

Nautilus Penetrator

Standard Bulkhead Penetrator for Subsea Applications –
Available in 4, 7, & 12 Circuits

Teledyne ODI's Nautilus is a wet-mateable, multi-channel electrical connector. First introduced in 1991, the Nautilus is recognized as the leading choice for high reliability underwater mateable electrical connectors. Nautilus has been utilized on thousands of projects at depths up to >19,000 ft. (6,000 m) and in diverse industries including Oil & Gas, Oceanography, and Navy & Defense.

Nautilus is fully qualified to the latest industry standards and customer specifications including: electrical performance, helium leak, mechanical shock & vibration, thermal cycling & shock, turbid hyperbaric mate/demate and misaligned mateability. Electrical harnesses utilizing Teledyne ODI's Oil-Filled Hose have also been qualified to these standards and specifications.

Nautilus Electrical Penetrators meet the same electrical performance characteristics as Nautilus connectors and are used where the need to mate and demate is not necessary, generally at the second end of a pressure-balanced oil-filled (PBOF) assembly with a Nautilus connector at the opposite end. The Penetrator is typically attached directly to a vessel, which can be either pressure balanced or at 1 ATM.

The Nautilus Penetrator forms a pressure barrier where differential pressure exists between the PBOF assembly and a 1 ATM vessel.



*4-Way Stainless Steel
Nautilus Penetrator*

PRODUCT FEATURES

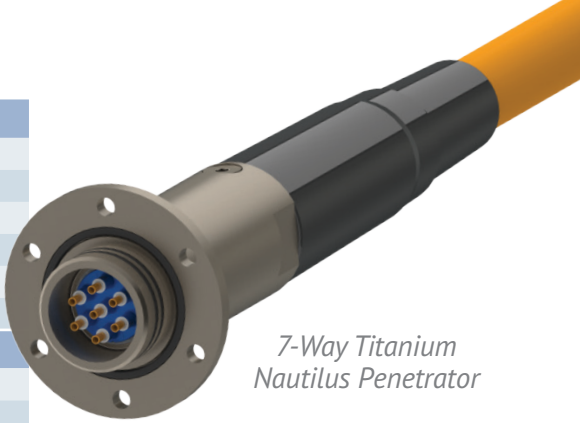
- Sensor Integration
- Subsea Junction Boxes
- Modular Connectorized Distribution Unit (MCDU)
- Field Assembled Cable Termination (FACT)
- Pressure Balanced Oil Filled (PBOF) Hose

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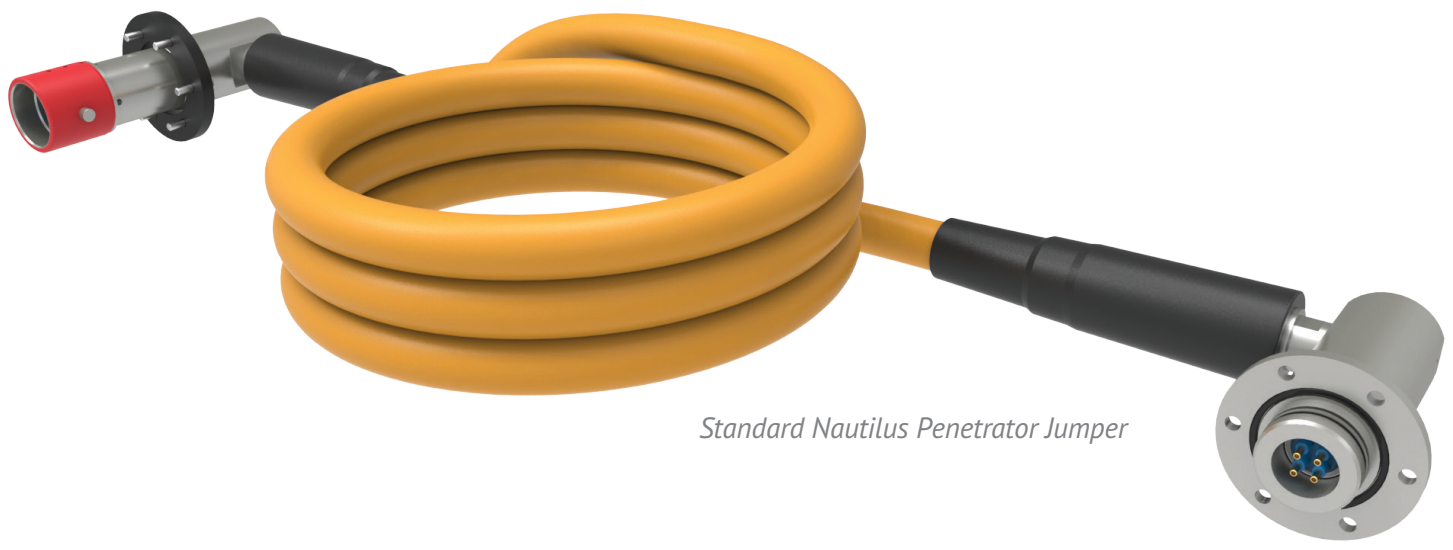
TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS	
Operational Depth	20,997 ft (6,400 m)
Operational Pressure (Pressure Balanced)	10,000 psi (689 bar)
Operating Temperature	14°F to 122°F (-10°C to +50°C)
Storage Temperature	-22°F to 140°F (-30°C to +60°C)
Material	Titanium or 316 Stainless Steel
Design Life	30 Years
ELECTRICAL SPECIFICATIONS	
Number of Circuits	4, 7 or 12
Maximum Operational Current	30 Amps
Maximum Operational AC Voltage	1.0 kV Phase-to-Ground 1.73 kV Phase-to-Phase
Maximum Operational DC Voltage	3.3 kV
Insulation Resistance	≤20 GΩ @ 1 kVDC
Contact Resistance	≥10 mΩ per contact



7-Way Titanium Nautilus Penetrator

For reference only, see FDS - D/N 325994 for Official Values



Standard Nautilus Penetrator Jumper