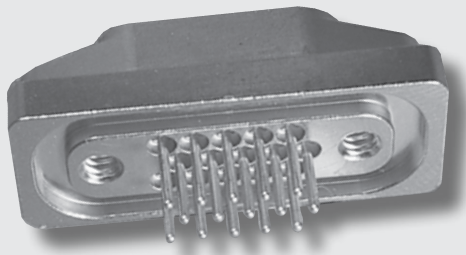
www.glenair.com

MIL-DTL-24308 Type D-Subminiature Hermetic Connectors

SECTION H TABLE OF CONTENTS

GLENAIR MIL-DTL-24308 TYPE D-SUBMINIATURE HERMETIC CONNECTORS:

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MIL-DTL-24308 Type Hermetic

MIL-DTL-24308/9 and Glenair Commercial Hermetic D-Subminiature Connectors

Product Applications

Glenair MIL-DTL-24308 D-Subminiature hermetic connectors are high density, compact connectors suited for use in rack and panel, cable to panel and cable to cable applications where an airtight seal is required. Front- and rear-mount shell styles are available with both solder cup and eyelet contacts in six shell sizes for maximum design flexibility.

Materials

D-Subminiature hermetic connectors are offered with passivated stainless steel, fused tin and nickel plated shells, with glass insulators fused to the connector shell. Ferrous alloy gold-plated contacts, available in sizes #20 and

with panel sealing are available with nitrile, fluorosilicone and silicone O-rings.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders.

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for

All Appropriate Contacts in Solder Cup or Pierced Contact Styles

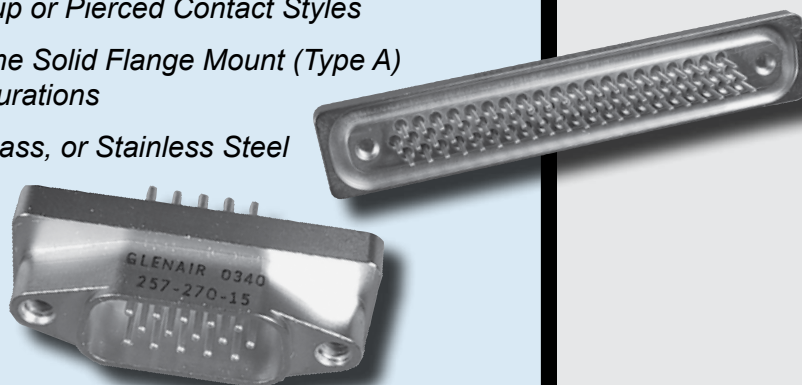
One Piece Machined Shell for both the Solid Flange Mount (Type A) and Jackpost Mount (Type B) Configurations

CRS with Fused Tin Plating or "H" Class, or Stainless Steel with Matte Nickel Finish ("K" Class)

Shell Sizes 1 Through 6

Space Grade Connector

Custom Configurations Available



#22 contacts—on standard and high-density arrangements, respectively—meet a leak rate of 1×10^{-7} cc/Helium per second. Choose from 11 different insert arrangements with 9 to 104 circuits, in accordance with MIL-DTL-24308/9H and Glenair commercial series. Connectors

the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately on our website, www.glenair.com.

MIL-DTL-24308

D-Subminiature Hermetic Connectors

Solder Mount Information

Style A

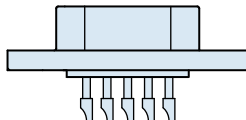


Style B



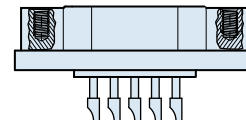
Glass-sealed hermetic receptacles are qualified to MIL-DTL-24308/9 and feature gold-plated iron alloy size #20 contacts and steel shells. Available in six shell sizes, these connectors are installed onto bulkheads by soldering. Choose solder cup or eyelet contacts for termination to #20 AWG wire. Choose Class H tin-plated steel shells for general purpose applications. For space applications choose Class K versions with nickel-plated stainless steel shells.

Flange Style A



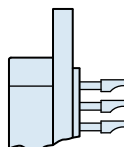
Solid connector flange with no mounting hole.

Flange Style B



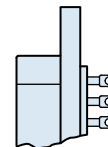
Connector flange features integral tapped #4-40 female threads for attaching mating male screw locks.

Contact Style P



Connector is supplied with solder cup contacts.

Contact Style X



Connector is supplied with eyelet style contacts.

Shell Size	No. of Contacts	Contact Style	Flange Style	Class H Tin-Plated Steel Part Number	Military PN	Class K (Space) Nickel-Plated Stainless Steel Part Number	Military PN
1	9	Solder Cup	A	280-006H1AP	M24308/9-1	280-006K1AP	M24308/9-21
1	9	Solder Cup	B	280-006H1BP	M24308/9-11	280-006K1BP	M24308/9-31
1	9	Eyelet	A	280-006H1AX	M24308/9-6	280-006K1AX	M24308/9-26
1	9	Eyelet	B	280-006H1BX	M24308/9-16	280-006K1BX	M24308/9-36
2	15	Solder Cup	A	280-006H2AP	M24308/9-2	280-006K2AP	M24308/9-22
2	15	Solder Cup	B	280-006H2BP	M24308/9-12	280-006K2BP	M24308/9-32
2	15	Eyelet	A	280-006H2AX	M24308/9-7	280-006K2AX	M24308/9-27
2	15	Eyelet	B	280-006H2BX	M24308/9-17	280-006K2BX	M24308/9-37
3	25	Solder Cup	A	280-006H3AP	M24308/9-3	280-006K3AP	M24308/9-23
3	25	Solder Cup	B	280-006H3BP	M24308/9-13	280-006K3BP	M24308/9-33
3	25	Eyelet	A	280-006H3AX	M24308/9-8	280-006K3AX	M24308/9-28
3	25	Eyelet	B	280-006H3BX	M24308/9-18	280-006K3BX	M24308/9-38
4	37	Solder Cup	A	280-006H4AP	M24308/9-4	280-006K4AP	M24308/9-24
4	37	Solder Cup	B	280-006H4BP	M24308/9-14	280-006K4BP	M24308/9-34
4	37	Eyelet	A	280-006H4AX	M24308/9-9	280-006K4AX	M24308/9-29
4	37	Eyelet	B	280-006H4BX	M24308/9-19	280-006K4BX	M24308/9-39
5	50	Solder Cup	A	280-006H5AP	M24308/9-5	280-006K5AP	M24308/9-25
5	50	Solder Cup	B	280-006H5BP	M24308/9-15	280-006K5BP	M24308/9-35
5	50	Eyelet	A	280-006H5AX	M24308/9-10	280-006K5AX	M24308/9-30
5	50	Eyelet	B	280-006H5BX	M24308/9-20	280-006K5BX	M24308/9-40

MIL-DTL-24308
D-Subminiature Hermetic Connectors
Materials, Finishes and Specifications



MIL-DTL
24308

MATERIALS AND FINISHES

Contacts	Ferrous alloy, gold plated per ASTM B488, type II, code C, class 1,27.
Shell, class H	Carbon steel, tin/lead plated over nickel underplating (3% min. lead)*
Shell, class K	304L alloy stainless steel, dull nickel plated
Insulators	Vitreous glass

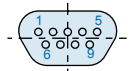
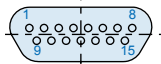
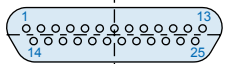
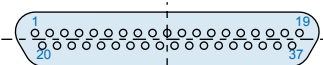
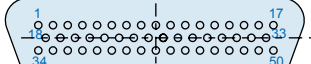
* Additional shell materials available including titanium. Please consult factory for ordering information

SPECIFICATIONS

Current rating	5 Amps per contact maximum
Voltage rating (DWV)	750 VAC sea level, 175 VAC at 70,000 ft. (21,336 meters)
Insulation resistance	5000 megohms minimum
Hermeticity	Will meet or exceed requirements for leakage as indicated in MIL-DTL-24308
Contact resistance	165 milliohms maximum
Thermal vacuum outgassing (class K)	1.0% max. TML , 0.1% max. VCM
Durability	500 mating cycles
Operating temperature	-55° C to +125° C
Shock	50 g.
Vibration	20 g.
Corrosion resistance (salt spray)	48 hours
Maximum wire size	#20 AWG

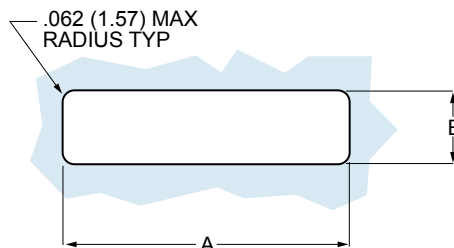
H

**STANDARD INSERT
ARRANGEMENTS (#20 CONTACTS)**

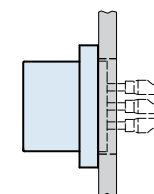
SHELL SIZE	NUMBER OF CONTACTS	MATING FACE OF CONNECTOR
1	9	
2	15	
3	25	
4	37	
5	50	

PANEL CUTOUTS

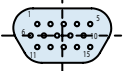
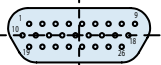
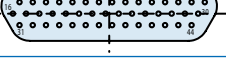
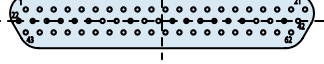
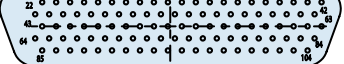
The cutout shown is for front-panel mounting of flange style A and B.



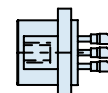
Shell Size	A		B	
	In.	mm.	In.	mm.
1	± .005	± 0.13	± .005	± 0.13
2	.745	18.92	.385	9.78
3	.950	24.13	.385	9.78
4	1.495	37.97	.385	9.78
5	2.145	54.48	.385	9.78
5	2.015	51.18	.520	13.21



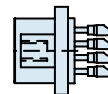
*Front-Mounted
Connector
Installed on
Bulkhead*

SHELL SIZE	NUMBER OF CONTACTS	MATING FACE OF CONNECTOR
1	15	
2	26	
3	44	
4	62	
5	78	
6	104	

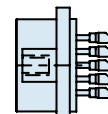
**SOLDER CUP
ORIENTATION**



Sizes 1-4



Size 5



Size 6

MIL-DTL-24308

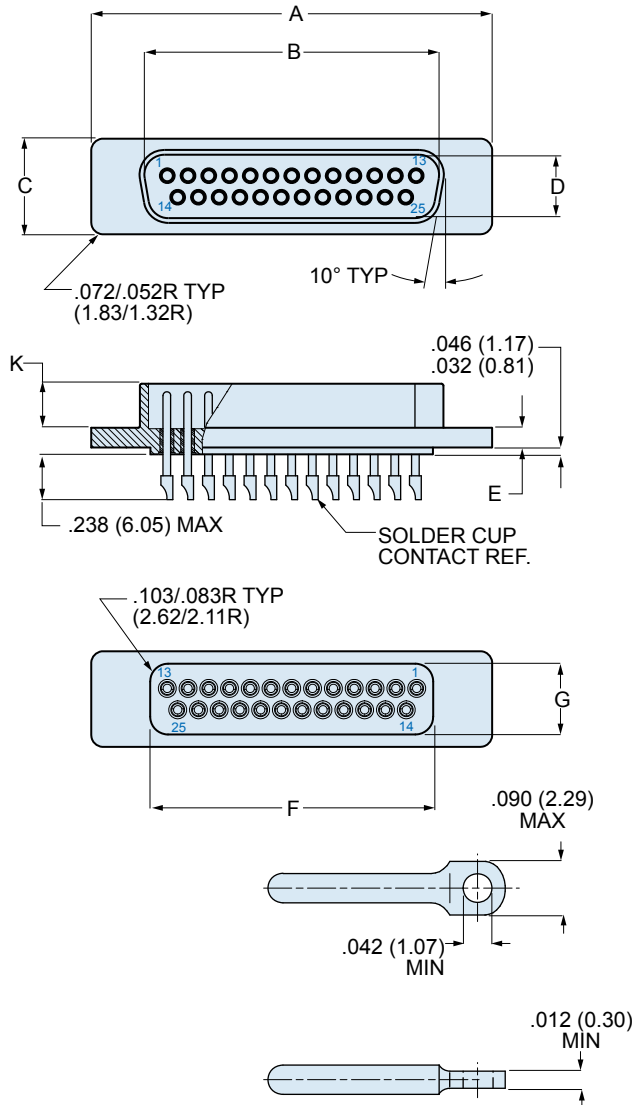
D-Subminiature Hermetic Connectors

Style A and Style B Dimensions

Glenair

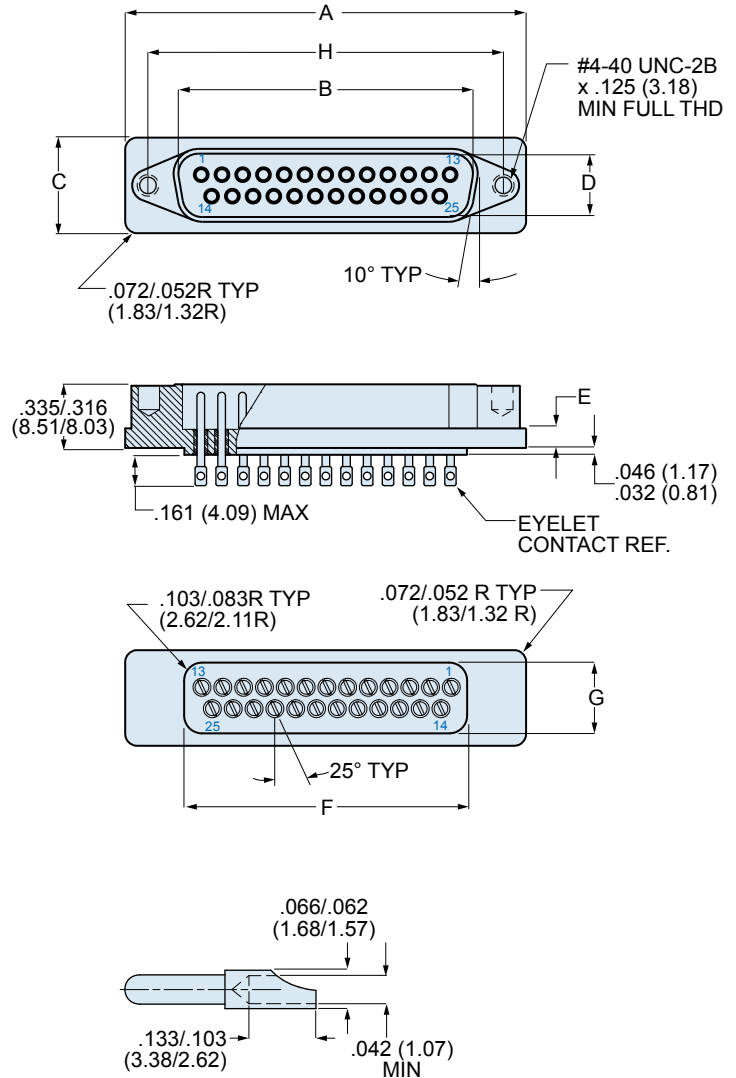
MIL-DTL
24308

Dimensions for Flange Style A



CONTACT STYLE X
EYELET

Dimensions for Flange Style B

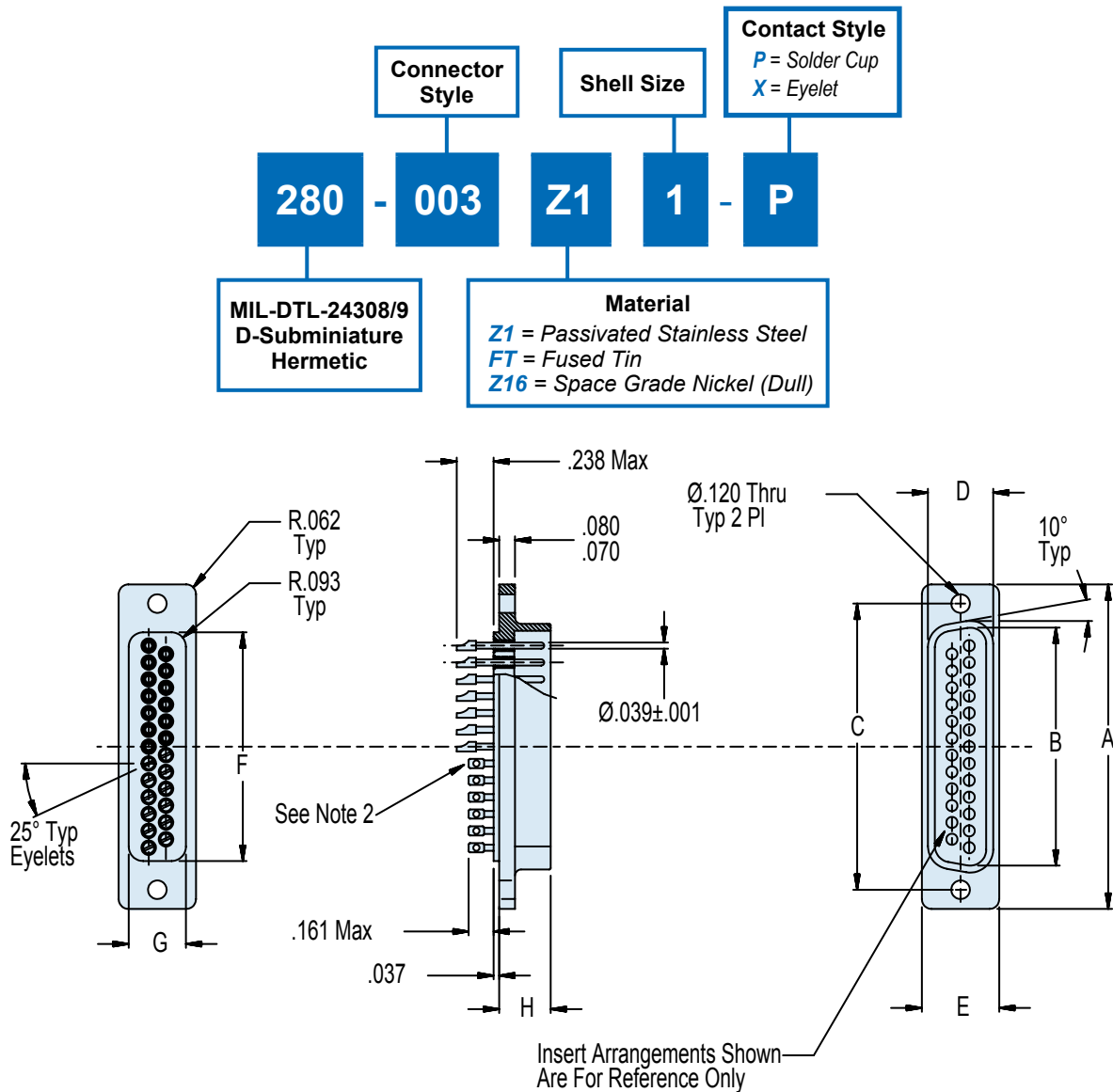


CONTACT STYLE P
SOLDER CUP

Shell Size	A		B		C		D		E		F		G		H		K	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
1	± .015	± 0.38	± .004	± 0.10	± .010	± 0.25	± .004	± 0.10	± .006	± 0.15	± .010	± 0.25	± .010	± 0.25	± .005	± 0.13	± .010	± 0.25
2	1.213	30.81	.667	16.94	.498	12.65	.330	8.38	.094	2.39	.725	18.42	.369	9.37	.984	24.99	.235	5.97
3	1.541	39.14	.993	25.22	.498	12.65	.330	8.38	.094	2.39	.932	23.67	.369	9.37	1.312	33.32	.235	5.97
4	2.088	53.04	1.535	38.99	.498	12.65	.330	8.38	.103	2.62	1.479	37.57	.369	9.37	1.852	47.04	.230	5.84
5	2.729	69.32	2.183	55.45	.498	12.65	.330	8.38	.103	2.62	2.125	53.98	.369	9.37	2.500	63.50	.230	5.84
5	2.635	66.93	2.079	52.81	.610	15.49	.441	11.20	.103	2.62	2.000	50.80	.500	12.70	2.406	61.11	.230	5.84

280-003

MIL-DTL-24308/9 Type Hermetic Glass-Sealed D-Subminiature Receptacle



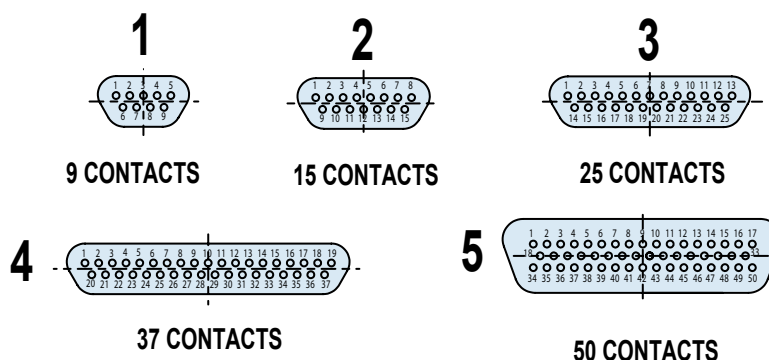
APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or Solder Cup (See Part Number Development)
- Material/Finish:
Shell: Z1 = Stainless steel/passivated.
FT = Cold rolled steel/fused tin plate.
Z16 = Stainless steel/nickel plated, dull finish
- Insulators - Glass bead/N.A.
- Contacts: Pins, Alloy 52/gold plated
- Metric Dimensions (mm) are indicated in parentheses.

