



SS320 Titanium Rotator

The **Sidus SS320** underwater rotator assembly is designed in a modular configuration and uses high quality precision ball bearings, low backlash gear drives and motors. The high output brushless, synchronous electric motors can operate reliably even after thousands of cycles. These units can operate at a depth of 10,000 feet and are capable of generating impressive amounts of torque.

The SS320 can operate in any type of harsh environment due to its corrosion resistant titanium design which prevents rusting and water ingestion. Communication is supported through RS232, RS422 and RS485 protocols. Users can choose from a range of input connectors.

Electrical

Input Voltage	24 VDC, 24 VAC or 115 VAC
Maximum Drive Current	100mA – 900mA (24 VDC serial, speed dependent) 250mA (24 VDC analog) 750mA (24 VAC) 150mA (115 VAC)
Maximum Static Current	100mA – 1.2 A (24 VDC serial, customer selectable) 650mA (24 VDC analog) 350mA (24 VAC) 100mA (115 VAC)
Maximum Output Torque	10 ft-lb (14 Nm) (24 VDC) 13 ft-lb (18 Nm) (24 VAC & 115 VAC)
Output Speed	3 to 10 deg/s
Position Feedback	12 bit resolution (approx 0.1°)
Communication	Analog, RS-485, RS-422 or RS-232
Connector	Customer selectable – Seacon Brantner is standard

Environmental

Operating Depth	Up to 10,000 ft (3000 m) with internal compensation Up to 20,000 ft (6000 m) with external compensation
Temperature Range	-20°C to +50°C (-4°F to +122°F) operating -30°C to +60°C (-22°F to +140°F) storage
Housing Material	6Al4V Titanium
O-Ring Material	Viton
Fastener Material	316 Stainless Steel

Mechanical

Gears	Precision strain wave gearing
Backlash	36 arc minutes (approx 0.5°)
Dimensions	3.3 in diameter x 6.6 in long (81mm x 168mm)
Weight in Air	5.9lbs (2.7kg)
Weight in Water	3.5lbs (1.6kg)
Pressure Compensator	Internal diaphragm
Position Limits	(optional) +/-175° Pan, +/-85° Tilt (other configurations available)