## SS120 PAN & TILT Stainless Steel Pan and Tilt Device



underwater vision specialists

## **Features**

- Corrosion Resistant 316
   Stainless Steel
- Low Backlash Gear Drives
- 10,000ft Operating Depth
- Precision Ball Bearings



## Description

The SS120 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 SS120 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.





## Specification - SS120 PAN & TILT

**MECHANICAL** 

Gears: Precision Strain Wave Gearing Backlash: 36 arc Minutes (approx. 0.5°)

Dimensions: 8.45 in x 6.64 in x 3.68 in (215mm x 169mm x 94mm)

Weight in Air: 12.0lbs (5.5kg)
Weight in Water: 7.0lbs (3.2kg)
Pressure Compensator: Internal Diaphragm

Position Limits: (optional) +/-175° Pan, +/-90° Tilt

**ENVIRONMENTAL** 

Operating Depth: Up to 10,000ft (3000m) with Internal Compensation

Up to 20,000ft (6000m) with External Compensation

Temperature Range:  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  (-4°F to 122°F) Operating  $-30^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  (-22°F to  $+140^{\circ}\text{F}$ ) Storage

Housing Material: 316 Stainless Steel

O-ring Material: Buna

Fastener Material: 316 Stainless Steel

**ELECTRICAL** 

Input Voltage: 24 VDC, 24 VAC or 115 VAC

Maximum Drive Current: 100mA – 900mA per axis (24 VDC serial, speed dependent)

250mA Per Axis (24 VDC analog) 750mA Per Axis (24 VAC) 150mA Per Axis (115 VAC)

Maximum Static Current: 100mA – 1.2 A Per Axis (24 VDC serial, customer selectable)

650mA Per Axis (24 VDC analog)

350mA Per Axis (24 VAC) 100mA Per Axis (115 VAC) 10 ft-lb (14 Nm) (24 VDC)

Maximum Output Torque: 10 ft-lb (14 Nm) (24 VDC)

13 ft-lb (18 Nm) (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, RS-485, RS-422 or RS-232
Connector: Large Selection of Connectors Available



