

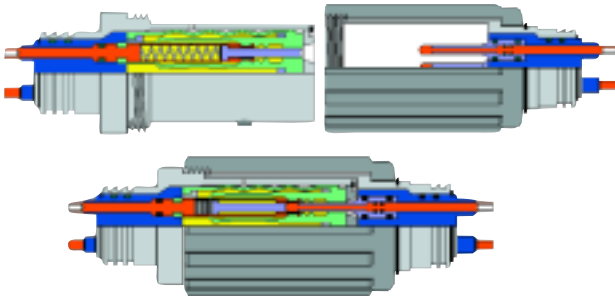


Nautilus QD

**Wet-Mate Electrical Connector
4 Circuit, 1 kVDC, 30 Amp
Quick Connect and Disconnect**

The connector was developed primarily for use by military divers on heated suits. Design constraints included light weight, robustness and the ability to self-disconnect in an emergency situation.

As the design is based on the well-proven NAUTILUS connector technology, the product, therefore, exhibits the characteristics of high insulation resistance, ruggedness, ease of connection and long submerged life of the standard range.



The design features which make the Nautilus side of the connector so reliable include the dual independent oil reservoirs providing two completely separate barriers to the ingress of sea water. The patented design of electrical contact allows the pin to enter these reservoirs and to transfer sealing via a shuttle pin and dual wiper seal assembly.

Qualification Testing

Qualification Testing included: Mateability, Hydrostatic, Electrical Leakage and Current Load. All tests passed.

In addition, the QD is qualified to Nautilus Standards, as it is constructed from production-quality Nautilus components.

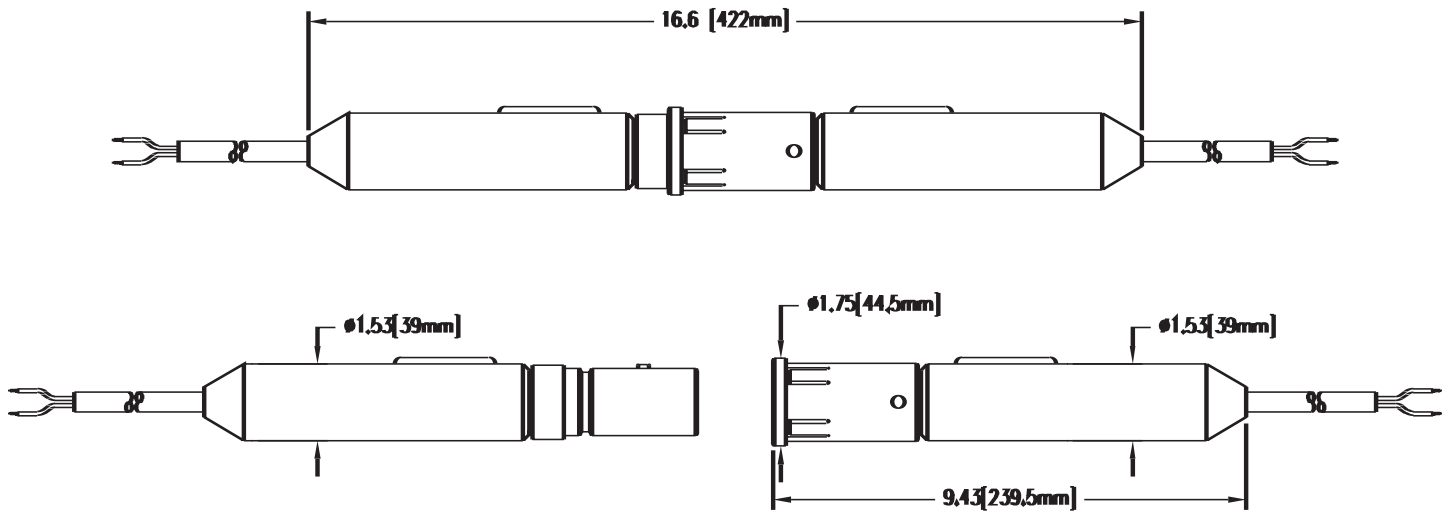
Production Testing

This will be limited to a visual inspection, IR, circuit continuity and mateability. Pressure testing may be specified by the customer but at an additional cost.

Nautilus QD

Wet-Mate Electrical Connector
4 Circuits, 1 kVDC, 30 Amps
Quick Connect and Disconnect

Specifications



GENERAL

Design Life :	>5 years
Max Optional Pressure :	3000 psi/2000 meters**
Mating Force :	23 lbs ± 4 lbs (10.4 ± 1.8 kg)
Demating Force :	24 lbs ± 4 lbs (10.9 ± 1.8 kg)
Operational Temperature :	-10° C to + 50° C
Storage Temperature :	-23° C to + 60° C
Configurations :	The Connectors are normally provided with 6 ft. (2m) of 16 AWB insulated conductor quad cable each side. For other cable types, please contact ODI.

ELECTRICAL

Max Operational Current :	30 amps per contact**
Max Operational Voltage :	>1 kVDC**
Insulation Resistance :	>1 G Ω @ 1 kVDC**
Contact Resistance :	<0.1 Ω per contact

** Note: All electrical properties and depth are cable dependent. Presently, the connector has been produced as an in-line variant only, but a modification to make the receptacle into a bulkhead version would be straightforward.