VITROVEX® bulkhead adaptors

Through-wall connector system for glass enclosures





Nautilus Marine Service is a German-based specialized company to manufacture pressure housings made of glass (VITROVEX®) which are used for deep sea applications. Customers of such pressure housings often require through-wall solutions for their unique combinations of connectors and sensors which moreover vary in diameter and length. A number of manufacturing operations and fixing components for each connector is required to meet these demands. As a result, existing VITROVEX® deep-sea glass housings have holes drilled for each electrical connector. Each hole has a surrounding flat area precision-grounded around its periphery and a bevel machined around the entry and exit of each hole. Bulkhead mounting sets for the various curvatures and material characteristics complement the range of products in this regard.







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Nevertheless, most bulkhead connectors and devices are designed for a panel thickness of less than 10mm. VITROVEX® housings however, are built with wall sizes between 7mm and 21mm; hence, custom-length connectors are often obliged.

VITROVEX® bulkhead adaptors offer an additional approach to realize through-wall connections. They are available for circular and low profile connectors with either 7/16 – 20 UNF – 2A or 5/8 –18 UNF – 2A. The azimuth of low profile bulkheads can precisely be aligned by means of an inner sleeve.





Nautilus Marine Service GmbH has done intensive inhouse pressure tests to 700 bar as well as long-term leak tests at low pressure to assure the integrity of the through-wall connector system.

Bulkhead adaptors provide greater flexibility for the use of glass enclosures since additional interfaces could be attached proactively and sealed with blanking plugs. Connectors can be fit as required, even by operators who are not that familiar with such procedures. Lifetime and reliability of the enclosure will be increased due to the absence of direct contact between connector metal surfaces and the glass.

BENEFITS AT A GLANCE

- Usage of standard connectors rather than customized versions
- Faster lead times
- Simplified assembly like any other enclosure
- Connectors are interchangeable with or substitutable for another
- Increased lifetime and reliability of glass enclosure
- Greater flexibility in using glass enclosures

Please contact Nautilus Marine Service GmbH for further assistance.

