

Receptacle Panel Mount Connector Assembly

CONFIGURATIONS

The Receptacle panel mount connector is a bulkhead mounted version (panel mount configuration) that contains an externally threaded flamepath for mounting to certified explosion proof enclosures devices (“Ex d”) with suitable internal mating thread and have externally gaskets to certified explosion proof increased safety enclosure (“Ex e”). It is also suitable for no Ex threaded and unthreaded panel interface with a specific certification.

The Glenair Panel Mount explosion proof series of connectors is comprised of metallic (aluminium alloy as standard) receptacle shells, to form connections with only Glenair in-line explosion proof connector plug shell.

The panel mount receptacle and a plug shells when mated form an in-line connection.

Externally the main bodies aren’t fitted with cable glands. The body of this version must be internally potted with bi-component epoxy resin.

This product has two types of certifications the first one as Component and the second one as Equipment.

Series 927-072-003 can be used such as additional component for customer device which have to test overall. A product certified and marked such as Component must be used or installed on a box with Ex d or Ex e certification.

Series 927-072-004 can be used such as stand-alone equipment for customer panel interface (NO “EX” PANEL) which have not to test. A product certified and marked as Equipment must be used or installed on a panel. The device had already a certification with its assigned temperature class.

Internally the main bodies each contain an insulator insert fitted with crimp type contacts of either a pin or socket variety (female and male inserts are reversible).

When connected together they form a cylindrical flamepath and are mechanically interlocked by means of a threaded nut (trapezoidal double start thread) retained by a grub screws. When not connected, each connector is mated to a safety environmental cap and the corresponding joint is a cylindrical flamepath, mechanically interlocked by trapezoidal double start thread and grub screws.

The range is comprised of six body sizes (10SL, 14S, 16, 18, 28, 36), each with a number of pin/socket size combinations between 1 and 56 contacts.

The connector shell size, contacts configuration and rating are reflected in the individual type designations.

Some design options could be alternative keying options, and pin or sleeve contacts in receptacle bodies.

The connectors are certified IP68 (tested at a depth of 10 meters for 30 minutes).



PANEL MOUNT			
SERIES 927-072-003- COMPONENT No Temperature Class		SERIES 929-072-004- EQUIPMENT Temperature Class	
On Panel with “Ex” Interface		On Panel no “Ex” Interface	
Ex “d” Interface	Ex “e” Interface	Jam Nut Type	Screw Type

Receptacle Panel Mount Connector Assembly

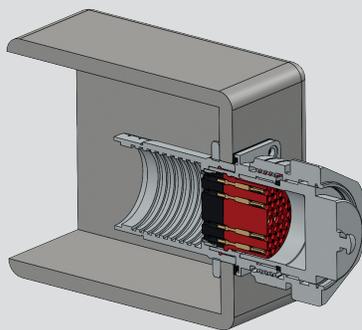
FOR Ex "e" PANEL APPLICATIONS (JAM NUT TYPE)

Use the flat panel gasket, and jam nut both supplied by Glenair.

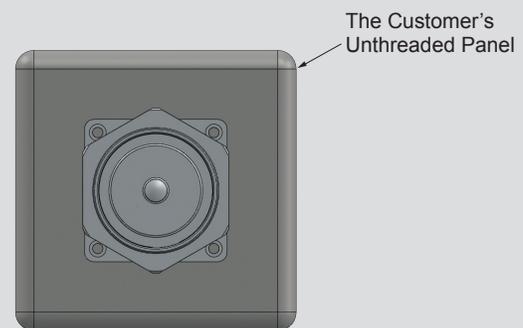
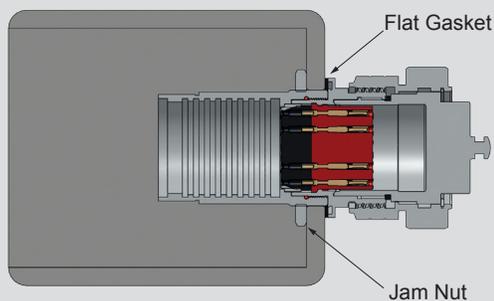
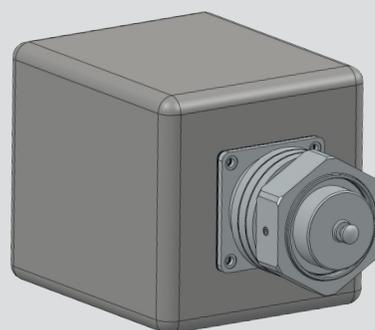
1. As is typical in all gasketing applications, clean all mating surfaces: back of flange, front and back mating surfaces of panel, faces of gasket and mating face of jam nut.
2. Mount gasket to back of connector flange.
3. Install the connector through panel, positioning as required.
4. Install and run jam nut to panel.
5. Tighten jam nut fully, by hand, so the connector is solidly pressed against the panel and the gasket is captured.
6. To complete tightening, turn the jam nut an additional 1/4 turn using an appropriate tool.
7. In applications where vibration is anticipated, a second jam nut could be used to lock the primary jam nut in place.
8. Thread locking compound (Loctite 242, blue, or equal), per the compound suppliers recommendations, can be used on any of the threads without impacting flamepath function.

For all increased safety panel mount receptacles: in accordance with IEC/EN 60079-7:2015, Clause 7.1, the increased safety enclosure certificate must include the use of the device as well as an electric strength test on the finished assembly.

Section view



Full view



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FOR Ex "d" BULKHEAD APPLICATIONS (SCREW TYPE)

The panel adapter / potting chamber has external threads that are flamepath. For the minimum thickness of the customer panel [mm] see table 13 of the Glenair instruction manual D500500002.

Ex "d" applications require an enclosure that is Ex "d" rated. For this case, the included o-ring is used, and the flat gasket is omitted.

1. With the o-ring installed onto the back of the receptacle flange, thread the receptacle assembly into the mating flameproof thread on EX "d" approved enclosure. The thread on the enclosure shall be identified as a threaded flamepath, and suitable to accept either EX certified cable glands or Ex proof connectors.
2. It is best to fit the connector to the bulkhead at a time when the free end of the cable is not terminated to the electrical system. If this is not possible, then it is necessary to rotate the connector assembly counter-clockwise to wind the cable / conductors so that when the assembly is threaded into a bulkhead in the subsequent instruction, the cable/conductors regain their most natural lay, once the connector is mounted to the bulkhead. (Rotations required to be determined by end-user).
3. Thread the connector into the bulkhead by hand, stopping at the point where the o-ring just touches down onto the bulkhead surface.
4. Turn the connector an addition amount so that the mounting holes in the flange, line up with the blind threaded holes in the enclosure. If after touching down the o-ring, the holes happen to line up with less than a 1/4 turn, advance the receptacle until the next holes line up.
5. Secure the connector to the enclosure using M5 fasteners.
6. Thread locking compound (Loctite 242, blue, or equal), per the compound suppliers recommendations, can be used on any of the threads without impacting flamepath function.

