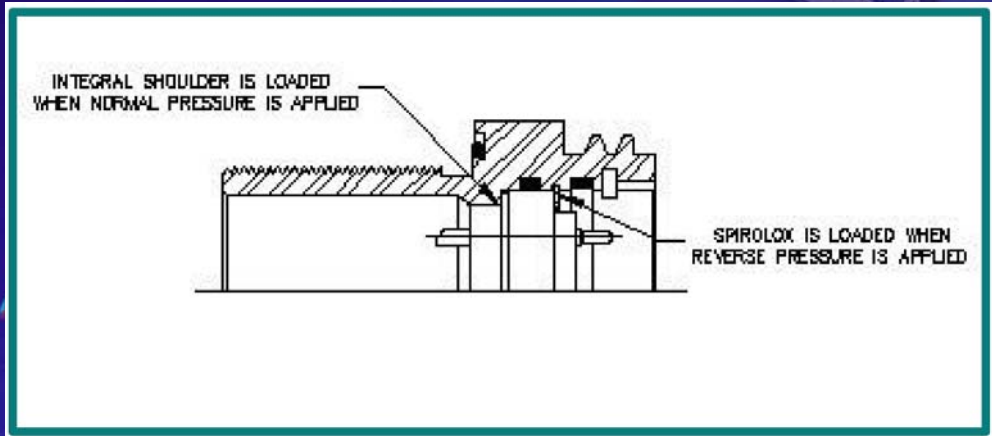
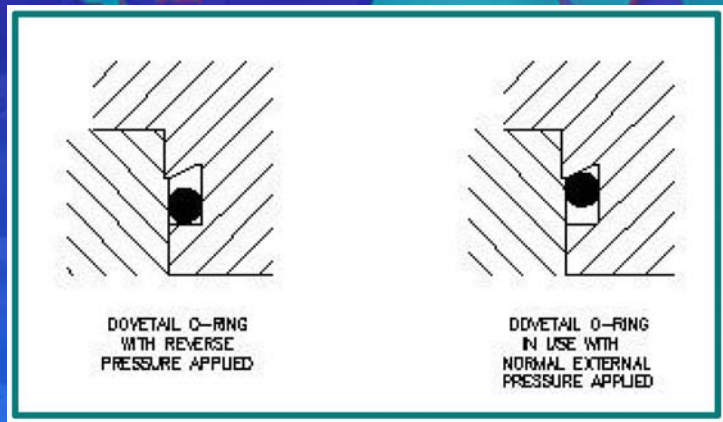


REVERSE (INBOARD OR BACK) PRESSURE

Standard SEA CON[®] bulkhead connectors are designed for use with an external hydrostatic load applied. Because the load is always external, we have designed our connectors and their seals to accommodate such a loading condition. We have taken care to have all metal shell type bulkhead inserts supported by an integral shoulder in the shell and have incorporated a dovetail style face seal o-ring groove into some of our connector lines.

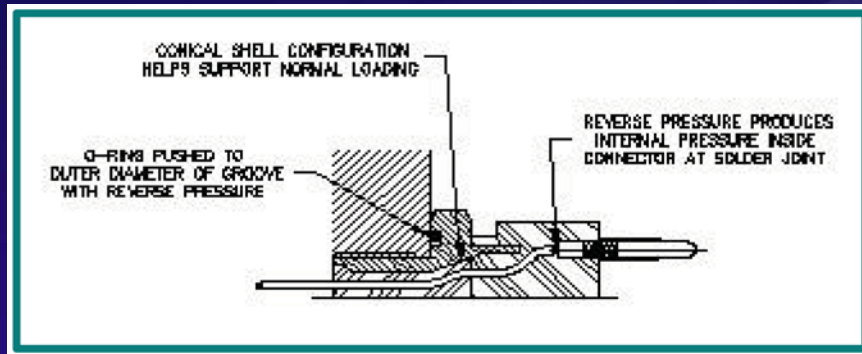


These seal designs help insure that the o-ring stays in its groove and helps ease installation of the connector. Our glass reinforced epoxy connectors have been engineered for the typical unidirectional loading as well. This material has very good mechanical properties when loaded in compression.



We have strived to design our connectors for the most favorable loading conditions for the material in use. This even extends to design of the profile of the contacts molded into the epoxy. Our rubber molded designs such as the RM-BCL and the AW-BC are also designed for unidirectional pressure. The design of the metal shell and/or potting compound is to support a load in the normal direction. Thought must also be given to the pigtail wire themselves.

They can become a pipeline to the inside of a connector and pressurize the connector from the inside, thus destroying its integrity. The above reasoning also applies to testing a connector or system. A test in which the connector is pressurized from the lowpressure side is not always a valid test for connector water tightness or structural integrity.



If a reverse load is to be applied then it must be considered when specifying the connector. We have made many custom designed connectors for uses in which there is reverse loading applied. These loads can come from pressurizing an electronics bottle with one or more atmospheres of nitrogen. The load may also be applied when the connector is installed in a reverse manner, in which the pressure on the pigtail side is higher than that on the mating side.

We have experience in building connectors to suit special situations so please make sure we understand the environment and the application for each connector. With this knowledge, we will make sure the connector fits the application.