280-003
MIL-DTL-24308/9 Type Hermetic
Glass-Sealed D-Subminiature Receptacle



MIL-DTL
24308



HERMETIC LEAK RATE MOD CODES

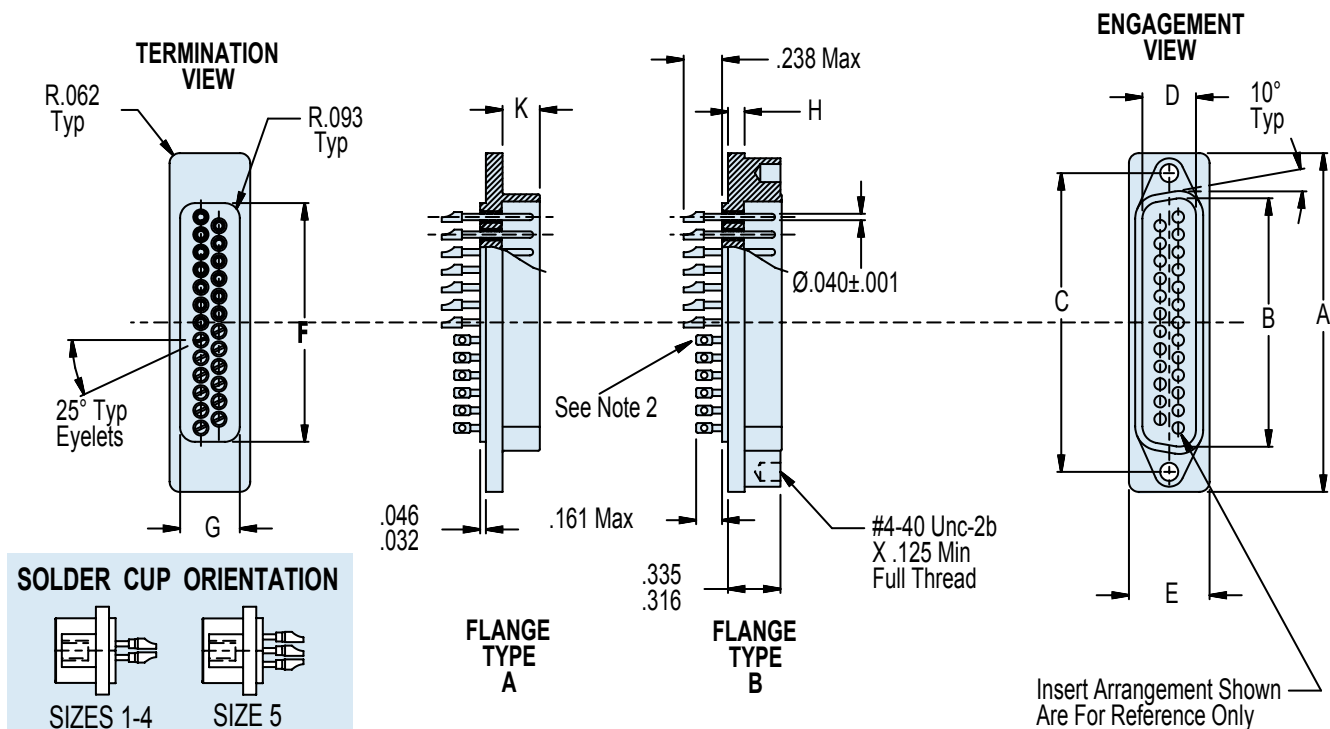
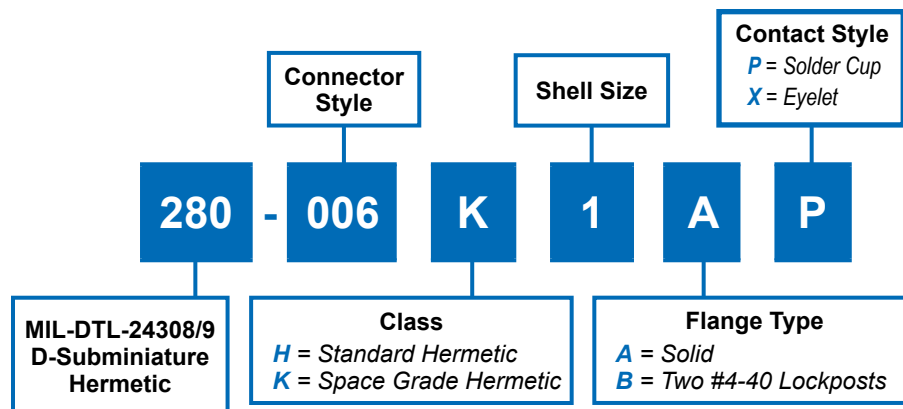
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A ± .010 (± 0.3)	Dim B ± .004 (± 0.1)	Dim C ± .005 (± 0.1)	Dim D ± .010 (± 0.3)	Dim E ± .010 (± 0.3)	Dim F ± .010 (± 0.3)	Dim G ± .010 (± 0.3)	Dim H ± .015 (± 0.4)
1	1.208 (30.7)	.667 (16.9)	.984 (25.0)	.366 (9.3)	.498 (12.6)	.725 (18.4)	.369 (9.4)	.334 (8.5)
2	1.545 (39.2)	.993 (25.2)	1.312 (33.3)	.366 (9.3)	.498 (12.6)	.932 (23.7)	.369 (9.4)	.334 (8.5)
3	2.093 (53.2)	1.535 (39.0)	1.852 (47.0)	.384 (9.8)	.498 (12.6)	1.497 (38.0)	.369 (9.4)	.334 (8.5)
4	2.733 (69.4)	2.183 (55.4)	2.500 (63.5)	.384 (9.8)	.498 (12.6)	2.125 (54.0)	.369 (9.4)	.334 (8.5)
5	2.640 (67.1)	2.079 (52.8)	2.406 (61.1)	.490 (12.4)	.610 (15.5)	2.000 (50.8)	.500 (12.7)	.334 (8.5)

H

280-006 MIL-DTL-24308/9 Hermetic Glass-Sealed D-Subminiature Receptacle



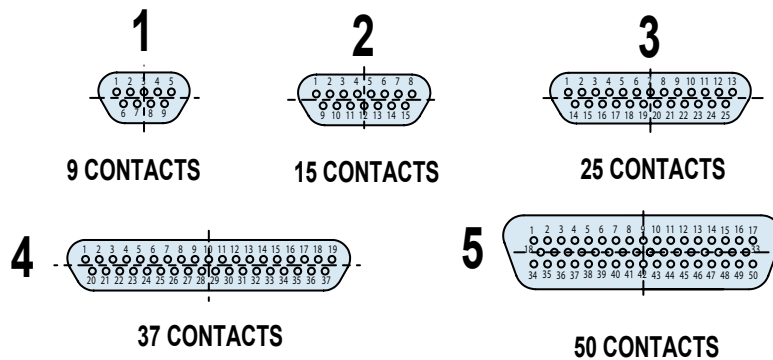
APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or Solder Cup (See Part Number Development).
- Material/Finish:
Shell: Z1 = Stainless steel/passivated.
FT = Cold rolled steel/fused tin plate.
Z16 = Stainless steel/nickel plated, dull finish
Insulators: Glass bead/N.A.
Contacts: Pins, Alloy 52/gold plated
- Performance:
DWV - 750 VAC Pin-to-Shell
I.R. - 5,000 MegOhms Min @ 500 VDC
Hermeticity <1 x 10⁻⁷ cc He/sec @ 1 atmosphere differential
- Glenair 280-006 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.
- All dimensions are typical for flange types "A" and "B". "C" dim is not applicable to flange type "A".
- Metric dimensions (mm) are indicated in parentheses.

280-006
MIL-DTL-24308/9 Hermetic
Glass-Sealed D-Subminiature Receptacle



MIL-DTL
24308



HERMETIC LEAK RATE MOD CODES	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS									
Shell Size	Dim A ± .015 (± 0.4)	Dim B ± .004 (± 0.1)	Dim C ± .005 (± 0.1)	Dim D ± .004 (± 0.1)	Dim E ± .010 (± 0.3)	Dim F ± .010 (± 0.3)	Dim G ± .010 (± 0.3)	Dim H ± .006 (± 0.2)	Dim K ± .010 (± 0.3)
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.498 (12.6)	.725 (18.4)	.369 (9.4)	.094 (2.4)	.235 (6.0)
2	1.541 (39.2)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.498 (12.6)	.932 (23.7)	.369 (9.4)	.094 (2.4)	.235 (6.0)
3	2.088 (53.2)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.498 (12.6)	1.497 (38.0)	.369 (9.4)	.103 (2.6)	.230 (5.8)
4	2.729 (69.4)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.498 (12.6)	2.125 (54.0)	.369 (9.4)	.103 (2.6)	.230 (5.8)
5	2.635 (67.1)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	2.000 (50.8)	.500 (12.7)	.103 (2.6)	.230 (5.8)

RECOMMENDED PANEL CUTOUT
SEE TABLE 2

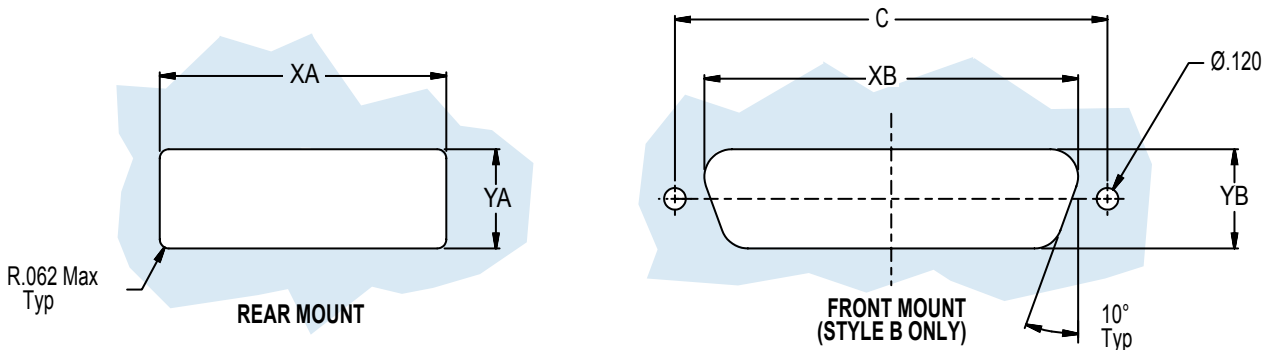
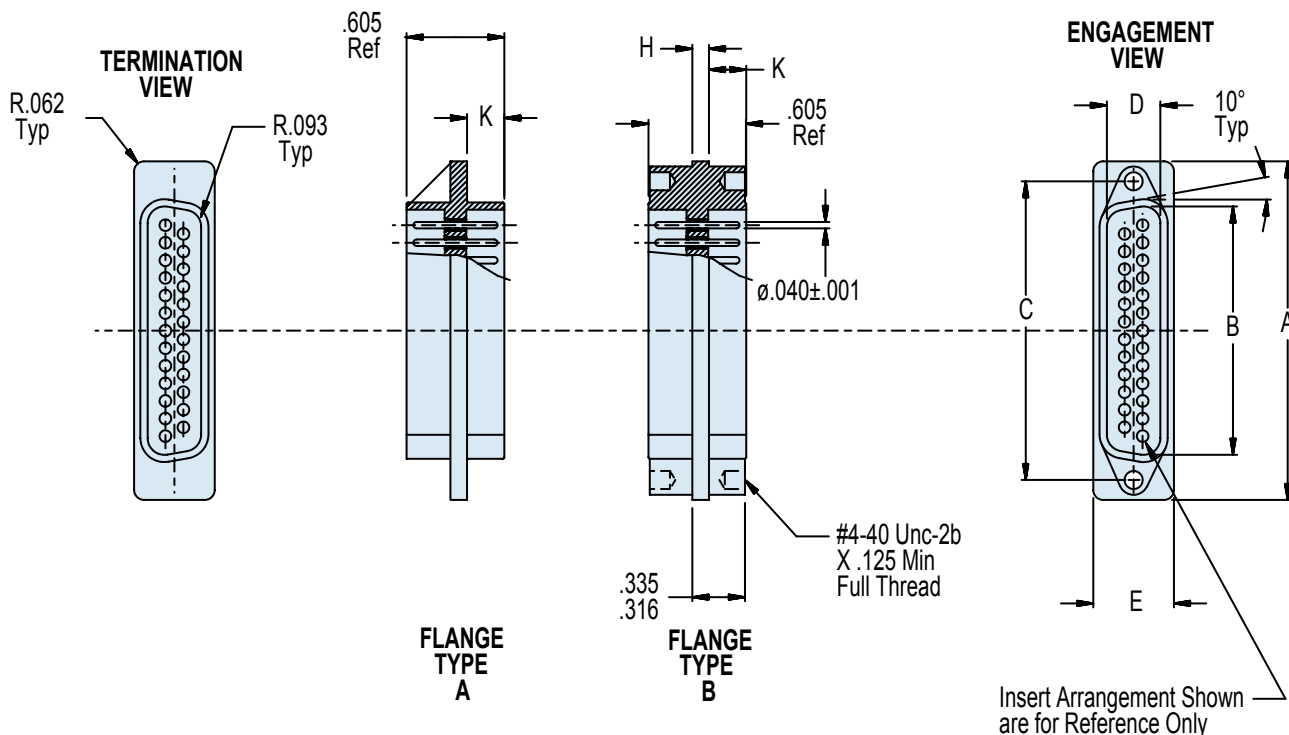
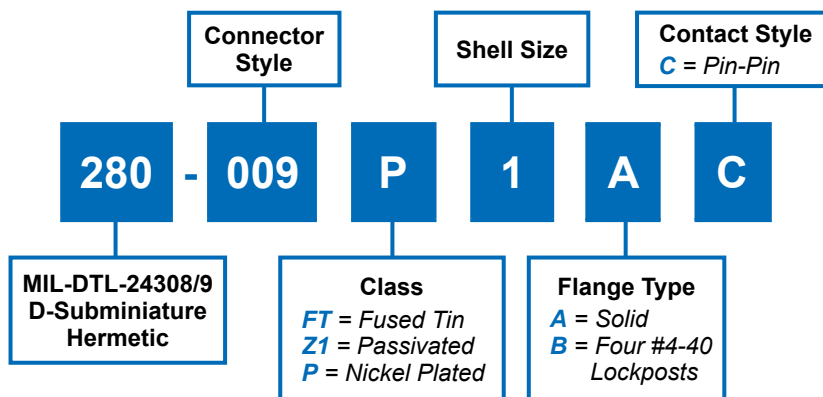


TABLE II: PANEL CUT-OUT					
Shell Sizes	Style A		Style B		
	Dim XA	Dim YA	Dim XB	Dim YB	Dim C
1	.745 (18.9)	.385 (9.8)	.799 (20.0)	.462 (11.7)	.984 (25.0)
2	.950 (24.1)	.385 (9.8)	1.125 (31.8)	.462 (11.7)	1.312 (33.3)
3	1.495 (38.0)	.385 (9.8)	1.690 (42.9)	.482 (12.2)	1.852 (47.0)
4	2.145 (54.5)	.385 (9.8)	2.335 (59.3)	.482 (12.2)	2.500 (63.5)
5	2.015 (51.2)	.520 (13.2)	2.231 (56.7)	.588 (14.9)	2.406 (61.1)

280-009 MIL-DTL-24308/9 Type Hermetic D-Subminiature Pin-to-Pin Feedthrough



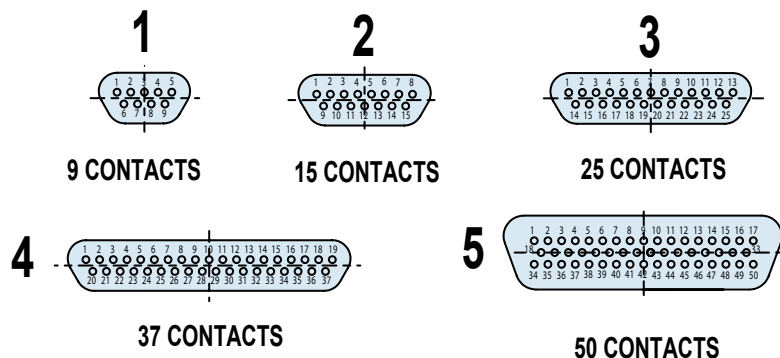
APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Pin-to-Pin only (See Part Number Development).
- All dimensions are typical for flange types "A" and "B." "C" dim is not applicable to flange type "A."
- Material/Finish:
Shell: FT = Carbon steel/tin plated.
Z1 = Stainless steel/passivated.
P = Stainless steel/nickel plated.
Insulators: Glass bead/N.A.
Contacts: Pins, Alloy 52/gold plated
- Performance:
DWV - 750 VAC Pin-to-Shell
I.R. - 5,000 MegOhms Min @ 500 VDC
Hermeticity - 1×10^{-7} scc He/sec @ 1 atmosphere differential
- Glenair 280-009 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.
- Metric dimensions (mm) are indicated in parentheses.

