

SS109 PAN & TILT

Underwater Pan and Tilt Assembly



underwater **vision** specialists

Features

- Modular Configuration
- High Quality Ball Bearings
- Low Backlash Gear Drives and Motors
- Operating Depth of 10,000ft



Description

The SS109 underwater pan and tilt 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 on each axis.

The SS109 can operate in any type of harsh environment due to its corrosion resistant, single piece 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.



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Specification – SS109 PAN & TILT

MECHANICAL

Gears:	Precision Strain Wave Gearing
Backlash:	36 arc Minutes (approx. 0.5°)
Dimensions:	8.45in x 6.64in x 3.68in (215mm x 169mm x 94mm)
Weight in Air:	9.3lbs (4.2kg)
Weight in Water:	5.9lbs (2.7kg)
Pressure Compensator:	Internal Diaphragm
Position Limits:	(optional) +/-175° Pan, +/-90° Tilt

ENVIRONMENTAL

Operating Depth:	Up to 10,000ft (3,000m) with Internal Compensation Up to 20,000ft (6,000m) 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:	Anodized 6061-T6 Aluminium
O-ring Material:	Buna
Fastener Material:	316 Stainless Steel

ELECTRICAL

Input Voltage:	24Vdc, 24 Vac or 115 Vac
Maximum Drive Current:	100mA to 900mA Per Axis (24 Vdc serial, speed dependant) 250mA Per Axis (24 Vdc analog) 750mA Per Axis (115 Vac) 150mA Per Axis (115 Vac)
Maximum Static Current:	100mA – 1.2A Per Axis (24 Vdc serial, customer selectable) 650mA Per Axis (24 Vdc analog) 350mA Per Axis (24 Vac) 100mA Per Axis (115 Vac)
Maximum Output Torque:	10 ft-lb (14nm) (24 Vdc) 13 ft-lb (18nm) (24 Vac & 115 Vac)
Maximum Payload:	50lbs (23kg)
Output Speed:	RS485 Version 9 Steps 1.5 to 7.5 deg/s
Position Feedback:	12 Bit Resolution (approx. 0.1°)
Communication:	Analog, RS485. RS422 or RS232
Connector:	Large Selection of Connectors Available

