

**Product information**

Part number: SS109 / SS110 / SS120

**High Torque, High Performance  
Pan & Tilt Units**

The underwater pan and tilt assemblies SS109, SS110 and SS120 are designed in a modular configuration and use 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 3 km and are capable of generating impressive amounts of torque on each axis.

They 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.



SS109



SS110



SS120

## Specifications

Environmental	SS109HT	SS110HT	SS120HT
Operating Depth	30 meters(air filled)		
	3.000 meter (oil filled)		
	6.000 meters (ext. compensation)		
Operating Temperature	-25° to 50° C)		
Electrical	SS109HT	SS110HT	SS120HT
Power	120 VAC, 24 VAC & 24 VDC		
Connector	Customer Selectable Conductor Requirements: 4-8		
Optional	Preset internal mechanical or software control limits		
Mechanical	SS109HT	SS110HT	SS120HT
Housing	Hard Anodized Aluminum	316L Stainless Steel	6Al4V Titanium
Height	207 mm		
Width	169 mm		
Depth	84 mm		
Weight (in air)	4,2 kg	8,7 kg	5,5 kg
Weight (in water)	2,7 kg	6,2 kg	3,2 kg
Torque	14 ft. pounds / 19Nm (each axis)		
Rotation Speed	Up to 20° per second		
Positional Accuracy	0,1°		
Gear Backlash	36 arc minutes		
Scan Range	360° both axis / 180° tilt axis with yoke		
Controls	SS109HT	SS110HT	SS120HT
Recommended Controls	SS201 Series Desktop / Flush Mount SS202 Serial Control RS485 / RS232 / Custom RS422 Laptop/PC with Control Panel GUI		
Optional Controls	Optional integrated functions, Pelco-D Keyboard, mouse or joystick control digital feedback option		

## Dimensions

Units in inches and [mm].