280-009
MIL-DTL-24308/9 Type Hermetic
D-Subminiature Pin-to-Pin Feedthrough

Glenair®

MIL-DTL
24308



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A ± .015 (± 0.4)	Dim B ± .004 (± 0.1)	Dim C ± .005 (± 0.1)	Dim D ± .004 (± 0.1)	Dim E ± .010 (± 0.3)	Dim H ± .006 (± 0.2)	Dim K ± .010 (± 0.3)
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.498 (12.6)	.094 (2.4)	.235 (6.0)
2	1.541 (39.1)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.498 (12.6)	.094 (2.4)	.235 (6.0)
3	2.088 (53.0)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.498 (12.6)	.103 (2.6)	.230 (5.8)
4	2.729 (14.7)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.498 (12.6)	.103 (2.6)	.230 (5.8)
5	2.635 (66.9)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	.103 (2.6)	.230 (5.8)

RECOMMENDED PANEL CUTOUT
SEE TABLE 2

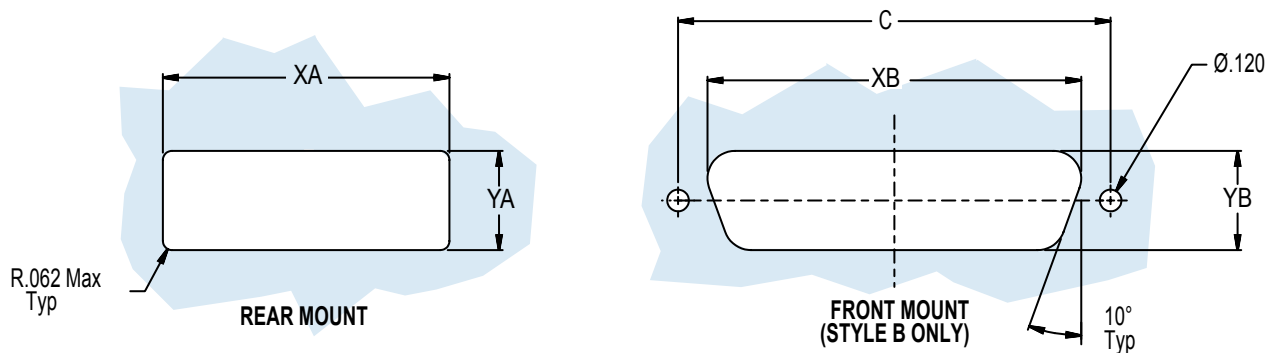
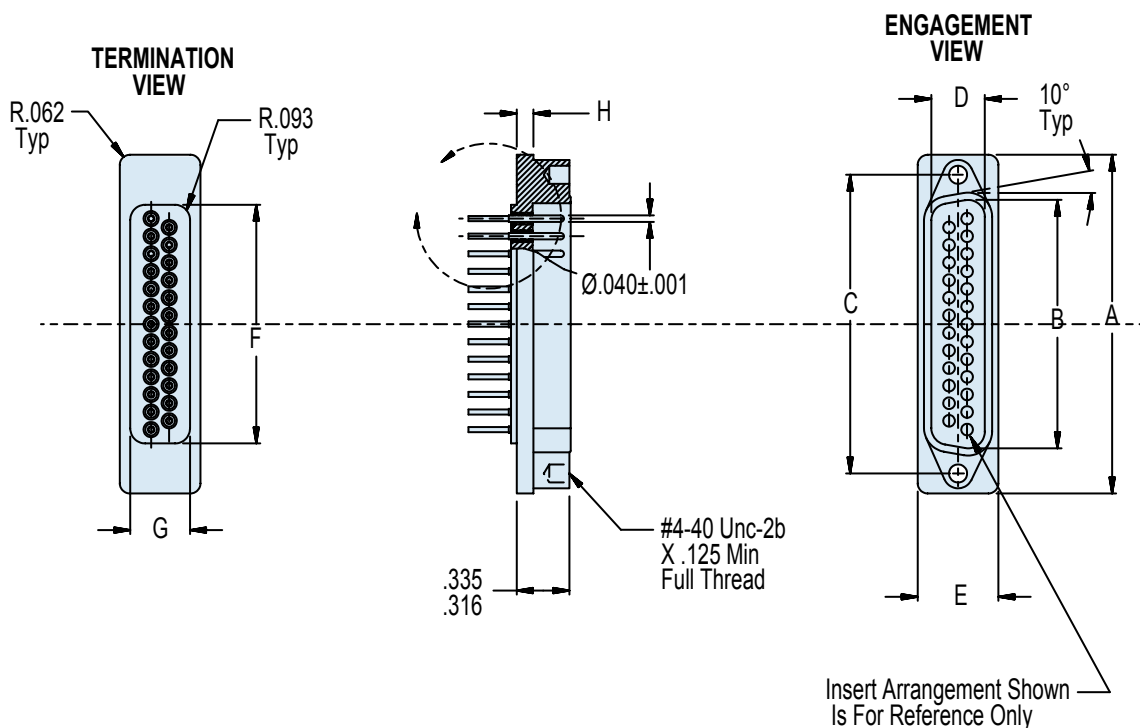
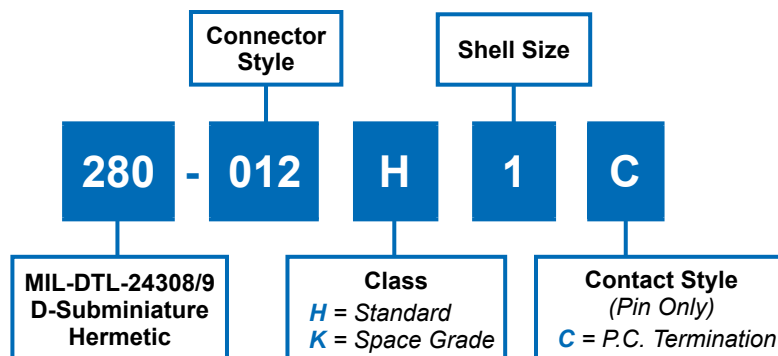


TABLE II: PANEL CUT-OUT DIMENSIONS

Shell Sizes	Style A		Style B		
	Dim XA	Dim YA	Dim XB	Dim YB	Dim C
1	.745 (18.9)	.385 (9.8)	.799 (20.3)	.462 (11.7)	.982 (25.0)
2	.950 (24.1)	.385 (9.8)	1.125 (28.6)	.462 (11.7)	1.312 (33.3)
3	1.495 (38.0)	.385 (9.8)	1.690 (42.9)	.462 (11.7)	1.852 (47.0)
4	2.145 (54.5)	.385 (9.8)	2.335 (59.3)	.462 (11.7)	2.500 (63.5)
5	2.015 (51.2)	.520 (13.2)	2.231 (56.7)	.588 (14.9)	2.406 (61.1)



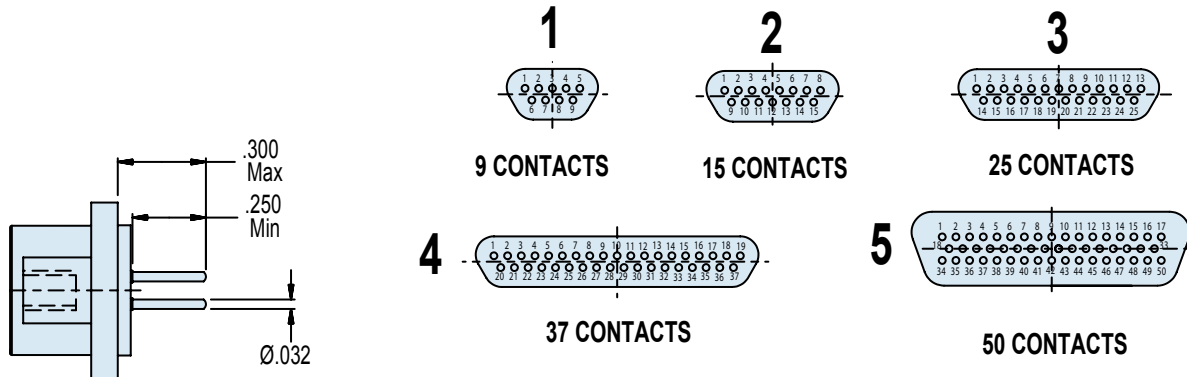
APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Printed circuit termination only.
- Material/Finish:
Shell: H = FT - Carbon steel/tin plated.
K = Z16 - Stainless steel/nickel plated, dull finish.
Insulators: Glass bead/N.A.
Contacts: Pins, Alloy 52/gold plated
- Performance:
DWV - 750 VAC Pin-to-Shell
I.R. - 5,000 MegOhms Min @ 500 VDC
Hermeticity - 1×10^{-7} scc He/sec @ 1 atmosphere differential
- Glenair 280-012 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.
- Metric dimensions (mm) are indicated in parentheses.

280-012
MIL-DTL-24308/9 Type Hermetic
Rear Printed Circuit Board Termination
Glass-Sealed D-Subminiature Connector

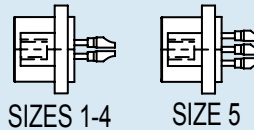


MIL-DTL
24308



**Contact
Detail**

SOLDER CUP ORIENTATION



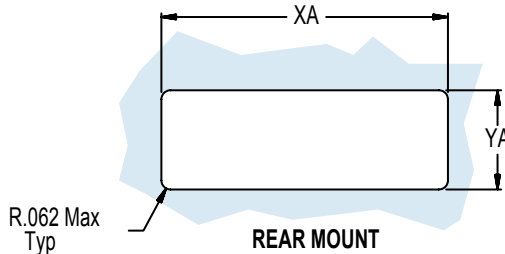
SIZES 1-4

SIZE 5

TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A $\pm .015 (\pm 0.4)$	Dim B $\pm .004 (\pm 0.1)$	Dim C $\pm .005 (\pm 0.1)$	Dim D $\pm .004 (\pm 0.1)$	Dim E $\pm .010 (\pm 0.3)$	Dim F $\pm .010 (\pm 0.3)$	Dim G $\pm .010 (\pm 0.3)$	Dim H $\pm .006 (\pm 0.2)$	Dim K $\pm .010 (\pm 0.3)$
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.498 (12.6)	.725 (18.4)	.369 (9.4)	.094 (2.4)	.235 (6.0)
2	1.541 (39.1)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.498 (12.6)	.932 (23.7)	.369 (9.4)	.094 (2.4)	.235 (6.0)
3	2.088 (53.0)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.498 (12.6)	1.497 (38.0)	.369 (9.4)	.103 (2.6)	.230 (5.8)
4	2.729 (69.3)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.498 (12.6)	2.125 (54.0)	.369 (9.4)	.103 (2.6)	.230 (5.8)
5	2.635 (66.9)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	2.000 (50.8)	.500 (12.7)	.103 (2.6)	.230 (5.8)

RECOMMENDED PANEL CUTOUT
SEE TABLE II



HERMETIC LEAK RATE MOD CODES

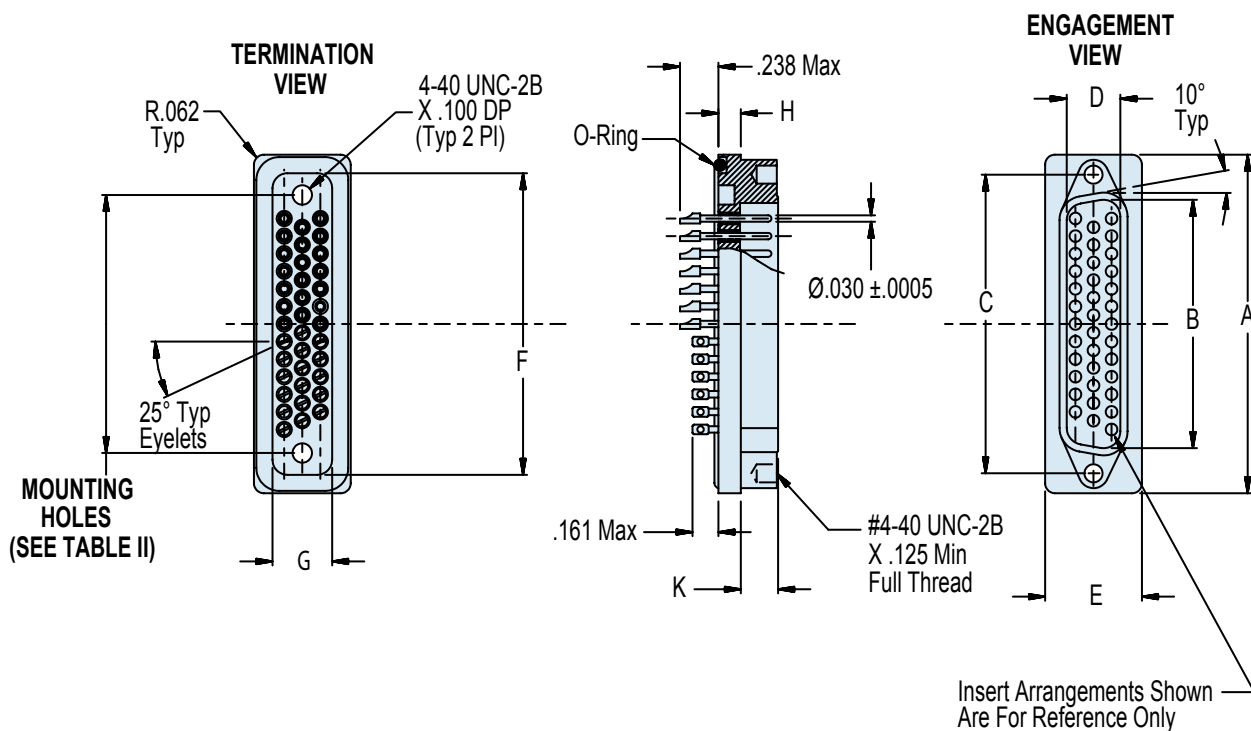
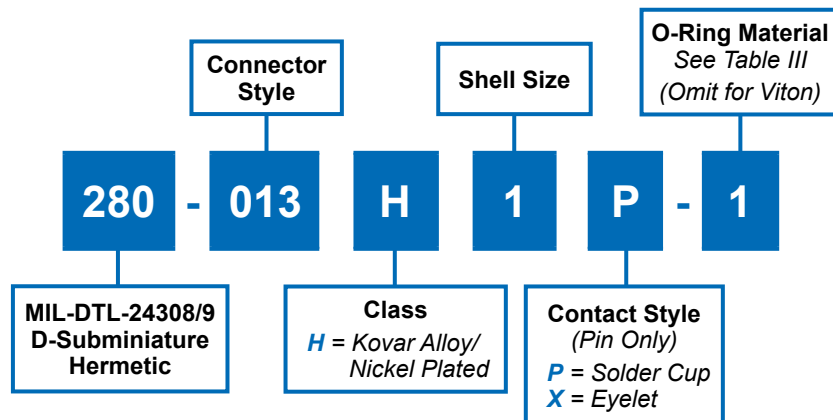
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE II: PANEL CUT-OUT

Shell Sizes	Style A		Style B		
	Dim XA	Dim YA	Dim XB	Dim YB	Dim C
1	.745 (18.9)	.385 (9.8)	.799 (20.0)	.462 (11.7)	.984 (25.0)
2	.950 (24.1)	.385 (9.8)	1.125 (31.8)	.462 (11.7)	1.312 (33.3)
3	1.495 (38.0)	.385 (9.8)	1.690 (42.9)	.482 (12.2)	1.852 (47.0)
4	2.145 (54.5)	.385 (9.8)	2.335 (59.3)	.482 (12.2)	2.500 (63.5)
5	2.015 (51.2)	.520 (13.2)	2.231 (56.7)	.588 (14.9)	2.406 (61.1)

280-013

MIL-DTL-24308/9 Type Hermetic O-Ring Panel Sealing Glass-Sealed D-Subminiature High Density Connector



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or solder cup (see part development).
- Material/Finish:
Shell: Kovar alloy/nickel plated.
Insulators: Glass bead/N.A.
Contacts: Kovar alloy/gold plated
O-Ring: Specify (see Table III)/N.A.
- Performance:
DWV - 500 VAC Pin-to-Shell
I.R. - 5,000 MegOhms Min @ 500 VDC
Hermeticity - $<1 \times 10^{-7}$ scc He/sec @ 1 atmosphere differential
- Glenair 280-013 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.
- Metric dimensions (mm) are indicated in parentheses.

280-013
MIL-DTL-24308/9 Type Hermetic
O-Ring Panel Sealing
Glass-Sealed D-Subminiature High Density Connector

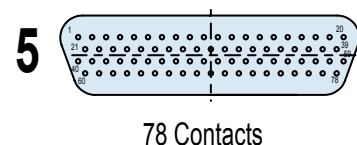
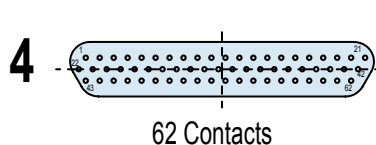
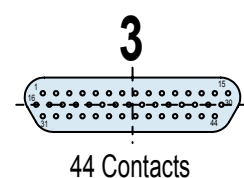
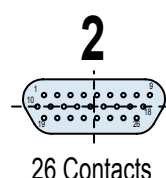
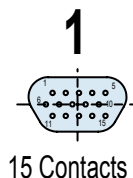


MIL-DTL
24308

TABLE III: O-RING MATERIAL

Dash Number	Material
None	Viton
-1	Nitrile
-2	Fluorosilicone
-3	Silicone

CONTACT ARRANGEMENTS



SOLDER CUP ORIENTATION

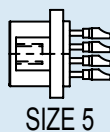
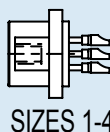


TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A $\pm .015 (\pm 0.4)$	Dim B $\pm .004 (\pm 0.1)$	Dim C $\pm .005 (\pm 0.1)$	Dim D $\pm .004 (\pm 0.1)$	Dim E $\pm .010 (\pm 0.3)$	Dim F $\pm .010 (\pm 0.3)$	Dim G $\pm .010 (\pm 0.3)$	Dim H $\pm .006 (\pm 0.2)$	Dim K $\pm .010 (\pm 0.3)$	O-Ring 2-
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.600 (15.2)	.874 (22.2)	.272 (6.9)	.155 (3.9)	.235 (6.0)	-017
2	1.541 (39.1)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.600 (15.2)	1.270 (32.3)	.372 (9.5)	.155 (3.9)	.235 (6.0)	-022
3	2.088 (53.0)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.600 (15.2)	1.760 (44.7)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-027
4	2.729 (69.3)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.600 (15.2)	2.418 (61.4)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-031
5	2.635 (66.9)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	2.418 (61.4)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-031

