SIDUS Solutions

SS350 / SS351 / SS352 — Heavy duty rotators

Distributed by ROVITEC AS

rovitec.no

Manufacturer / system supplier: SIDUS Solutions

Document type: manufacturer specification

Version 1.0 | September 22 , 2025

Source checked: 16 September 2026

Applies to the named models and revision only. Housing, interface and performance differences must follow the individual model tables. Source discrepancies are recorded on the ROVITEC product pages; request the approved specification before integration.

Original manufacturer source

https://www.sidus-solutions.com/wp-content/uploads/2025/11/SS350_SS351_SS352_Subsea-Positioner_Family_Specifications_2025.pdf

Manufacturer pages follow unchanged. Local distribution copy.

SIDUS

SS350 / SS351 / SS352 ~ Series Subsea Rotators

SIDUS Solutions' SS350, SS351, and SS352 family of high-performance rotators are designed for deepwater, subsea operations where strong currents, and harsh environmental conditions are extreme.

Within a small footprint, you are now able to position heavy loads with ease and high accuracy.

The SS350 series rotator assembly gains dependability and ease of maintenance through integration of DC stepper motors, extremely low backlash harmonic drives and precision ball bearings into a unique modular motor assembly. This workhorse offers impressive torque ratings up to 65 ft-lbs securely locked into the corrosion resistant, one-piece subsea housing.



Item	Housing Material	Depth Rating
SS350	Anodized 6061-T6 Aluminum	Up to 30m air filled 3000m w/ internal compensation 6000m w/ external compensation
SS351	316 Stainless Steel	Up to 30m air filled 3000m w/ internal compensation 6000m w/ external compensation
SS352	6AI4V Titanium	Up to 30m air filled 3000m w/ internal compensation 6000m w/ external compensation

Features

- Max Drive Current:
  - 300mA – 2.2 A (24 VDC serial, speed dependent @ nominal torque)
  - 2.0 A (24 VDC analog)
- Max Static Current:
  - 300mA – 1.2 A (24 VDC serial, customer selectable @ nominal torque)
  - 1.0 A (24 VDC analog)
- Max Output Torque: 65 ft lbs (88 Nm)
- Maximum Payload: 150 lbs (68kg)
- Positional Accuracy: 0.1˚
- Backlash: < 3 arc minutes (approx. 0.05˚)
- Position Limits: (Optional) +/- 175˚ Pan, +/- 90˚ Tilt (other configurations available)
- Communication: Analog, RS485, or RS232
- Low Backlash Harmonic Drives

ELECTRICAL SPECIFICATIONS:

Input Voltage	20-30 VDC
Maximum Drive Current	300mA – 2.2 A (24 VDC serial, speed dependent @ nominal torque) 2.0 A (24 VDC analog)
Maximum Static Current	300mA – 1.2 A (24 VDC serial, customer selectable @ nominal torque) 1.0 A (24 VDC analog)
Output Speed	0.5˚ to 20˚ per sec
Position Feedback	12-bit resolution (Approx 0.1)
Communication	Analog, RS485, or RS232
Connector	Customer selectable, Subconn (Standard)

ENVIRONMENTAL SPECIFICATIONS:

Operating Depth	Up to 3000m (9843 ft) Up to 6000m (20,000 ft)	Standard Internal Compensation With External Compensation
Temperature Range	Operating	-20˚ C ~ 50˚ C (-4˚ F to 122˚ F)
	Storage -30˚ C ~ 60˚ C (-22˚ F to 140˚ F)	
Housing Material	**SS350:** Anodized 6061-T6 Aluminum (Standard), other options available **SS351:** 316 Stainless Steel **SS352:** 6Al-4V Titanium	
O-Ring Material	Buna-N, Viton or other depending on fluid environment	
Fastener Material	316 Stainless Steel	

MECHANICAL SPECIFICATIONS:

Maximum Output Torque	65 ft lbs (88 Nm)
Maximum Payload	150 lbs (68kg)
Gears	Precision strain wave gearing
Positional Accuracy/Backlash	< 3 arc minutes (Approx 0.05)
Dimensions	4.6" dia (117mm) x 9.7" length (228mm) 6.7" dia (171mm) Flange diameter (Flanged Version only)
Weight In Air Straight	**SS350:** 15.5 lbs (7.1kg) oil filled, 12.7 lbs (5.8kg) air filled **SS351:** 21.5 lbs (9.8kg) oil filled **SS352:** 14.5 lbs (6.6kg) oil filled
Weight In Water Straight	**SS350:** 9.9 lbs (4.5kg) oil filled, 8.2 lbs (3.7kg) air filled **SS351**: 12.8 lbs (5.8kg) oil filled **SS352:** 8.6 lbs (3.9kg) oil filled
Weight In Air Flanged	**SS350:** 15.5 lbs (7.1kg) oil filled, 13.7 lbs (6.2kg) air filled **SS351:** N/A **SS352:** N/A
Weight In Water Flanged	**SS350:** 9.9 lbs (4.5kg) oil filled, 8.7 lbs (4.0kg) air filled **SS351:** N/A **SS352:** N/A
Pressure Compensator	Internal Diaphragm (oil filled version)
Position Limits	(optional) +/-175˚ Pan, +/-90 ˚ Tilt, other configurations available



CONTROLS:

Recommended Controls	Laptop/PC with SIDUS Control Panel GUI Host device with Sidus serial commands Analog with feedback
Optional Controls	Optional integrated functions, Pelco-D Keyboard, mouse, or joystick control, digital feedback option
Control Methods	Laptop/PC with SIDUS Control Panel GUI with RS485 or RS232 to device Optional integrated functions, Pelco-D Keyboard, mouse, or joystick control Analog control with voltage feedback

DESIGN:

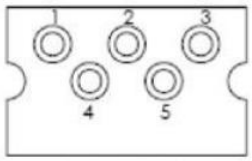
The information contained in this drawing is the sole property of SIDUS Solutions. Any reproduction in part or without the written permission of SIDUS Solutions is prohibited.

CONNECTOR PINOUT:

PIN	Function
1	Ground
2	+24 VDC
3	N/C
4	D+
5	D-

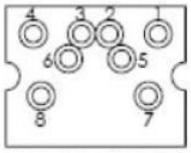
PIN	Function
1	Ground
2	Tilt CCW
3	Tilt CW
4	Pan CW
5	Pan CCW

PIN	Function
1	Ground
2	+24 VDC
3	Signal Ground
4	RX
5	TX



FAWL-5P-BC

PIN	Function	PIN	Function
1	Ground	5	Pan CCW
2	Tilt CCW	6	Tilt Feedback
3	Tilt CW	7	Pan Feedback
4	Pan CW	8	Not Connected



FAWM-8P-BC