

ITT Sub-Sea Components



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ENGINEERED FOR LIFE

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Reliable performance is critical in energy production and is exceptionally critical at 10,000 feet. Look to ITT for innovation and reliability of our motion control and energy absorption solutions for sub-sea applications.

ITT products can assist with the following critical applications:

- Linear sub-sea actuators for subsea tooling and emergency valve actuation.
- Rotary sub-sea actuators for operation of ball valves, paddle valves and shear seal valves.
- Sub-sea ready shock absorbers for sea-floor landing of high value equipment.
- Custom servo motors for light duty ROV/AUV propulsion systems.
- Sub-sea ready pressure switches for subsea control module systems monitoring.

To learn more about our sub-sea components please visit www.itt.com/markets/oil-gas



When it comes to sub-sea components, think about ITT.



Enidine Sub-Sea Ready Shock Absorbers

- Custom constructed subsea shock absorbers for softening impact at ocean floor for lowered equipment.
- Orifice seawater! No hydraulic oil.
- Environmentally safe.
- Can be designed for one-shot use or multiple uses.
- Stainless steel construction with optional materials available.
- Bore sizes up to 6"; stroke lengths up to 60"; rod diameters up to 3.5".
- Energy capacities up to 9,000,000 in-lbs.



Compact Automation Products Sub-Sea Linear Actuators

- Hydraulic service to 5,000 psi.
- Electro Polish 316 Stainless steel constructed with optional materials available, Super Duplex, Duplex, Nitronic 50, Nitronic 60, 17-4 SS, Inconel, Elgiloy, NAB, Hard Anodized Aluminum.
- Bore sizes to 2.5" - 24", Rod sizes 0.62"- 3.5" diameter.
- Internal spring packages available.
- Unlimited customization options.



Turn-Act Sub-Sea Rotary Actuators

- Highest rotary torque output in the smallest package available.
- Hydraulic service pressures to 500 psi.
- 3,500 in-lbs. torque at 500 psi. hydraulic input for size 3 double vane rotary actuator. 1750 in-lbs. for size 2 and 875 in-lbs. for size 1.
- Rotational ranges of 45, 90, 180 and 270 degrees. Zero backlash.
- Available in Hard-Coat Anodized Aluminum and 316 Stainless Steel construction. Special materials available upon request.



Torque Systems Brushless Servo Motors

- High copper density, brushless servo motors and parts-sets for inspection class ROV propulsion systems.
- High torque brushless technology with custom windings available to meet/exceed performance criteria.
- Parts-sets (stator/rotor) can be customized to fit various size thruster tubes and in modest volumes.
- Stainless-steel housings available.
- Optional brake, gearbox, on winding thermistor available.



Neo-Dyn Sub-Sea Pressure and Temperature Switches

- Mounted within Sub-Sea Control Modules at depth. (SCM)
- Actuation set points on increasing or decreasing pressure, depending upon the application.
- Belleville spring sensing mechanism means No false actuation.
- Provides actuation signal output in support of alarm and shut-down functions in event of system pressure abnormality.
- Perfect for subsea 'valve open'/'valve closed' verification to top-side operations personnel.
- System pressures to 5,000 psig.
- Custom variations available.





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