RECOMMENDED PANEL CUTOUT
SEE TABLE II

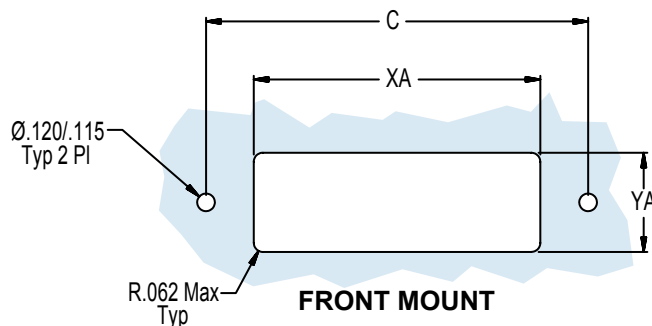


TABLE II: PANEL CUT-OUT

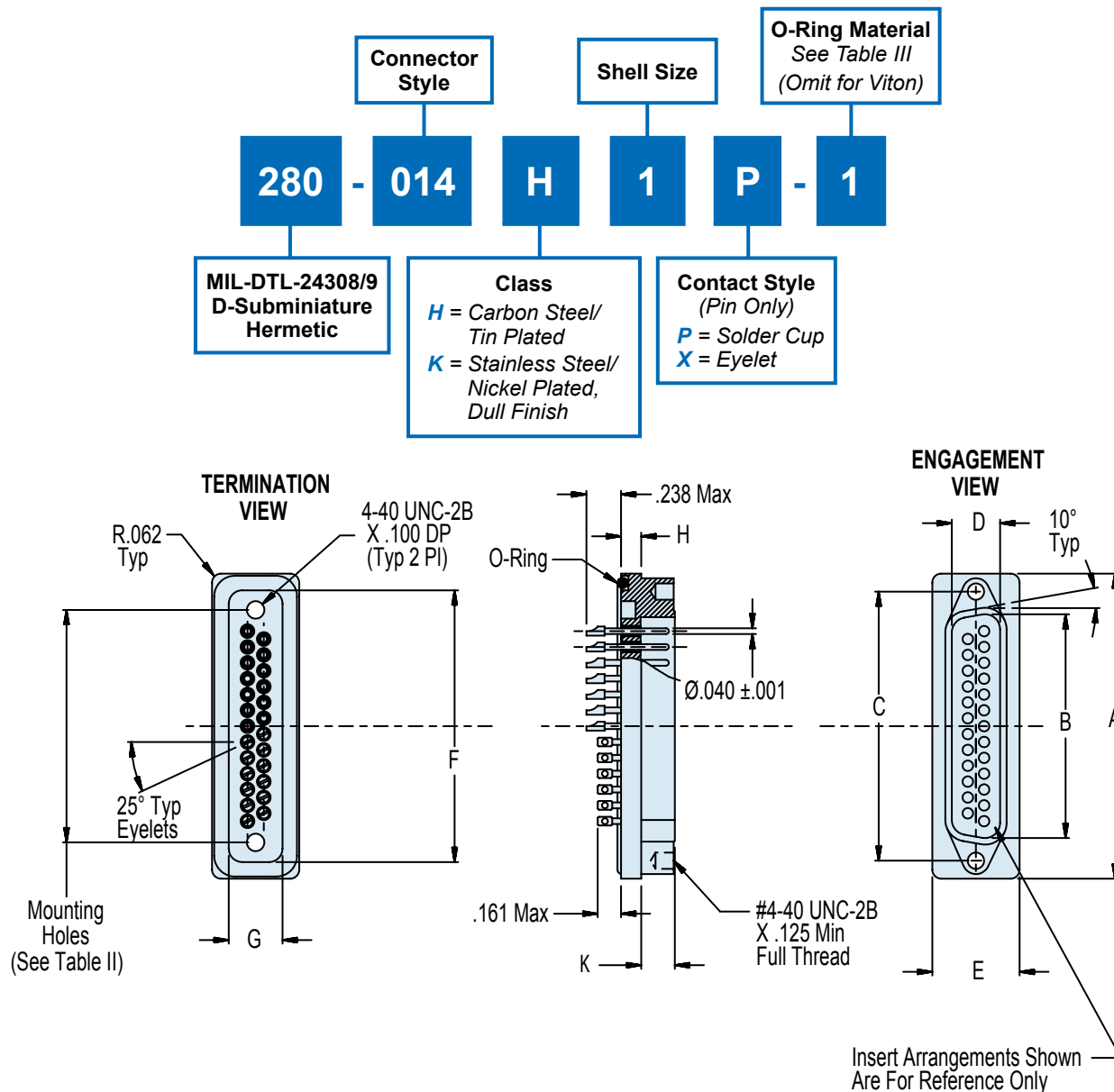
Shell Size	Dim XA	Dim YA	Dim C
1	.500 (12.7)	.220 (5.6)	.674 (17.1)
2	.830 (21.1)	.220 (5.6)	1.070 (27.2)
3	1.375 (34.9)	.220 (5.6)	1.560 (39.6)
4	2.000 (50.8)	.220 (5.6)	2.150 (54.6)
5	1.850 (47.0)	.300 (7.6)	2.200 (55.9)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

280-014

MIL-DTL-24308/9 Type Hermetic O-Ring Panel Sealing Glass-Sealed D-Subminiature Connector



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or solder cup (see part development).
- Material/Finish:
Shell: H = FT - Carbon steel/tin plated.
K = Z16 - Stainless steel/nickel plated dull finish.
Insulators: Glass bead/N.A.
Contacts: Alloy 52/gold plated
O-Ring: Specify (see Table III)/N.A.
- Performance:
DWV - 500 VAC Pin-to-Shell
I.R. - 5,000 MegOhms Min @ 500 VDC
Hermeticity - $<1 \times 10^{-7}$ scc He/sec @ 1 atmosphere differential
- Glenair 280-014 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.
- Metric dimensions (mm) are indicated in parentheses.

280-014
MIL-DTL-24308/9 Type Hermetic
O-Ring Panel Sealing
Glass-Sealed D-Subminiature Connector

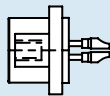


MIL-DTL
24308

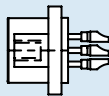
TABLE III: O-RING MATERIAL

Dash Number	Material
None	Viton
-1	Nitrile
-2	Fluorosilicone
-3	Silicone

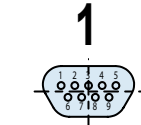
SOLDER CUP ORIENTATION



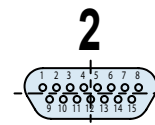
SIZES 1-4



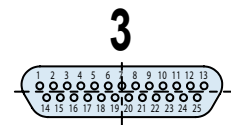
SIZE 5



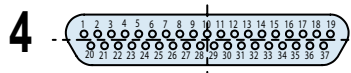
9 CONTACTS



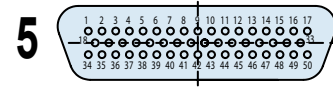
15 CONTACTS



25 CONTACTS



37 CONTACTS



50 CONTACTS

TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A $\pm .015 (\pm 0.4)$	Dim B $\pm .004 (\pm 0.1)$	Dim C $\pm .005 (\pm 0.1)$	Dim D $\pm .004 (\pm 0.1)$	Dim E $\pm .010 (\pm 0.3)$	Dim F $\pm .010 (\pm 0.3)$	Dim G $\pm .010 (\pm 0.3)$	Dim H $\pm .006 (\pm 0.2)$	Dim K $\pm .010 (\pm 0.3)$	O-Ring 2-
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.600 (15.2)	.874 (22.2)	.272 (6.9)	.155 (3.9)	.235 (6.0)	-017
2	1.541 (39.1)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.600 (15.2)	1.270 (32.3)	.372 (9.5)	.155 (3.9)	.235 (6.0)	-022
3	2.088 (53.0)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.600 (15.2)	1.760 (44.7)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-027
4	2.729 (69.3)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.600 (15.2)	2.418 (61.4)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-031
5	2.635 (66.9)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	2.418 (61.4)	.372 (9.5)	.160 (4.1)	.230 (5.8)	-031

RECOMMENDED PANEL CUTOUT
SEE TABLE II

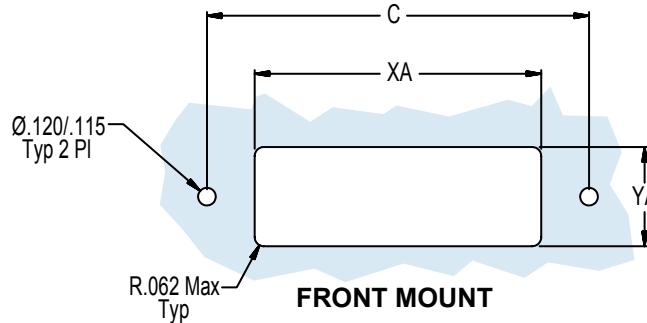


TABLE II: PANEL CUT-OUT

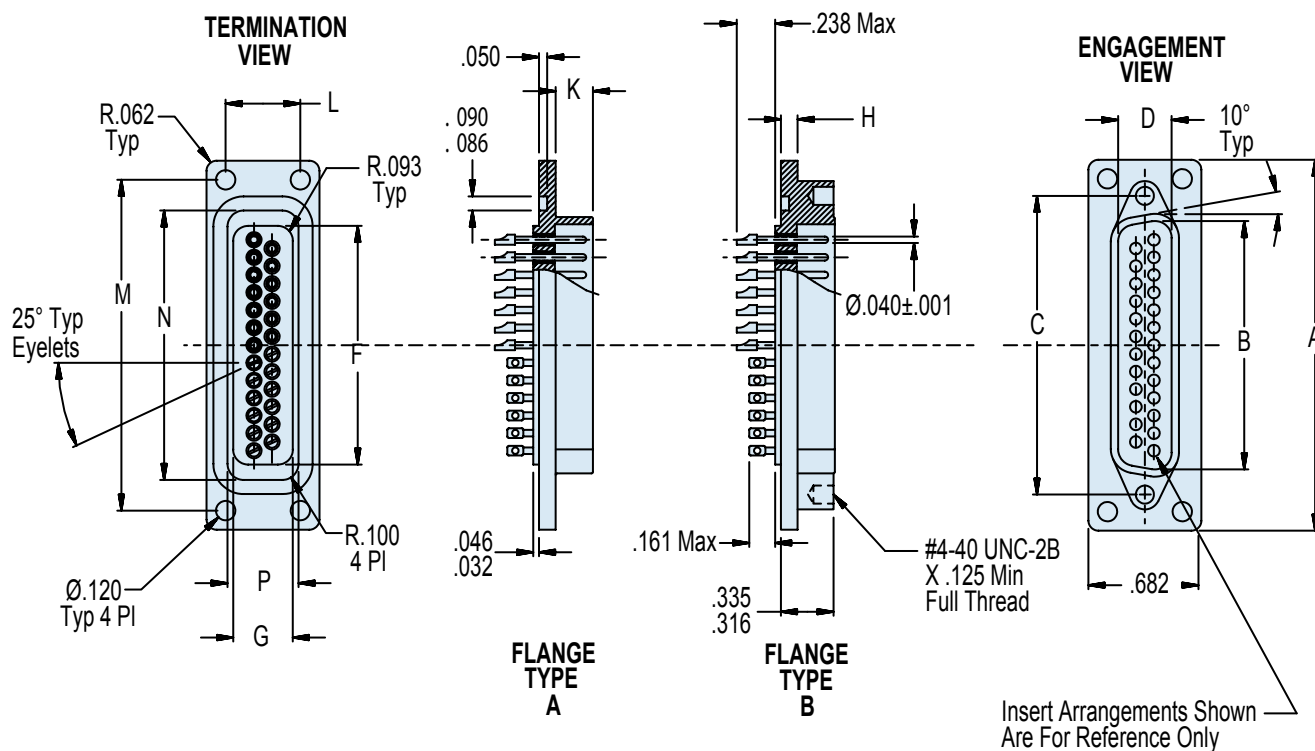
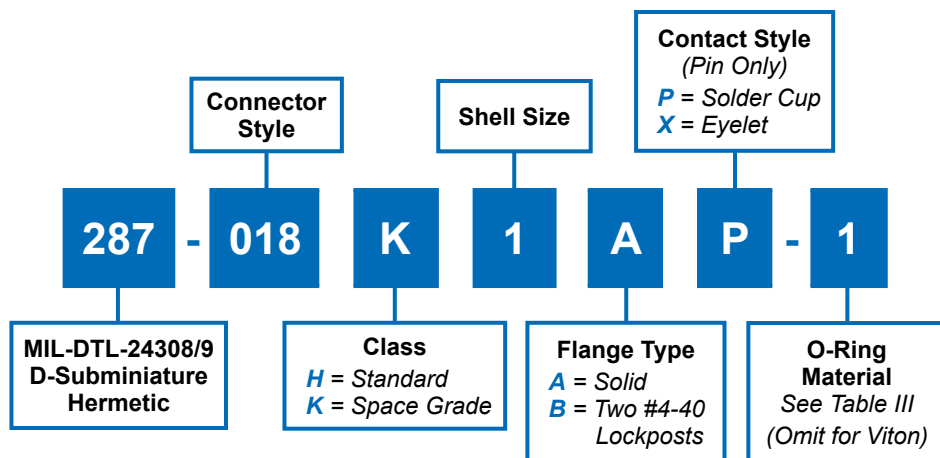
Shell Size	Dim XA	Dim YA	Dim C
1	.520 (13.2)	.220 (5.6)	.874 (22.2)
2	.850 (21.6)	.220 (5.6)	1.070 (27.2)
3	1.380 (35.1)	.220 (5.6)	1.560 (39.6)
4	2.035 (51.7)	.220 (5.6)	2.200 (55.9)
5	1.850 (47.0)	.300 (7.6)	2.200 (55.9)

HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1×10^{-10} cc's Helium per second
-585B	1×10^{-9} cc's Helium per second
-585C	1×10^{-8} cc's Helium per second

287-018

MIL-DTL-24308/9 Type Hermetic Glass-Sealed D-Subminiature Connector Rear Mount O-Ring Seal



APPLICATION NOTES

- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or solder cup (see part development).
- Material/Finish:
Shell: H = FT - Carbon steel/tin plated.
K = Z16 - Stainless steel/nickel plated dull finish.
Insulators: Glass bead/N.A.
Contacts: Pins, alloy 52/gold plated.
- Metric dimensions (mm) are indicated in parentheses.
- Performance:
DWV - 750 VAC Pin-to-Shell
I.R. - 5,000 Megohms Min @ 500 VDC
Hermeticity - $<1 \times 10^{-7}$ scc He/sec @ 1 atmosphere differential.
- All dimensions are typical for flange types "A" and "B". "C" dim is not applicable to flange type "A".
- Glenair 287-018 will mate with any QPL MIL-DTL-24308/1, /2 and /23 receptacle of the same size and arrangement.

287-018
MIL-DTL-24308/9 Type Hermetic
Glass-Sealed D-Subminiature Connector
Rear Mount O-Ring Seal

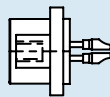


MIL-DTL
24308

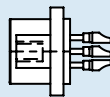
TABLE III: O-RING MATERIAL

Dash Number	Material
None	Viton
-1	Nitrile
-2	Fluorosilicone
-3	Silicone

SOLDER CUP ORIENTATION



SIZES 1-4



SIZE 5

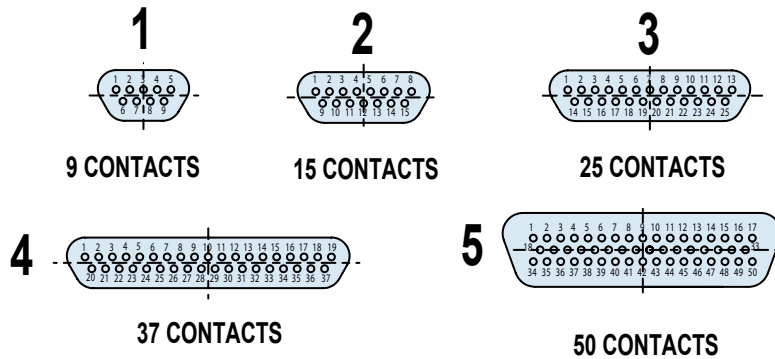
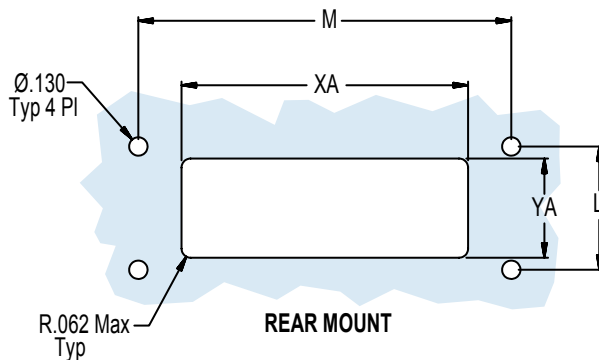


TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A $\pm .015 (\pm 0.4)$	Dim B $\pm .004 (\pm 0.1)$	Dim C $\pm .005 (\pm 0.1)$	Dim D $\pm .004 (\pm 0.1)$	Dim E $\pm .010 (\pm 0.3)$	Dim F $\pm .010 (\pm 0.3)$	Dim G $\pm .010 (\pm 0.3)$	Dim H $\pm .006 (\pm 0.2)$	Dim K $\pm .010 (\pm 0.3)$	Dim L BSC	M BSC	N $\pm .005 (\pm 0.1)$	P $\pm .005 (\pm 0.1)$
1	1.413 (35.9)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.698 (17.7)	.725 (18.4)	.369 (9.4)	.094 (2.4)	.235 (6.0)	.462 (11.7)	1.177 (29.9)	.805 (20.4)	.440 (11.2)
2	1.741 (44.2)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.698 (17.7)	.932 (23.7)	.369 (9.4)	.094 (2.4)	.235 (6.0)	.462 (11.7)	1.499 (38.1)	1.002 (25.5)	.440 (11.2)
3	2.288 (58.1)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.698 (17.7)	1.479 (37.6)	.369 (9.4)	.103 (2.6)	.230 (5.8)	.462 (11.7)	1.972 (50.1)	1.589 (40.4)	.440 (11.2)
4	2.929 (74.4)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.698 (17.7)	2.125 (54.0)	.369 (9.4)	.103 (2.6)	.230 (5.8)	.462 (11.7)	2.693 (68.4)	2.183 (55.4)	.440 (11.2)
5	2.835 (72.0)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.810 (20.6)	2.000 (50.8)	.500 (12.7)	.103 (2.6)	.230 (5.8)	.654 (16.6)	2.599 (66.0)	2.250 (57.2)	.570 (14.5)

RECOMMENDED PANEL CUTOUT
SEE TABLE 2



HERMETIC LEAK RATE MOD CODES

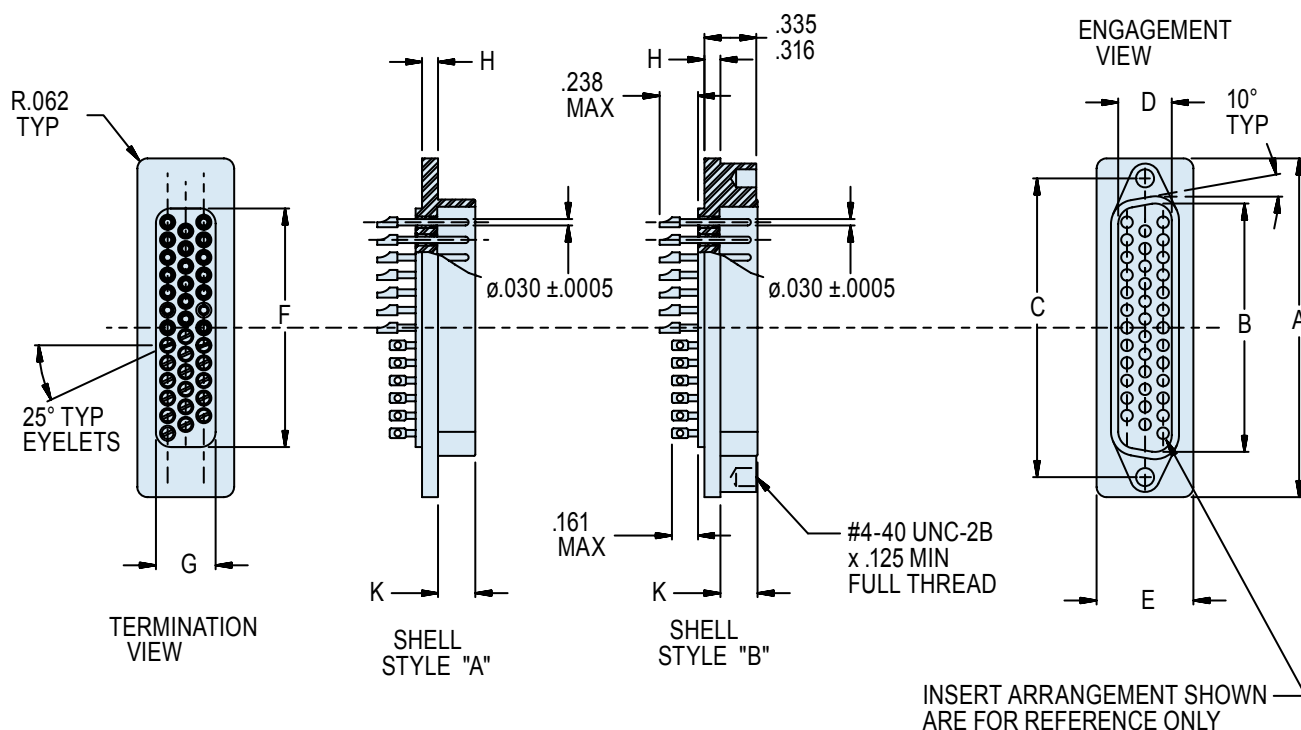
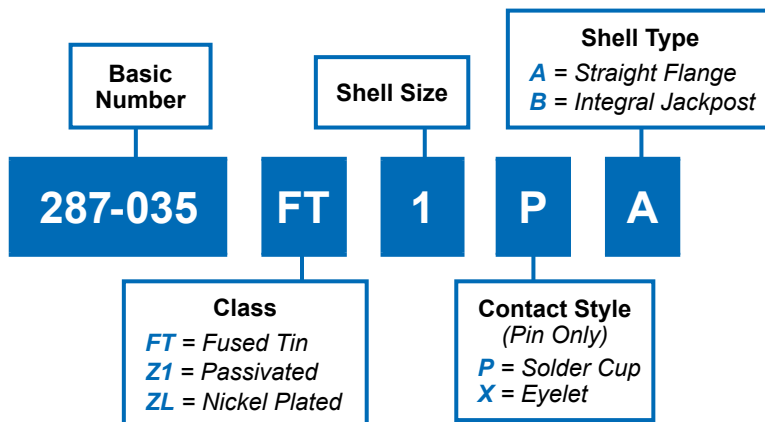
Designator	Required Leak Rate
-585A	1×10^{-10} cc's Helium per second
-585B	1×10^{-9} cc's Helium per second
-585C	1×10^{-8} cc's Helium per second

