

Nautilus™ Series

Product Technical Specification – Electrical Connector

ROV Wet-Mateable Connector

General

The connector is designed to meet the specification shown in Table 1. Each deliverable connector is Factory Acceptance Tested (FAT) either individually, or as part of an assembly, as specified in Table 2. A Certificate of Conformance (C of C) is supplied with each connector or associated assembly. Upon request, a documentation package including as-built General Arrangement drawing, material traceability log and test results can be provided.

Table 1 – Standard Specifications

Physical Characteristics:

Type:	ROV Operable
Number of Circuits:	4,7,12 – Others available on request
Material:	Titanium CP Gr2
ROV Handle Type:	Flexible Paddle- Others available on request
Alignment Key:	Single – Multiple keys available on request

Operational Characteristics:

Amperage Rating:	30 Amps per circuit
Voltage Rating (per IEC 60502):	1.8 kVac - phase-to-ground 3.0 kVac - phase-to-phase
Mate/Demate Cycles:	>1,000
Operating Depth:	Pressure compensated for full ocean depth. Consult ODI for pressure differentials >3,000psi.
Operational Temperature:	-2°C - +50°C
Storage Temperature:	-25°C - +60°C
Mating Force:	<6 lbs. Force per circuit
Demate Force:	<50 lbs. Force
Circuit Resistance:	<0.1Ω (<30 mΩ Typical)
Contact Resistance:	<10 mΩ (Not measurable as an assembly)

Design Characteristics:

Design Life:	25 Years
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Table 2 – FAT Standards

Hydrostatic Test:-	
Minimum Differential Pressure	3,000 psi
Insulation Resistance	Pin-Ground >10 GΩ @ 1,000Vdc
Post Hydrostatic Bench Tests:-	
Circuit Resistance	<0.1 Ω
Insulation Resistance	Pin-Ground >10 GΩ @ 1,000Vdc
Mateability Function	1 Cycle minimum with latch verification

Fixed Mount ROV Connector Half –

- Plug or Receptacle Available
- Front or Rear Mount Available
- Straight 45° or 90° Rear Termination



Cable End ROV Connector Half –

- Plug or Receptacle Available
- 45° or 90° Termination Standard – other angles available on request
- Paddle Handle Standard

