

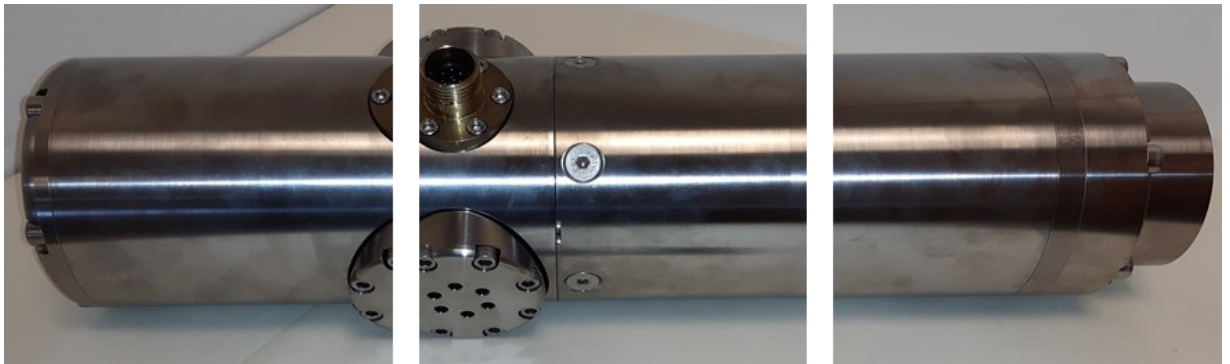
SUBSEA ELECTRICAL VALVE ACTUATOR 230NM



Key Features

Robust Design	Designed for long lifetime. Compact size and low weight. API-6A PR 2 qualified and all electronics qualified to API-17F.
Mounting	Subsea electrical valve actuator for permanent installation iaw. ISO 5211. Retrievable ROV version available.
Flexible Configuration	User configurable speed, acceleration, torque and end positions. Configurable as multiturn, quarter turn or user defined. Manual and auto homing with retained positions after power down.
Failsafe Functionality	Configurable failsafe operation on loss of power and/or communication. <ul style="list-style-type: none"> - Fail safe close - Fail safe open - Fail as is - Fail to configured position
Low Power Consumption	Battery delivers power boost during valve operation and is trickle charged between valve operations, reducing maximum external supply power demand.
Battery Pack	Battery pack for fail safe functionality. Option without battery and shorter actuator length available on request. Super capacitor option available on request.

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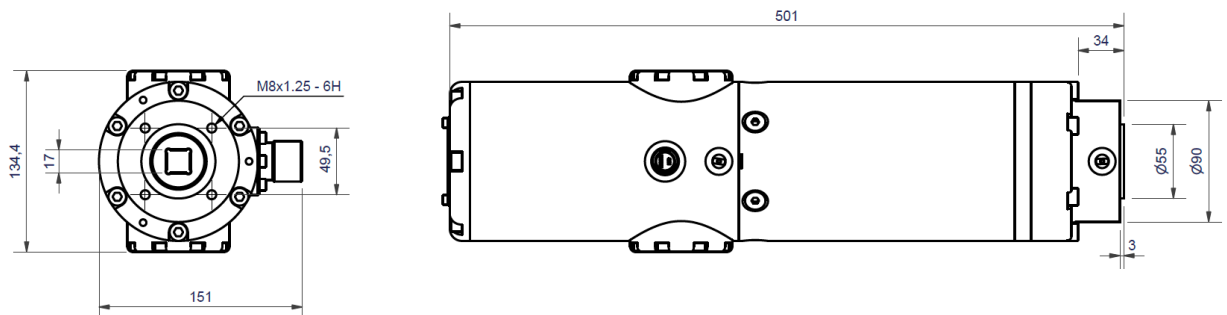
Technical Data

Operational Depth	3000 m
Temperature Rating	Operational: -5 to +40 °C Storage: -18 to +50 °C Electronics qualification: -18 to +70 °C
Output Speed	Configurable: 0-2 RPM
Valve Configuration	Configurable as: Quarter turn, multiturn or step
Operational torque	0-230Nm nominal torque range 285Nm maximum torque
Peak torque	Configurable maximum torque up to 285Nm. EVA operation on low torque valves possible with reduced peak torque limit setting to avoid over torque
Holding torque	25Nm (no power applied) Configurable 25-230Nm when powered
Dimensions	135 x 151 x 501 mm (w/connector)
Weight	19 kg (Titanium grade 5, dry weight) 29 kg (Stainless steel, dry weight)
Valve Interface	ISO 5211
Communication Interfaces	- SIIS Level 1(4-20mA) - SIIS Level 2 (CANbus) - SIIS Level 3 (Ethernet, Modbus TCP) - RS-232 and RS-485, Modbus RTU
Input Voltage	12 - 30V DC
Battery (Optional)	Li-ion: 48V / 2Ah or 24V / 4Ah Super Capacitor battery available on request
Power Consumption	1W standby, no holding current applied (configurable) Up to 24W maximum (when charging, configurable)
Connector	7 Pins Gisma S10 drymate Others dry-mate and wet-mate available on request

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Configurable Parameters	User configurable actuator main parameters: <ul style="list-style-type: none"> - Rotational speed - Acceleration / Deacceleration - Maximum torque limit - Direction - End positions - Fail safe operation
Other features	Auto or manual homing functionality to configure end-positions. Actuator position and all configuration parameters is retained on power loss.
Monitoring	Position, valve profile and housekeeping data such as voltages, temperature and battery status. Alarm triggered if valve operation fails to complete.
Applicable design codes and guidelines	ISO 5211 API-6A / ISO 10423 API-17F / ISO 13628-6
Qualification	API-17F: Q1 qualification of controller, BMS and encoder electronics. API-17F: Hyperbaric test to 3300m with 200 EVA cycles API- 6A: PR2 test (200 cycles incl. high/low temp testing with valve load) API- 6A: Endurance testing (200 cycles with valve load) Long lifetime test: 2600 cycles with valve load Encoder: Long lifetime 330 bar test of pressure tolerant electronics

Dimensions



Note:

The EVA can alternatively be delivered as an ROV retrievable version and with torque ranges from 25 Nm - 3000 Nm.