TABLE II: PANEL CUT-OUT

Shell Size	Dim XA	Dim YA	Dim L	Dim M
1	.745 (18.9)	.385 (9.8)	.462 (11.7)	1.177 (29.9)
2	.950 (24.1)	.385 (9.8)	.462 (11.7)	1.499 (38.1)
3	1.495 (38.0)	.385 (9.8)	.462 (11.7)	1.972 (50.1)
4	2.145 (54.5)	.385 (9.8)	.462 (11.7)	2.693 (68.4)
5	2.015 (51.2)	.520 (13.2)	.654 (16.6)	2.599 (66.0)

287-035

MIL-DTL-24308/9 Type Hermetic High Density Glass-Sealed D-Subminiature Connector Rear Mount O-Ring Seal



APPLICATION NOTES

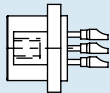
- To be identified with manufacturer's name, part number and date code, space permitting.
- Contact Style: Eyelet or solder cup (see part development).
- Material/Finish:
Shell: FT = Carbon Steel / Fused Tin
Z1 = CRES / Passivated
ZL = CRES / Nickel Plated
Insulators: Glass bead/N.A.
Contacts: Nickel-Iron Alloy / Gold Plated
- Metric dimensions (mm) are indicated in parentheses.
- Performance:
DWV - 500 VAC Pin-to-Shell
I.R. - 5,000 Megohms Min @ 500 VDC
Hermeticity - $<1 \times 10^{-5}$ scc He/sec @ 1 atmosphere differential.
- Glenair 287-035 will mate with any QPL MIL-DTL-24308/9, /6 and /23 receptacle of the same size and arrangement.

287-035
MIL-DTL-24308/9 Type Hermetic High Density
Glass-Sealed D-Subminiature Connector
Rear Mount O-Ring Seal

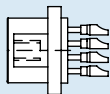
Glenair®

MIL-DTL
24308

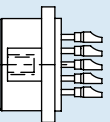
**SOLDER CUP
ORIENTATION**



SIZES 1-4

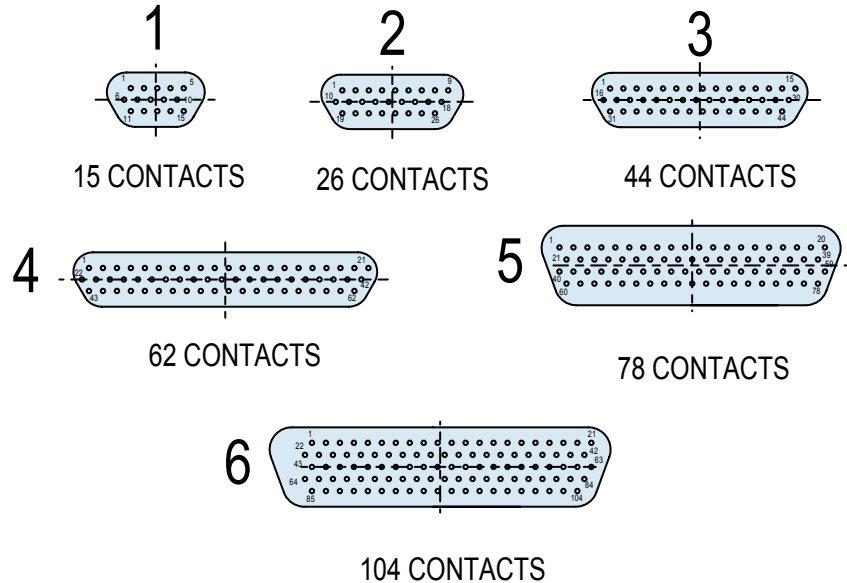


SIZE 5

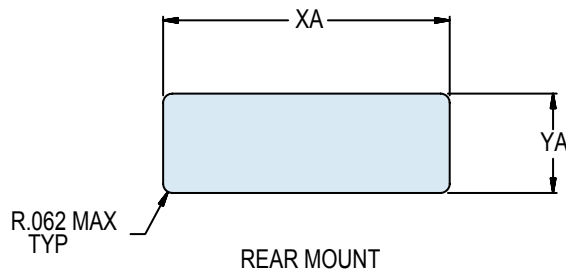


SIZE 6

CONTACT ARRANGEMENT



**RECOMMENDED PANEL CUTOUT
SEE TABLE II**



HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

TABLE I: CONNECTOR DIMENSIONS

Shell Size	Dim A ± .015 (± 0.4)	Dim B ± .005 (± 0.1)	Dim C ± .005 (± 0.1)	Dim D ± .004 (± 0.1)	Dim E ± .010 (± 0.3)	Dim F ± .010 (± 0.3)	Dim G ± .005 (± 0.1)	Dim H ± .010 (± 0.3)	Dim K ± .010 (± 0.3)
1	1.213 (30.8)	.667 (16.9)	.984 (25.0)	.330 (8.4)	.498 (12.6)	.759 (19.3)	.422 (10.7)	.094 (2.4)	.235 (6.0)
2	1.541 (39.1)	.993 (25.2)	1.312 (33.3)	.330 (8.4)	.498 (12.6)	1.083 (27.5)	.422 (10.7)	.094 (2.4)	.235 (6.0)
3	2.088 (53.0)	1.535 (39.0)	1.852 (47.0)	.330 (8.4)	.498 (12.6)	1.625 (41.3)	.422 (10.7)	.103 (2.6)	.230 (5.8)
4	2.729 (69.3)	2.183 (55.4)	2.500 (63.5)	.330 (8.4)	.498 (12.6)	2.272 (57.7)	.422 (10.7)	.103 (2.6)	.230 (5.8)
5	2.635 (66.9)	2.079 (52.8)	2.406 (61.1)	.441 (11.2)	.610 (15.5)	2.178 (55.3)	.534 (13.6)	.103 (2.6)	.230 (5.8)
6	2.729 (69.3)	2.212 (56.2)	2.500 (63.5)	.503 (12.8)	.668 (17.0)	2.302 (58.5)	.596 (15.1)	.103 (2.6)	.230 (5.8)

TABLE II: PANEL CUT-OUT

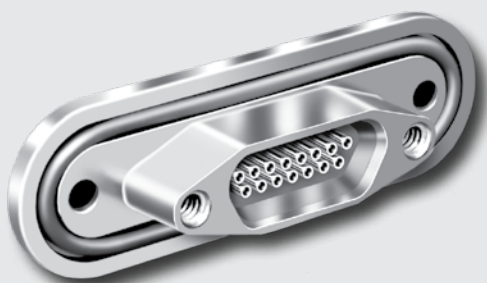
Shell Size	Dim. XA	Dim. YA
	± .005 (.13)	
1	.775 (19.7)	.438 (11.1)
2	1.099 (27.9)	.438 (11.1)
3	1.642 (41.7)	.438 (11.1)
4	2.288 (58.1)	.438 (11.1)
5	2.194 (55.7)	.550 (14.0)
6	2.318 (58.9)	.612 (15.5)

MIL-DTL-83513 Type Micro-D Hermetic Connectors

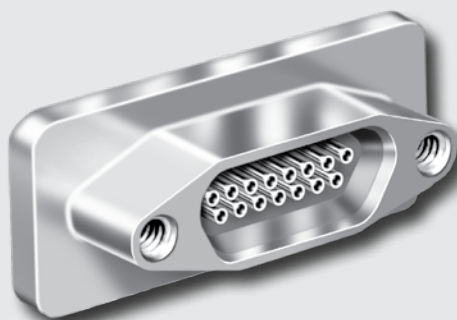
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177-705H Rear Panel Mount



177-140H Solder Mount

A Full Range of MIL-DTL-83513 Type Micro-D Hermetic Connectors

Product Applications

Glenair MIL-DTL-83513 type Micro-D hermetic connectors are ideal for high-pressure/low-leakage applications where size, weight and vibration resistance are a critical concern. Sophisticated electronics enclosures, vacuum chambers and cryogenic equipment all benefit from the airtight seal and moisture resistant plating found on Glenair hermetic Micro-D connectors. Solder mount, weld mount and rear panel O-ring shell styles are available to meet a variety of design requirements.

seals and O-rings ensure positive sealing with plug connectors and panels.

Gold plated Kovar® socket contacts boast superior vibration resistance when used in conjunction with Glenair's innovative TwistPin contact system in the plug.

Same-Day Inventory

Because Glenair makes all its hermetic connectors in-house, including the machining of shells, molding of interfacial seals and firing

Weld Mount, Solder Mount and Rear Panel Sealing Options

Vibration and Shock Resistant TwistPin Contact System

9 to 100 Sockets in 9 Shell Sizes

Space Grade Special Screening Available

1 x 10⁻⁶ cc/Helium per Second Leakage Rate

Solder Cup, PC Tail and Pre-Wired Pigtail Termination Options

Machined Kovar® Shells and Contacts with Moisture Resistant Plating



Materials

Kovar®—an iron nickel alloy—is used in both the shells and contacts, and provides a chemical bond with the glass insulator for maximum hermeticity. Shells are then plated with nickel after the glass insulator is fired to enhance corrosion resistance. Contacts are plated with gold to ensure superior electrical conductivity.

Connectors are offered with a minimum of 9 sockets, up to a maximum of 100 sockets—in two, three and four row solder cup and pigtail configurations. Fluorosilicone rubber interfacial

of hermetic components, we can offer you outstanding availability on stock products and fast turnaround on special orders.

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. Corrected content is posted immediately to www.glenair.com.



MIL-DTL-83513 Type Micro-D Hermetic Connectors General Information

MICRO-D HERMETIC CONNECTORS

Hermeticity is defined as "the state or condition of being airtight". Sophisticated military electronics enclosures can experience electrical failure from ingress of moisture. System engineers can design the enclosure to withstand exposure to moisture and condensation by using "moisture-hardened" components and conformal coatings, but often the most practical approach is to install hermetically sealed electrical I/O connectors. Glass-to-metal seals provide assurance that, over the life of the enclosure, the accumulated amount of water vapor inside the box will not exceed the amount necessary to form condensation. Other applications for Micro-D hermetic connectors include vacuum chambers, cryogenics, and enclosures filled with inert gas.

Kovar® Alloy

Glenair's hermetic Micro-D shells and contacts are made from a special alloy called Kovar®, an iron-nickel-cobalt alloy consisting of 54% Fe, 29% Ni, and 17% Co. This alloy is covered by SAE specification AMS-I-23011. Kovar has a relatively low coefficient of thermal expansion.

Matched Glass-To-Metal Seals

Matched seals rely on a chemical bond between the metal and the glass. Kovar contacts and shells are first exposed to high temperatures in order to develop an oxide coating. Then, the borosilicate glass and metal components are assembled with fixtures and are fused in a firing furnace at 900° C. A strong chemical bond is created between the metal and glass. Unlike compression seals which rely on different thermal coefficients of expansion between the glass and metal, a matched seal offers better resistance to stress from thermal extremes.

Hermetic Testing

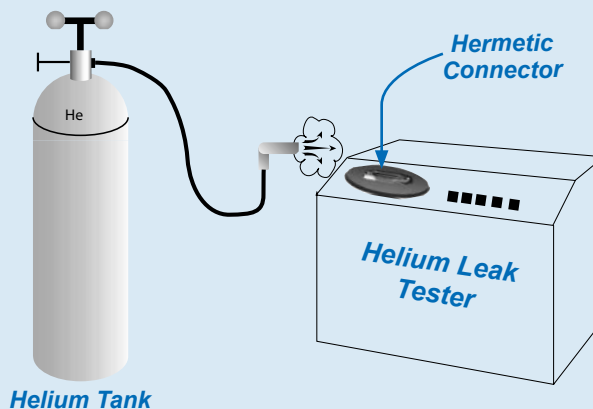
All Micro-D hermetic connectors are 100% tested prior to shipment. A helium leak test is performed to certify the hermetic seal. This test is conducted by inducing a 1 ATM vacuum on one side of the connector. Helium gas is released on the other side, and a mass spectrometer "counts" the number of helium molecules that penetrate the connector seal. Helium leak testing takes advantage of the small size of a helium molecule compared to air or water vapor. Helium is inert, rare in our atmosphere, and is easy to detect with a mass spectrometer.

Micro-D Hermetic Plating Options

Unlike regular connectors which are plated as components prior to assembly, hermetic connectors are electroplated after the parts are fired and cleaned of oxides. Typically the contacts are gold-plated and the connector shell is nickel-plated.

Connector Installation

Hermetic connectors are typically soldered or welded into panels or bulkheads. Laser welding is a good option if the connector is mounted onto Kovar. If the panel is aluminum alloy or stainless steel, then soldering is recommended. Micro-D's with o-ring seals offer another alternative. O-rings, when installed properly, will provide a very low permeability seal. The seating surface must be free from scratches or imperfections. A 32 finish is acceptable, but a 16 finish is preferred. The o-ring can be coated with a light coat of vacuum grease.



MIL-DTL-83513 Type Micro-D Hermetic Connectors General Information



MIL-DTL-83513
Connectors

MICRO-D HERMETIC CONNECTOR DESIGN NOTES

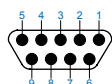
“Why can’t I get a hermetic Micro-D with pin contacts instead of sockets?”

The Micro-D TwistPin contact cannot be made from the materials that are required for hermetic contacts. Hermetic contacts are made from ferrous alloys such as Kovar® or Alloy 52. These alloys do not have spring properties. The Micro-D TwistPin contact is made from spring-temper beryllium copper. The Micro-D socket contact is a cylinder and does not provide any spring force, so Micro-D hermetic connectors are always receptacle connectors with socket contacts.

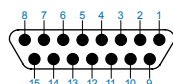
“What about high pressure?” “What is the maximum recommended pressure rating for a hermetic Micro-D?”

Glenair hermetic Micro-D's are built to safely withstand 1000 PSI of hydrostatic pressure in an open face (unmated) condition.

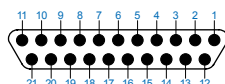
MICRO-D CONTACT ARRANGEMENTS (FACE VIEW SOCKET CONNECTOR)



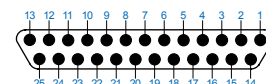
9 Socket



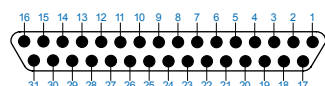
15 Socket



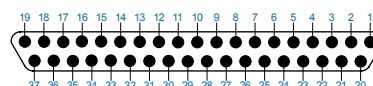
21 Socket



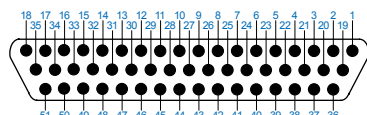
25 Socket



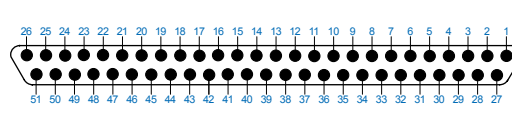
31 Socket



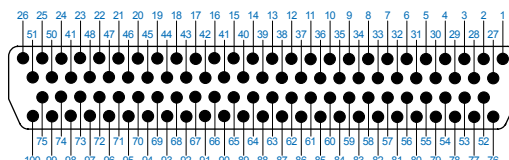
37 Socket



51 Socket (Standard 3 Row)



51 Socket (Special 2 Row)



100 Socket



MIL-DTL-83513 Type Micro-D Hermetic Connectors General Information

MATERIALS AND FINISHES

Connector Shell	Kovar® Alloy in Accordance With SAE AMS-I-23011 Class 1, Plated with Electrodeposited Nickel In Accordance With SAE-AMS-QQ-N-290 Class 2, 0.0002-0.0003 Inches Thick*.
Insulator	Borosilicate Glass
Interfacial Seal	Flourosilicone Rubber, Blue
Socket Contact	Kovar® Alloy in Accordance With SAE AMS-I-23011 Class 1, Gold Plated In Accordance With ASTM B 488 Type II, Class 1.27 (50 microinches minimum) over Nickel Underplate in Accordance With SAE-AMS-QQ-N-290 Class 2.
O-Ring	Flourosilicone Rubber, Blue
Encapsulant	Epoxy

* Additional shell materials available including titanium. Please consult factory for ordering information

PERFORMANCE SPECIFICATIONS

Current Rating	1.5 AMP
Dielectric Withstanding Voltage	150 VAC
Working Voltage	100 VDC
Insulation Resistance	5000 Megohms Minimum
Contact Resistance	30 Milliohms Maximum
Hermeticity	1 x 10 ⁻⁶ Maximum Helium Leak Rate per Second at One Atmosphere
Operating Temperature	-55° C. to +125° C.
Shock	50 g.
Vibration	20 g.
Outgassing	Meets NASA Outgassing Requirements
Mating Force	(10 Ounces) X (# of Contacts)
For additional performance requirements, please refer to MIL-DTL-83513	

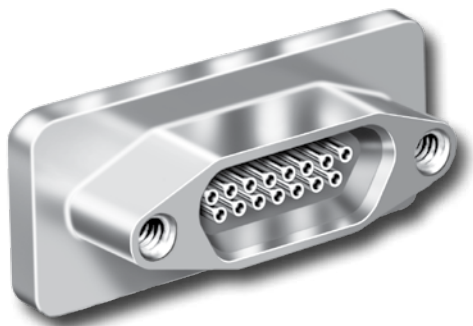
HERMETIC LEAK RATE MOD CODES

Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc's Helium per second
-585B	1 x 10 ⁻⁹ cc's Helium per second
-585C	1 x 10 ⁻⁸ cc's Helium per second

177-140H and 177-704H MIL-DTL-83513 Type Micro-D Hermetic Connectors Solder Mount



MIL-DTL-83513
Connectors



Solder these 177-140 hermetic Micro-D connectors. Featuring a matched glass-to-metal seal, these socket receptacles are designed for panel mounting.

Kovar® Shells and Contacts comply with applicable MIL-DTL-83513 requirements and are 100% intermateable with standard connectors.

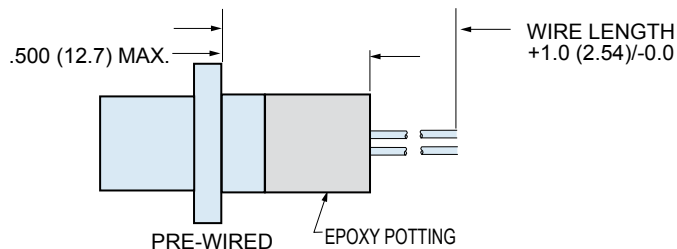
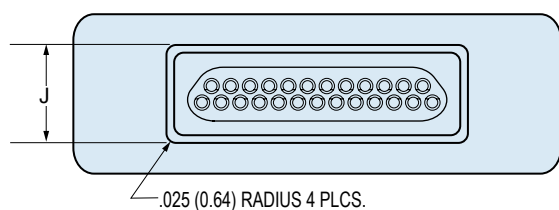
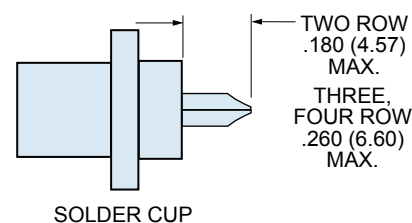
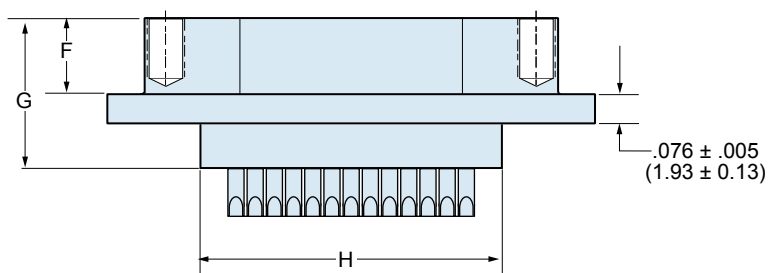
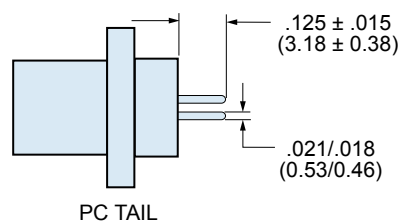
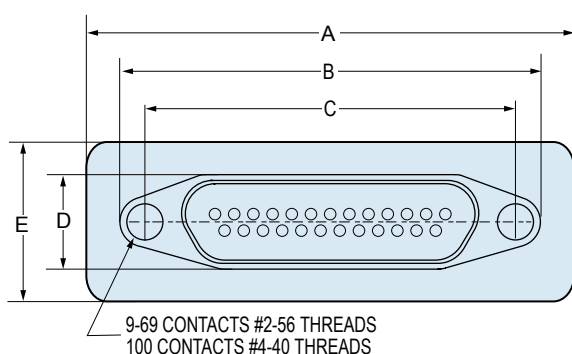
Choose 9 to 100 Contacts, with gold-plated contacts and nickel-plated shells. These connectors feature integral female jackposts.

HOW TO ORDER SOLDER CUP AND PC TAIL CONNECTORS

Series	Layout Number of Contacts	Contact Type	Termination Type
177-140H Micro-D Hermetic Socket Receptacle, Solder or Weld Mounting	9 15 21 25 31 37 51 100	S – Socket	S – Solder Cup P – PC Tail
Sample Part Number			
177-140H	15	S	P

HOW TO ORDER PRE-WIRED CONNECTORS

Series	Layout	Contact Type	Wire Gage (AWG)	Wire Type	Wire Color	Wire Length Inches
177-704H	9 15 21 25 31 37 51 100	S – Socket	6 – #26 8 – #28 0 – #30	K – M22759/11 600 Vrms Teflon® (TFE) (Not Available in #30 AWG) J – M22759/33 600 Vrms Modified Cross-Linked Tefzel® (ETFE)	1 – White 2 – Yellow 5 – Color-Coded Stripes Per MIL-STD-681 (#26 gage only) 7 – Ten Color Repeat	18 Wire Length In Inches. "18" Specifies 18 Inches.
Sample Part Number						
177-704H	25	S	6	K	1	– 18



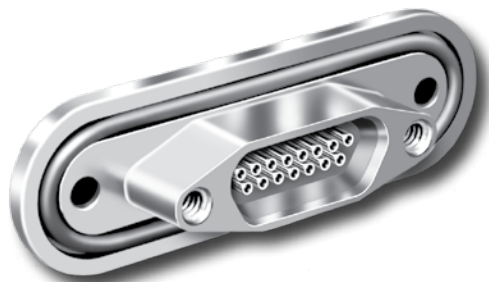
DIMENSIONS

Layout	A Max.		B Max.		C		D Max.		E Max.		F		G Max.		H		J	
	In.	mm.	In.	mm.	In. ± .003	mm. ± 0.08	In.	mm.	In.	mm.	In. ± .004	mm. ± 0.10	In.	mm.	In. ± .004	mm. ± 0.10	In. ± .004	mm. ± 0.10
9S	.785	19.94	.695	14.35	.565	14.35	.250	6.35	.310	7.87	.195	4.95	.394	10.01	.398	10.11	.268	6.81
15S	1.030	26.16	.855	21.71	.715	18.16	.250	6.35	.425	10.80	.195	4.95	.394	10.01	.535	13.59	.255	6.48
21S	1.180	29.97	1.005	25.53	.865	21.97	.250	6.35	.425	10.80	.195	4.95	.394	10.01	.750	19.05	.255	6.48
25S	1.280	32.51	1.105	28.06	.965	24.51	.250	6.35	.425	10.80	.195	4.95	.394	10.01	.785	19.94	.255	6.48
31S	1.430	36.32	1.255	31.88	1.115	28.32	.250	6.35	.425	10.80	.195	4.95	.394	10.01	.935	23.75	.255	6.48
37S	1.580	40.13	1.425	36.20	1.265	32.13	.250	6.35	.425	10.80	.195	4.95	.394	10.01	1.085	27.56	.255	6.48
51S 2 row	1.930	49.02	1.615	41.02	1.775	45.08	.310	7.87	.425	10.80	.199	5.05	.394	10.01	1.030	26.16	.297	7.5
51S 3 row	1.530	38.86	1.215	30.86	1.361	34.57	.310	7.87	.468	11.89	.199	5.05	.394	10.01				
100S	2.260	57.40	1.800	45.72	2.010	51.05	.330	8.38	.517	13.13	.199	5.05	.394	10.01	1.765	44.8	.355	9.0

177-705H and 177-706H MIL-DTL-83513 Type Micro-D Hermetic Connectors Rear Panel Mount with O-Ring



MIL-DTL-83513
Connectors



Fluorosilicone O-Ring eliminates the cost of soldering or welding the connector to a bulkhead.

Kovar® Shells and Contacts comply with applicable MIL-DTL-83513 requirements and are 100% intermateable with standard connectors.

Solder Cup, PC Tail or Pre-Wired and Fully Potted

Suitable for #26 gage wire or smaller, solder cup versions feature gold-plated contacts. Choose PC tails for attachment to flex circuits or rigid boards. Solder cup versions are also available pre-wired and potted.

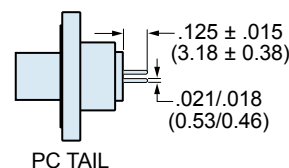
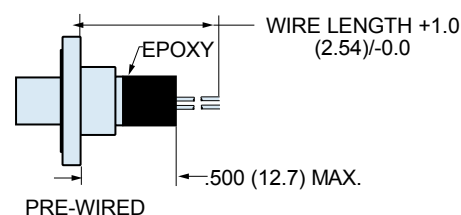
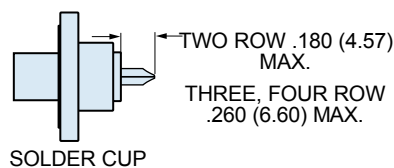
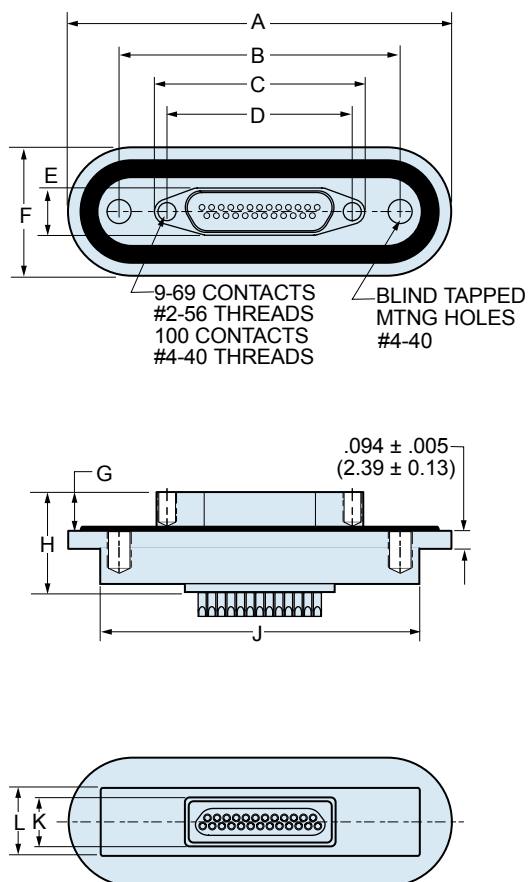
HOW TO ORDER SOLDER CUP AND PC TAIL CONNECTORS

Series	Layout Number of Contacts	Contact Type	Termination Type	Mounting Threads
177-705H Micro-D Hermetic Socket Receptacle, Rear Panel Mount with O-Ring, Solder Cup or PC Tail	9 15 21 25 31 37 51 100	S – Socket	S – Solder Cup P – PC Tail	U – #4 - 40 UNC M – M3 Metric
Sample Part Number				
177-705H	15	S	P	U

HOW TO ORDER PRE-WIRED CONNECTORS

Series	Layout	Contact Type	Wire Gage (AWG)	Wire Type	Wire Color	Wire Length Inches
177-706H	9 15 21 25 31 37 51 100	S – Socket	6 – #26 8 – #28 0 – #30	K – M22759/11 600 Vrms Teflon (TFE) (Not Available in #30 AWG) J – M22759/33 600 Vrms Modified Cross-Linked Tefzel (ETFE)	1 – White 2 – Yellow 5 – Color-Coded Stripes Per MIL-STD-681 (#26 gage only) 7 – Ten Color Repeat	18 Wire Length In Inches. "18" Specifies 18 Inches.
Sample Part Number						
177-706H	25	S	6	K	1	– 18

177-705H and 177-706H MIL-DTL-83513 Type Micro-D Hermetic Connectors Rear Panel Mount with O-Ring



DIMENSIONS

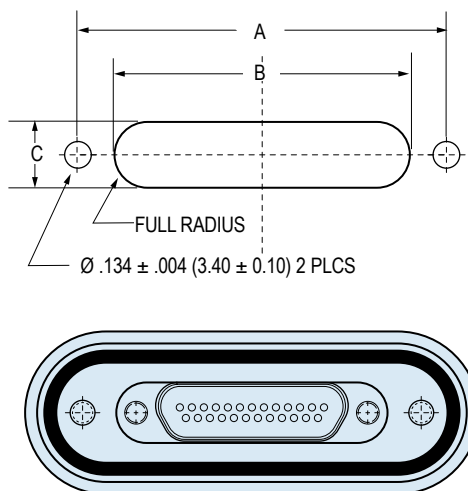
Layout	A Max.		B		C MAX.		D		E MAX.		F Max.		G		H Max.		J		K		L Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
9S	1.488	37.80	1.011	25.67	.728	18.49	.565	14.35	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.254	31.85	.254	6.45	.358	9.09
15S	1.638	41.61	1.161	29.48	.878	22.30	.715	18.16	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.414	36.91	.254	6.45	.358	9.09
21S	1.788	45.42	1.311	33.29	1.028	26.11	.865	21.97	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.564	39.72	.254	6.45	.358	9.09
25S	1.888	47.96	1.411	35.83	1.128	28.65	.965	24.51	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.664	42.26	.254	6.45	.358	9.09
31S	2.038	51.76	1.561	39.64	1.278	32.46	1.115	28.32	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.814	46.07	.254	6.45	.358	9.09
37S	2.188	55.57	1.711	43.45	1.428	36.27	1.265	32.13	.250	6.35	.675	17.14	.195	4.95	.526	13.36	1.984	50.39	.254	6.45	.358	9.09
51S 2 row	2.538	64.47	2.061	52.35	1.778	45.16	1.615	41.02	.250	6.35	.675	17.14	.195	4.95	.526	13.36	2.334	59.28	.254	6.45	.358	9.09
51S 3 row	2.138	54.30	1.661	42.19	1.378	35.00	1.215	30.86	.310	7.87	.715	18.16	.195	4.95	.526	13.36	1.920	48.77	.254	6.45	.358	9.09
100S	2.820	71.63	2.312	58.72	2.002	50.85	1.800	45.72	.330	8.38	.795	20.19	.195	4.95	.599	15.21	2.569	65.25	.254	6.45	.358	9.09

177-705H and 177-706H
MIL-DTL-83513 Type Micro-D Hermetic Connectors
Rear Panel Mount with O-Ring



MIL-DTL-83513
Connectors

PANEL CUTOUT DIMENSIONS FOR 177-705 AND 177-706



Layout	A		B		C	
	In. ± .003	mm. ± 0.08	In. ± .005	mm. ± 0.13	In. + .005/-0.0	mm. + 0.13/-0.0
9	1.011	25.69	.731	18.56	.252	6.40
15	1.161	29.50	.881	22.37	.252	6.40
21	1.311	33.31	1.031	26.18	.252	6.40
25	1.411	35.85	1.131	28.72	.252	6.40
31	1.561	39.66	1.281	32.53	.252	6.40
37	1.711	43.47	1.431	36.34	.252	6.40
51 2 row	2.061	52.35	1.781	45.24	.252	6.40
51 3 row	1.661	42.19	1.381	35.08	.310	7.87
100	2.312	58.72	2.005	50.93	.330	8.38

Selected MIL-DTL-26500 Type Hermetic Receptacles— *Popular Connector Designs Superseded by MIL-DTL-83723*

Product Applications

The MIL-DTL-26500 type connector is ideally suited for use on commercial, military and aerospace interconnect systems that demand hermetic sealing and high vibration resistance in a medium density cylindrical connector. Thirty-four insert arrangements are available in both threaded and bayonet coupling styles for a wide range of applications.

Materials

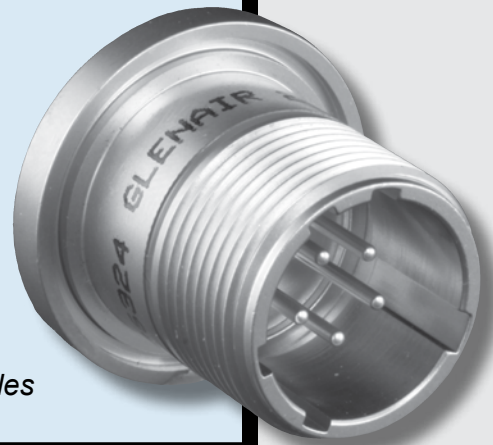
Glenair MIL-DTL-26500 Hermetic connectors are offered in either passivated stainless steel or fused tin over stainless steel,

Nickel-iron alloy 52 contacts—available in sizes 12, 16 and 20—depending on the layout chosen—offer a broad selection of insert arrangement options. Optional solder cup or eyelet contact terminations are standard. Contacts for other applications such as thermocouple or flex prints are also available.

Same-Day Inventory

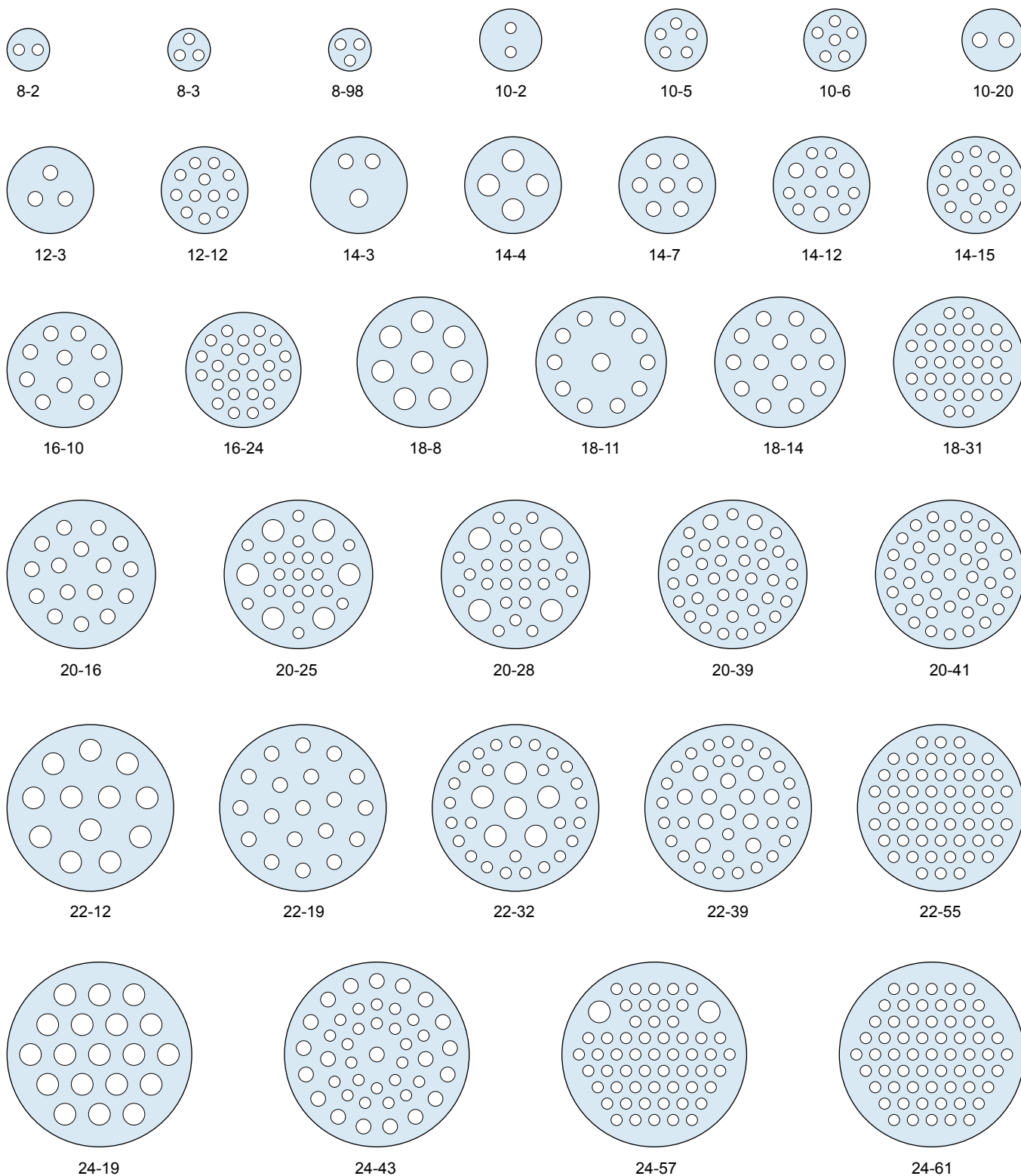
Glenair makes all its hermetic connectors in-house from design to finished product, affording you outstanding availability on stock products and fast turnaround on special orders.

<1x10⁻⁷ cc/second Helium Leak Rate @ 1 ATM Differential
Quick Release Bayonet or Threaded Coupling
Solder Cup, Eyelet, PCB, Flex and Thermocouple Contacts
Space Grade Special Screening Available
Complete Range of Materials and Finishes,
Including Titanium and Inconel® Options.
24 Shell Sizes Available with 2 to 61 Contacts
Jam Nut, Flange Mount and Solder Flange Mount Receptacles



with glass insulators fused to the connector shell, and contacts meeting a leak rate of 1×10^{-7} cc/ Helium per second. Maximum design flexibility is built into the MIL-DTL-26500 hermetic connector—with a minimum of 2 to a maximum of 61 circuits per connector in a wide variety of contact arrangements IAW MIL-STD-1554. Fluorosilicone elastomer interfacial and peripheral seals ensure positive sealing with plug connectors.

Catalog contents—including part numbers, materials and dimensions—are accurate to the best of our ability when we go to print. Even so, customers are advised to consult the factory for the latest specifications, particularly to confirm critical dimensions such as connector lengths, threads, and so on. When errors or mistakes are brought to our attention, corrected content is posted immediately to www.glenair.com.



J

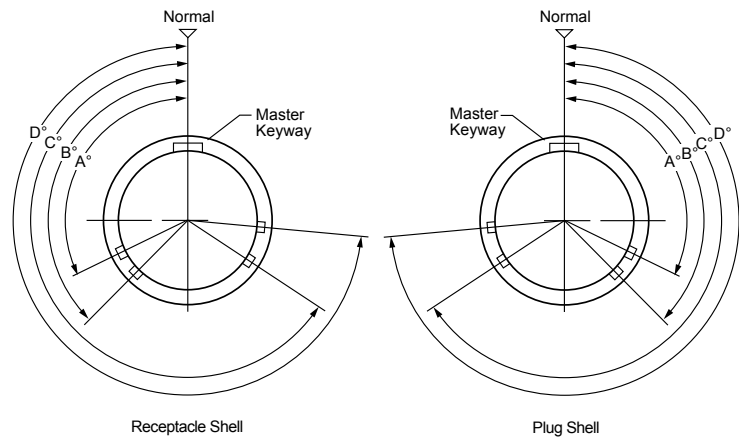
MIL-DTL-26500 Type Hermetic Class Connectors Threaded and Bayonet Coupling Insert Arrangements and Keyway Positions (IAW MIL-STD-1554)



MIL-DTL-
26500 TYPE

Insert Arrangements					
Shell Size Designator	Insert Arrangement Dash Number	Service Rating	Contact Size and Quantity		
			20	16	12
08	08-02	I	2		
	08-03	I	3		
	08-98	I	3		
10	10-02	I	2		
	10-05	I	5		
	10-06	I	6		
	10-20	I		2	
12	12-03	I		3	
	12-12	I		12	
14	14-03*	I		3*	
	14-04	I			4
	14-07	I		7	
	14-12	I	9	3	
	14-15	I	15		
16	16-10	I		10	
	16-24	I	24		
18	18-08	I			8
	18-11*	I		11*	
	18-14	I		14	
	18-31	I	31		
20	20-16	I		16	
	20-25	I	19		6
	20-28	I	24		4
	20-39	I	37	2	
	20-41	I	41		
22	22-12	I			12
	22-19	I		19	
	22-32	I	26		6
	22-39	I	27	12	
	22-55	I	55		
24	24-19	I			19
	24-43	I	23	20	
	24-57	I	55		2
	24-61	I	61		

*1 shielded.



Keyway Positions (Front Face of Pin Insert)					
Shell Size	Keyway Position	A°	B°	C°	D°
08 through 10	Normal	105°	140°	215°	265°
	6	102°	132°	248°	320°
	7	80°	118°	230°	312°
	8	35°	140°	205°	275°
	9	64°	155°	234°	304°
	Y or 10	25°	115°	220°	270°
12 through 24	Normal	105°	140°	215°	265°
	6	18°	149°	192°	259°
	7	92°	152°	222°	342°
	8	84°	152°	204°	334°
	9	24°	135°	199°	240°
	Y or 10	98°	152°	268°	338°

Y Position not available for shell size 8.
Use "Y" when ordering military parts, "10" when ordering commercial parts

J



MIL-DTL-26500 Type Hermetic Class Connectors Standard Materials and Finishes

TABLE I: HERMETIC CLASS MATERIALS

Shell, Barrel Coupling Nut and Jam Nut (Hermetic)	Cold rolled steel per ASTM 108
Interfacial Seals and O-Rings	Fluorosilicone rubber
Contacts	Nickel-iron alloy per MIL-I-23011, Class 2
Bayonet Pins	Corrosion resistant steel per QQ-S-764, Type 303
Inserts	Glass

TABLE II: HERMETIC CLASS FINISHES

Plating Code	Material	Finish	Specification
Glenair Commercial Equivalent Plating Codes			
Z1	Stainless Steel	Passivate	AMS-QQ-P-35
FT	Carbon Steel	Fused Tin Plate	ASTM-B545 or ASTM-B339
ZL	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290, Class 2
MIL-DTL-26500 Plating Codes			
D	Cold Rolled Steel	Fused Tin over Copper over Nickel	MIL-T-10727, MIL-C-14550, QQ-N-290
E	Stainless Steel	Passivate	QQ-S-764, Type 303
N	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290, Class 2

*Additional materials are available, including titanium and Inconel®. Consult factory for ordering information.

**MIL-DTL-26500 Type
Hermetic Class Connectors**
Bayonet and Thread Coupling and Electrical Service Data



**MIL-DTL-
26500 TYPE**

BAYONET COUPLING

Description	Military Designation	Glenair Designation
Jam Nut Mount	MS24265H*B*CN MS24265H*B*EN	230-039 230-039
Solder Mount	MS247034H*B*CN MS27034H*B*EN	230-036 230-036
Square Flange	MS24264H*B*CN MS24264H*B*EN	XXXXXXXX XXXXXXXX
Mating Plug	MS24266R*B*SN	

THREAD COUPLING

Description	Military Designation	Glenair Designation
Jam Nut Mount	MS24265H*T*CN MS24265H*T*EN	XXXXXX XXXXXX
Solder Mount	MS27034H*T*CN MS27034H*T*EN	230-038 230-038
Square Flange	MS24264H*T*CN MS24264H*T*EN	237-165 237-165
Mating Plug	MS24266R*T*SN	

Based on contact size, the maximum current carried by the connector is the same permitted by the wire bundle. Maximum current ratings and voltage drops demonstrated in tests of fully assembled connectors are shown in the following table:

ELECTRICAL SERVICE DATA

Contact Size	Test Current (Amps)	Potential Drop (Millivolts)
20	5	100
16	10	95
12	17	95

Method 3001 of MIL-STF-1344 specifying high potential test voltage mandates that tested unmated connectors will not exceed 2 milliamperes in leakage and present no sign of electrical breakdown or flashover per the following table:

HIGH POTENTIAL TEST VOLTAGE

Service Rating	Test Voltage (RMS 60 CPS)
1	1500

How To Order: Commercial

Connector Material / Finish
FT - Cold Rolled Steel - Fused Tin Finish
Z1 - Stainless Steel - Passivate Finish
ZL - Stainless Steel - Nickel Finish

Insert Arrangement
MIL-STD-1554
See Pages J-2 - J-3

Alternate Key Position
6, 7, 8, 9, 10
(*N* = Normal)

230-036

Z1

12 - 8-3

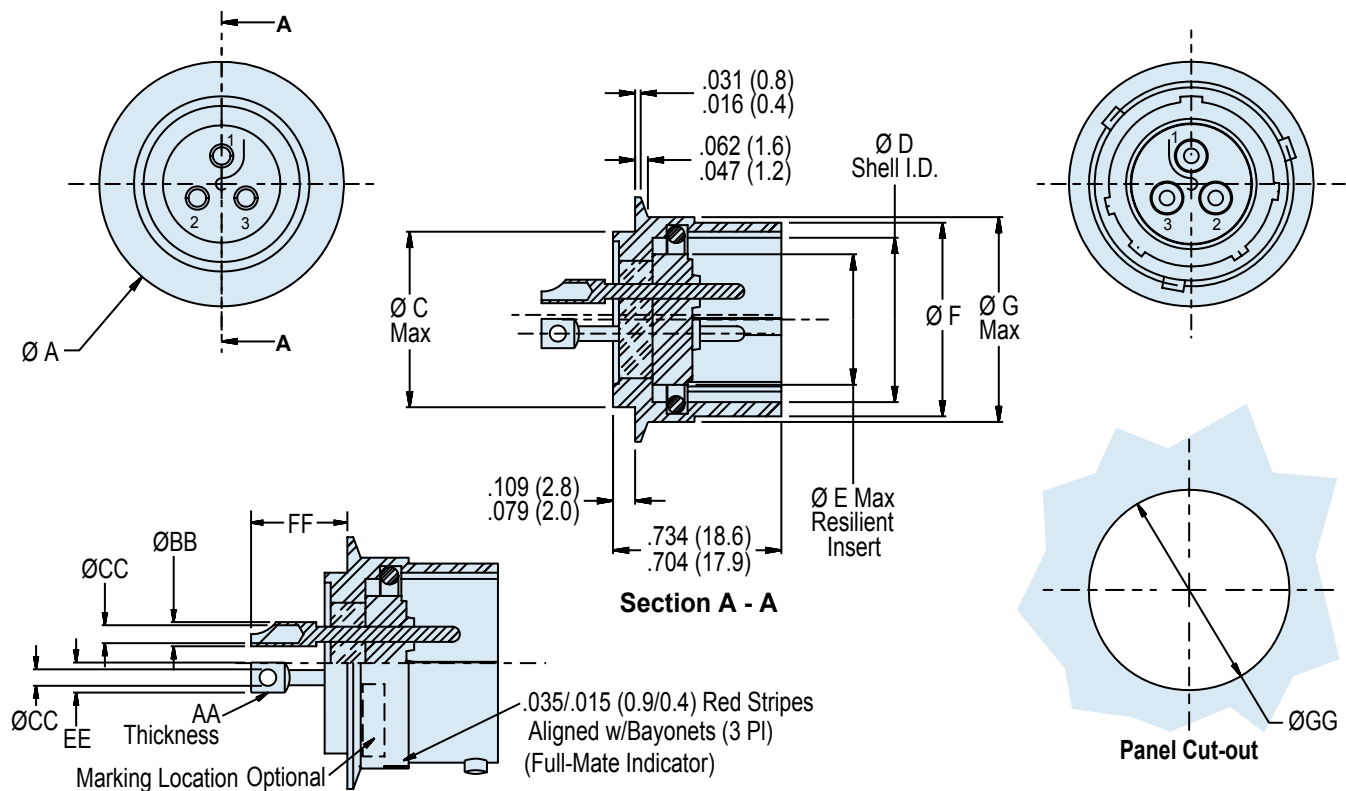
P

A

Basic Series

Shell Size
(See Table I)

Contact Termination
P - Pin, Solder Cup
X - Pin, Eyelet



230-036

MIL-DTL-26500 Type Hermetic Class Receptacle
MS27034H*B Type Solder Flange Mount, Bayonet Coupling**

**MIL-DTL-
26500 TYPE**
TABLE I: Shell Size, Connector Dimensions and Panel Cut-Out

Shell Size	Ø A	Ø C Max	Ø D Shell I.D.	Ø E Resilient Insert	Ø F	Ø G Max	Panel Cut-Out Ø GG
8	.725/.685 (18.4/17.4)	.437 (11.1)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.452/.442 (11.5/11.2)
10	.860/.820 (21.8/20.8)	.562 (14.3)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.577/.567 (14.7/14.4)
12	1.065/1.025 (27.1/26.0)	.750 (19.1)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.765/.755 (19.4/19.2)
14	1.110/1.070 (28.2/27.2)	.812 (20.6)	.774/.769 (19.7/19.5)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	.827/.817 (21.0/20.8)
16	1.230/1.190 (31.2/30.2)	.937 (23.8)	.901/.896 (22.9/22.8)	.754 (19.2)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	.952/.942 (24.2/23.9)
18	1.360/1.320 (34.5/33.5)	1.062 (27.0)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	1.077/1.067 (27.4/27.1)
20	1.495/1.455 (38.0/37.0)	1.182 (30.0)	1.132/1.127 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.197/1.187 (30.4/30.1)
22	1.610/1.570 (40.9/39.9)	1.312 (33.3)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.327/1.317 (33.7/33.5)
24	1.745/1.705 (44.3/43.3)	1.432 (36.4)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.447/1.437 (36.8/36.5)

TABLE II: Contacts

Contact Size	Contact Type	AA	ØØ BB	ØØ CC Min	DD	FF Max
12	Cup	--	.150 (3.8)	.112 (2.8)	.200 (5.1)	.400 (10.2)
12	Eyelet	.035 (0.9)	--	.112 (2.8)	--	.400 (10.2)
16	Cup	--	.103 (2.6)	.069 (1.8)	.125 (3.2)	.400 (10.2)
16	Eyelet	.025 (0.6)	--	.069 (1.8)	--	.400 (10.2)
20	Cup	--	.077 (2.0)	.042 (1.1)	.080 (2.0)	.330 (8.4)
20	Eyelet	.015 (0.4)	--	.042 (1.1)	--	.330 (8.4)

APPLICATION NOTES

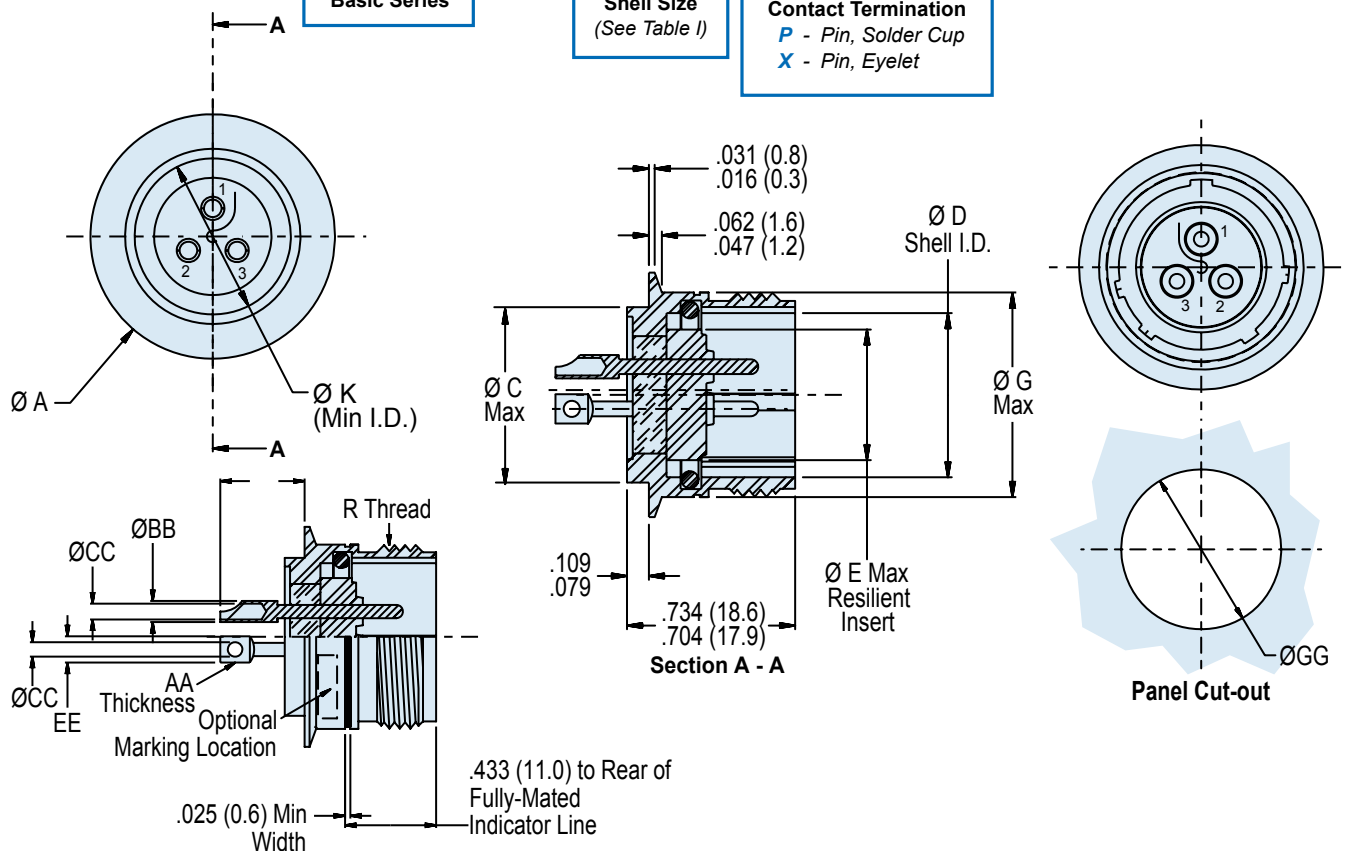
- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair 230-036 will mate with any QPL MIL-DTL-26500, MS24266 and MS27615 series bayonet coupling plug of same size, keyway and insert polarization.
- Performance:
Hermeticity - <10⁻⁷ ccHe/sec @ 1 atmosphere differential
Dielectric withstanding voltage - consult factory or MIL-STD-1554
Insulation resistance - 5000 megohms min @ 500VDC
- Material/ Finish:
Bayonets—Cres/Passivated
Contacts—52 Nickel alloy/Gold plated
Insulators—Glass/NA
Seals—fluorosilicone elastomer N.A.
- Metric Dimensions (mm) are indicated in parentheses.

How To Order: Commercial

Connector Material / Finish FT - Cold Rolled Steel - Fused Tin Finish Z1 - Stainless Steel - Passivate Finish ZL - Stainless Steel - Nickel Finish	Insert Arrangement MIL-STD-1554 See Pages J-2 - J-3	Alternate Key Position 6, 7, 8, 9, 10 (N = Normal)
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230-038	Z1	12	-03	P	A
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Basic Series	Shell Size (See Table I)	Contact Termination P - Pin, Solder Cup X - Pin, Eyelet
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APPLICATION NOTES

- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair 230-038 will mate with any QPL MIL-DTL-26500, MS24266 and MS27615 series bayonet coupling plug of same size, keyway and insert polarization.
- Performance:
 Hermeticity - $< \times 10^{-7}$ ccHe/sec @ 1 atmosphere differential
 Dielectric withstanding voltage - consult factory or MIL-STD-1554
 Insulation resistance - 5000 megohms min @ 500VDC
- Material/ Finish:
 Contacts—52 Nickel alloy/Gold plated
 Insulators—Glass/NA
 Seals—fluorosilicone elastomer N.A.
- Metric Dimensions (mm) are indicated in parentheses.

230-038
MIL-DTL-26500 Type Hermetic Class Receptacle
MS27034H*T Type Solder Flange Mount, Threaded Coupling**



**MIL-DTL-
26500 TYPE**

TABLE I: Shell Size, Connector Dimensions and Panel Cut-Out

Shell Size	Ø A	Ø C Max	Ø D Shell I.D.	Ø E Resilient Insert	Ø G Max	Panel Cut-Out Ø GG	R Coupling Thread UNEF-2A
8	.725/.685 (18.4/17.4)	.437 (11.1)	.433/.428 (11.0/10.9)	.312 (7.9)	.561 (14.2)	.452/.442 (11.5/11.2)	.562-24
10	.860/.820 (21.8/20.8)	.562 (14.3)	.535/.530 (13.6/13.5)	.388 (9.9)	.696 (17.7)	.577/.567 (14.7/14.4)	.687-24
12	1.065/1.025 (27.1/26.0)	.750 (19.1)	.705/.700 (17.9/17.8)	.558 (14.2)	.875 (22.2)	.765/.755 (19.4/19.2)	.875-20
14	1.110/1.070 (28.2/27.2)	.812 (20.6)	.774/.769 (19.7/19.5)	.627 (15.9)	.935 (23.7)	.827/.817 (21.0/20.8)	.937-20
16	1.230/1.190 (31.2/30.2)	.937 (23.8)	.901/.896 (22.9/22.8)	.754 (19.2)	1.062 (27.0)	.957/.942 (24.3/23.9)	1.062-18
18	1.360/1.320 (34.5/33.5)	1.062 (27.0)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.187 (30.1)	1.077/1.067 (27.4/27.1)	1.187-18
20	1.495/1.455 (38.0/37.0)	1.182 (30.0)	1.132/1.127 (28.8/28.6)	.965 (24.5)	1.312 (33.3)	1.197/1.187 (30.4/30.1)	1.312-18
22	1.610/1.570 (40.9/39.9)	1.312 (33.3)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.437 (36.5)	1.327/1.317 (33.7/33.5)	1.437-18
24	1.745/1.705 (44.3/43.3)	1.432 (36.4)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.262 (32.1)	1.447/1.437 (36.8/36.5)	1.562-18

TABLE II: Contacts

Contact Size	Contact Type	AA	ØØ BB	ØØ CC Min	DD	FF Max
12	Cup	--	.150 (3.8)	.112 (2.8)	.200 (5.1)	.400 (10.2)
12	Eyelet	.035 (0.9)	--	.112 (2.8)	--	.400 (10.2)
16	Cup	--	.103 (2.6)	.069 (1.8)	.125 (3.2)	.400 (10.2)
16	Eyelet	.025 (0.6)	--	.069 (1.8)	--	.400 (10.2)
20	Cup	--	.077 (2.0)	.042 (1.1)	.080 (2.0)	.330 (8.4)
20	Eyelet	.015 (0.4)	--	.042 (1.1)	--	.330 (8.4)

230-039
MIL-DTL-26500 Type Hermetic Class Receptacle
Single Hole Mount, Bayonet Coupling, MS24265H*B* Type

How To Order: Commercial

Connector Material / Finish
FT - Cold Rolled Steel - Fused Tin Finish
Z1 - Stainless Steel - Passivate Finish
ZL - Stainless Steel - Nickel Plated

Insert Arrangement
Per MIL-STD-1554
See Pages J-2 - J-3

Alternate Key Position
6, 7, 8, 9, 10
(*N* = Normal)

230-039

FT

12

- 3

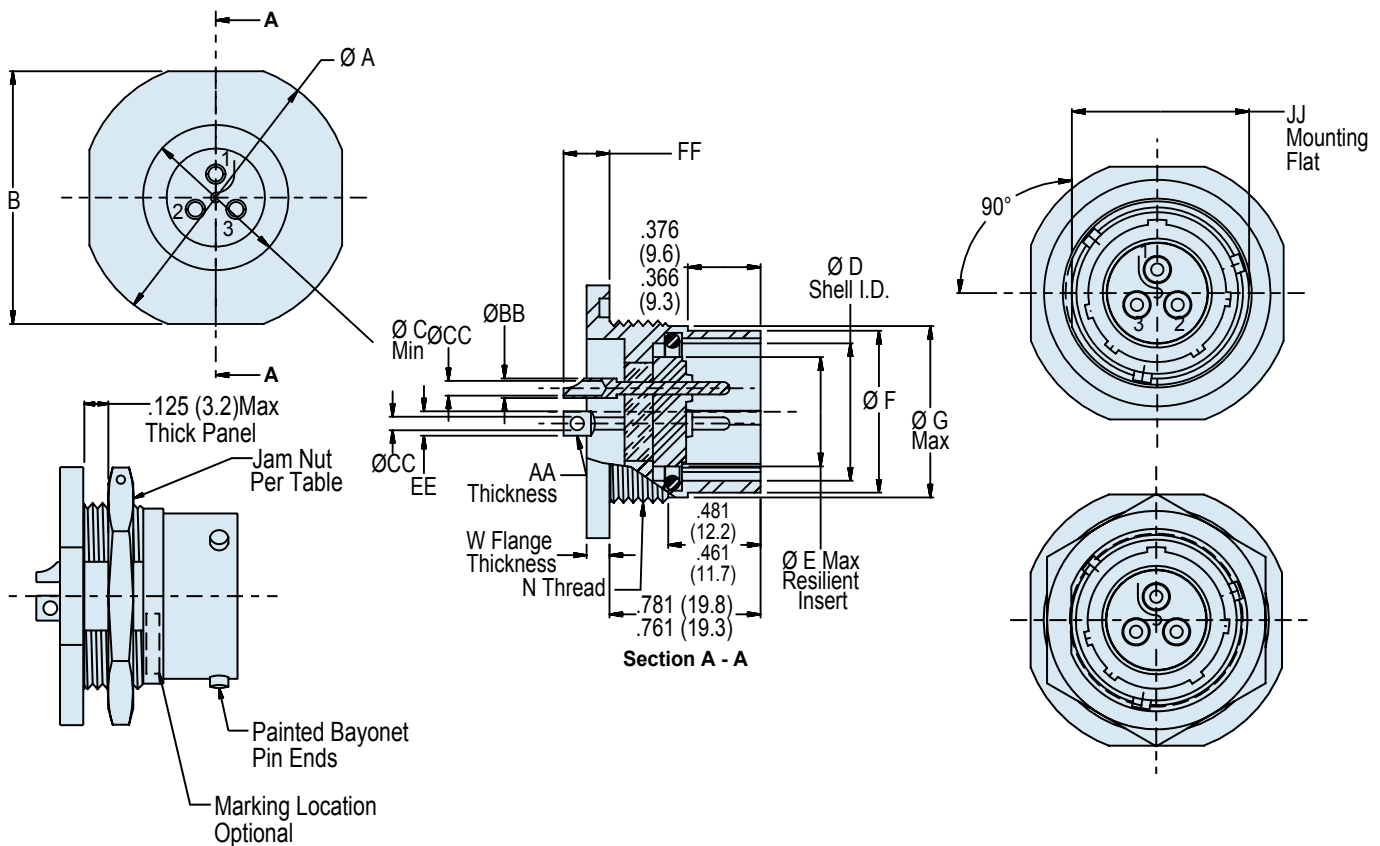
P

6

Basic Series

Shell Size
See Table I

Contact Termination
P - Pin, Solder Cup
X - Pin, Eyelet



230-039
MIL-DTL-26500 Type Hermetic Class Receptacle
Single Hole Mount, Bayonet Coupling, MS24265H*B* Type



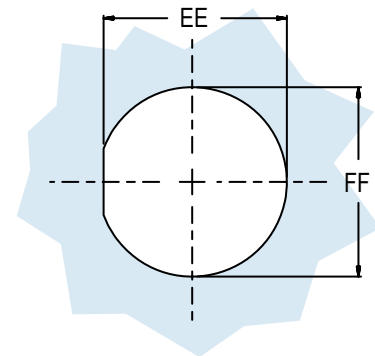
**MIL-DTL-
26500 TYPE**

TABLE I: Shell Size, Connector Dimensions and Panel Cut-Out

Shell Size	Ø A Max	B	Ø C Min	Ø D Shell I.D.	Ø E Resilient Insert	Ø F	Ø G mAX	N Thread	JJ Mounting Flat	Flange Thickness W ± .020 (0.5)	Panel Cut-Out EE	Panel Cut-Out FF	Jam Nut MS3186
8	1.068 (27.1)	.979 (24.9)	.493 (12.5)	.433/.428 (11.0/10.9)	.312 (7.9)	.536/.531 (13.6/13.5)	.561 (14.2)	.625-20 UN-2A	.596/.590 (15.1/15.0)	.117 (3.0)	.605 (15.4)	.635 (16.1)	-105
10	1.192 (30.3)	1.104 (28.0)	.555 (14.1)	.535/.530 (13.6/13.5)	.388 (9.9)	.659/.654 (16.7/16.6)	.696 (17.7)	.750-20 UNEF 2A	.721/.715 (18.3/18.2)	.117 (3.0)	.730 (18.5)	.760 (19.3)	-107
12	1.380 (35.1)	1.291 (32.8)	.743 (18.9)	.705/.700 (17.9/17.8)	.558 (14.2)	.829/.824 (21.1/20.9)	.875 (22.2)	.937-20 UNEF-2A	.908/.902 (23.1/22.9)	.117 (3.0)	.917 (23.3)	.947 (24.1)	-110
14	1.505 (28.2)	1.391 (35.3)	.805 (20.4)	.774/.769 (19.7/19.5)	.627 (15.9)	.898/.893 (22.8/22.7)	.935 (23.7)	1.000-20 UNEF-2A	.971/.965 (24.7/24.5)	.117 (3.0)	.980 (24.9)	1.010 (25.7)	-111
16	1.630 (41.4)	1.516 (38.5)	.931 (23.6)	.901/.896 (22.9/22.8)	.772 (19.6)	1.025/1.020 (26.0/25.9)	1.062 (27.0)	1.125-20 UNEF-2A	1.096/1.090 (27.8/27.7)	.117 (3.0)	1.105 (28.1)	1.135 (28.8)	-112
18	1.765 (44.8)	1.641 (41.7)	1.055 (26.8)	1.007/1.002 (25.6/25.5)	.860 (21.8)	1.131/1.126 (28.7/28.6)	1.187 (30.1)	1.250-18 UNEF-2A	1.220/1.214 (31.0/30.8)	.117 (3.0)	1.229 (31.2)	1.260 (32.0)	-116
20	1.860 (47.2)	1.766 (44.9)	1.243 (31.6)	1.132/1.125 (28.8/28.6)	.985 (25.0)	1.256/1.251 (31.9/31.8)	1.312 (33.3)	1.375-18 UNEF-2A	1.345/1.339 (34.2/34.0)	.117 (3.0)	1.354 (34.4)	1.385 (35.2)	-117
22	2.068 (52.5)	1.954 (49.6)	1.305 (33.1)	1.257/1.252 (31.9/31.8)	1.110 (28.2)	1.381/1.376 (35.1/35.0)	1.437 (36.5)	1.500-18 UNEF-2A	1.470/1.464 (37.3/37.2)	.148 (3.8)	1.497 (38.0)	1.510 (38.4)	-120
24	2.160 (54.9)	2.079 (52.8)	1.493 (37.9)	1.382/1.377 (35.1/35.0)	1.235 (31.4)	1.506/1.501 (38.3/38.1)	1.562 (39.7)	1.625-18 UNEF-2A	1.595/1.589 (40.5/40.4)	.148 (3.8)	1.604 (40.7)	1.635 (41.5)	-121

TABLE II: Contacts

Contact Size	Contact Type	AA	ØØ BB	ØØ CC Min	DD	FF Max
12	Cup	--	.150 (3.8)	.112 (2.8)	--	.235 (6.0)
12	Eyelet	.035 (0.9)	--	--	.200 (5.1)	.235 (6.0)
16	Cup	--	.103 (2.6)	.069 (1.8)	--	.235 (6.0)
16	Eyelet	.025 (0.6)	--	--	.125 (3.2)	.235 (6.0)
20	Cup	--	.077 (2.0)	.042 (1.1)	--	.165 (4.2)
20	Eyelet	.015 (0.4)	--	--	.080 (2.0)	.165 (4.2)



J

APPLICATION NOTES

- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair 230-039 will mate with any QPL MIL-DTL-MS24266 type bayonet coupling plug of same size, keyway and insert polarization.
- Performance:
 Hermeticity - 1×10^{-7} ccHe/sec @ 1 atmosphere differential
 Dielectric withstanding voltage - consult factory or MIL-STD-1554
 Insulation resistance - 5000 megohms min @ 500VDC
- Material/ Finish:
 Shell and Jam Nut—specified by class
 Pin contacts—nickel-iron alloy 52/gold
 Bayonets—Cres/Passivated
 Contacts—52 Nickel alloy/Gold plated
 Insulators—Glass/NA
 Seals—fluorosilicone elastomer N.A.
- Metric Dimensions (mm) are indicated in parentheses.

How To Order: Commercial

Connector Material / Finish
SM - Carbon Steel/Electroless Nickel

Insert Arrangement
 MIL-STD-1554
 See Pages J-2 - J-3

Alternate Key Position
 6, 7, 8, 9, 10
 (N = Normal)

237-165

Z1

12 - 8-3

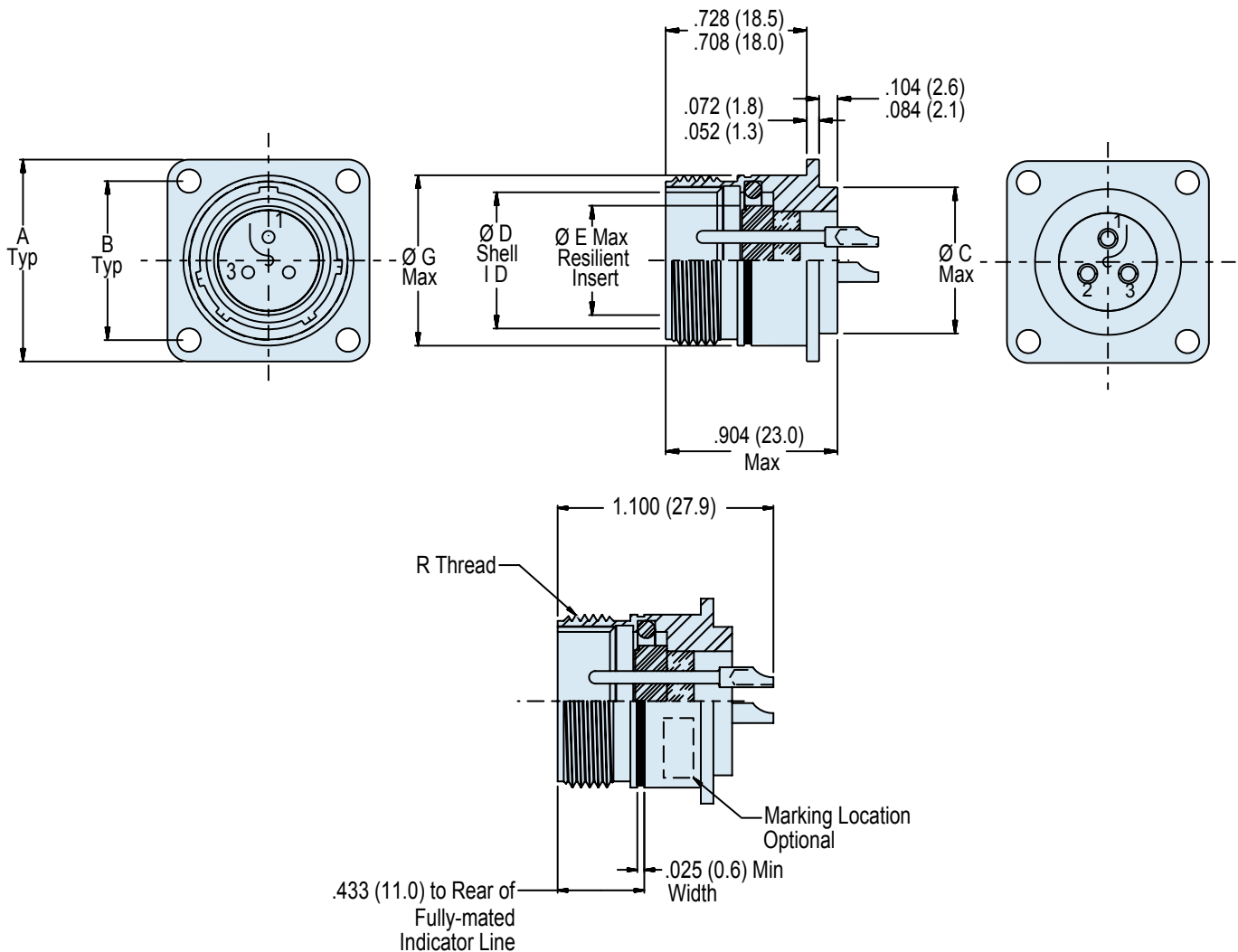
P

A

Basic Series

Shell Size
 (See Table I)

Contact Termination
P - Pin, Solder Cup
X - Pin, Eyelet



J

237-165
MIL-DTL-26500 Type Hermetic Class Receptacle
MS26424H*T Type Square Flange Mount, Threaded Coupling**



**MIL-DTL-
26500 TYPE**

TABLE I: Shell Size, Connector Dimensions and Panel Cut-Out

Shell Size	A	B	Ø C	Ø D Shell I.D.	Ø E Max Resilient Insert	Ø G Max	Ø H Through 4 Places	R Coupling Thread UNEF-2A	Panel Cut-Out Min Ø
8	.812 (20.6)	.594 (15.1)	.500/.494 (12.7/12.5)	.433/.428 (11.0/10.9)	.318 (8.1)	.561 (14.2)	.125/.116 (3.2/2.9)	.562-24	.572 (14.5)
10	.937 (23.8)	.719 (18.3)	.562/.556 (14.3/14.1)	.535/.530 (13.6/13.5)	.394 (10.0)	.696 (17.7)	.125/.116 (3.2/2.9)	.688-24	.706 (17.9)
12	1.031 (26.2)	.812 (20.6)	.750/.744 (19.1/18.9)	.705/.700 (17.9/17.8)	.564 (14.3)	.875 (22.2)	.125/.116 (3.2/2.9)	.875-20	.885 (22.5)
14	1.125 (28.6)	.906 (23.0)	.812/.806 (20.6/20.5)	.774/.769 (19.7/19.5)	.633 (16.1)	.935 (23.7)	.125/.116 (3.2/2.9)	.938-20	.946 (24.0)
16	1.250 (31.8)	.969 (24.6)	.937/.931 (23.8/23.6)	.901/.896 (22.9/22.8)	.760 (19.3)	1.062 (27.0)	.125/.116 (3.2/2.9)	1.062-18	1.072 (27.2)
18	1.343 (34.1)	1.062 (27.0)	1.062/1.056 (27.0/26.8)	1.007/1.002 (25.6/25.5)	.866 (22.0)	1.187 (30.1)	.125/.116 (3.2/2.9)	1.188-18	1.197 (30.4)
20	1.437 (36.5)	1.156 (29.4)	1.187/1.181 (30.1/30.0)	1.132/1.125 (28.8/28.6)	.991 (25.2)	1.312 (33.3)	.125/.116 (3.2/2.9)	1.312-18	1.322 (33.6)
22	1.562 (39.7)	1.250 (31.8)	1.312/1.306 (33.3/33.2)	1.257/1.252 (31.9/31.8)	1.116 (28.3)	1.437 (36.5)	.125/.116 (3.2/2.9)	1.438-18	1.447 (36.8)
24	1.703 (43.3)	1.375 (34.9)	1.437/1.431 (36.5/36.3)	1.382/1.377 (35.1/35.0)	1.241 (31.5)	1.562 (39.7)	.154/.145 (3.9/3.7)	1.562-18	1.572 (39.9)

J

APPLICATION NOTES

- Assembly identified with manufacturer's name and part number, space permitting.
- Glenair 237-165 will mate with any QPL MIL-DTL-26500 type threaded coupling plug of same size, keyway and insert polarization.
- Performance:
 Hermeticity - $<10^{-7}$ ccHe/sec @ 1 atmosphere differential
 Dielectric withstanding voltage - consult factory or MIL-STD-1554
 Insulation resistance - 5000 megohms min @ 500VDC
- Material/ Finish:
 Shell—C1215 Steel/Electroless nickel
 Contacts—52 Nickel alloy/Gold plated
 Insulators—Glass/NA
 Seals—fluorosilicone elastomer N.A.
- Metric Dimensions (mm) are indicated in parentheses.

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MIL-DTL-26482 Type Hermetic Connectors

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