

SS109HT High Torque Pan & Tilt Assembly Specifications



- Torque: 14 ft. pounds / 19 Nm (each axis)
- Rotation Speed: Up to 20° per second
- Scan Range: 360° both axis / 180° tilt axis with yoke
- Depth rated 6000 meters
- Positional Accuracy: 0.1°
- Reversible synchronous motors
- Low backlash harmonic drives

ELECTRICAL SPECIFICATIONS:

Power –Input Voltage	20-24VDC
Maximum Drive Current	1.2 A per axis
Maximum Static Current	200mA - 650mA per axis (customer selectable)
Maximum Output Torque	14 ft-lbs (19Nm) each axis
Maximum Payload	50 lbs (23kg)
Output Speed	Angular Speed: 0.5-20 degrees/sec Speed: 0°- 20° per second
Position Feedback	12-bit resolution (approximately 0.1)
Communication	RS-485 or RS-232 or Analog
Connector	Customer selectable – Season Brantner is standard, MCBH-8P



ENVIRONMENTAL SPECIFICATIONS:

Depth Rated	10,000 feet / 3050 meters (internal compensation) 18,000 feet / 6000 meters (external compensation)
Operating Temperature	-4° to 122° F (-20° to 60° C)
Housing Material	Hand Annotated 6061-t6 Aluminum housing (Standard)
O-Ring Material	Buna
Fastener Material	316 Stainless Steel

MECHANICAL SPECIFICATIONS:

Height x Width x Depth	8.45" (207mm) x 6.64" (169mm) x 3.68" (84mm)
Weight in Air	9.3 lbs / 4.2 kg
Weight in Water	5.9 lbs / 2.7 kg
Positional Accuracy/Backlash	36 arc minutes
Scan Range	360° both axis / 180° tilt axis with yoke
Gears	Precision strain wave gearing
Pressure Compensator	Internal diaphragm
Position Limits	(optional) +/- 175° Pan, +/- 90° Tilt

CONTROLS:

Recommended Controls	SS201 Series Desktop / Flush Mount SS202 Serial Control RS485 / RS232 / Custom RS422 Laptop/PC with SIDUS Control Panel GUI 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 Optional integrated functions, Pelco-D Keyboard, mouse, or joystick control Digital feedback option (requires 2 additional conductors) DC Brake option for Analog configuration (requires additional conductors)

ACCESSORIES:

Bracket & Mount	907 Series: Standard base plates for mounting in any position. CS Series: Custom specified mounting plates.
Optional Controls	Optional integrated functions, Pelco-D Keyboard, mouse, or joystick control digital feedback option

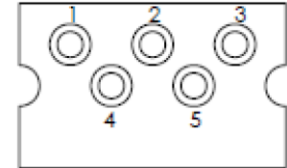


CONNECTOR PIN OUTS:

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

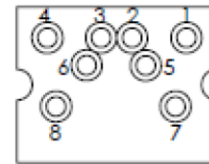
PIN	Function
1	Ground
2	Tilt CCW
3	Tilt CW
4	Pan CW
5	Pan CCW

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

Connector Pinout:

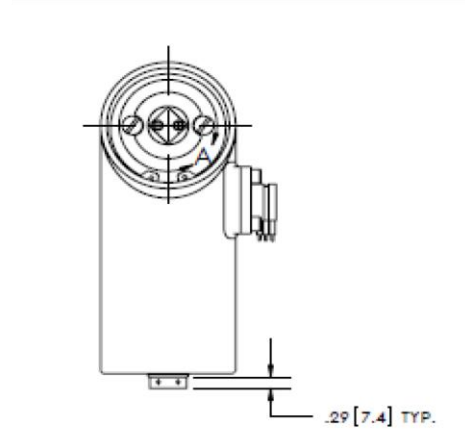
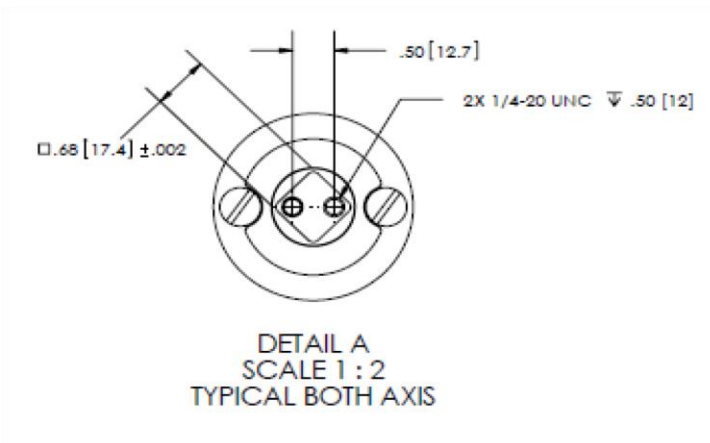
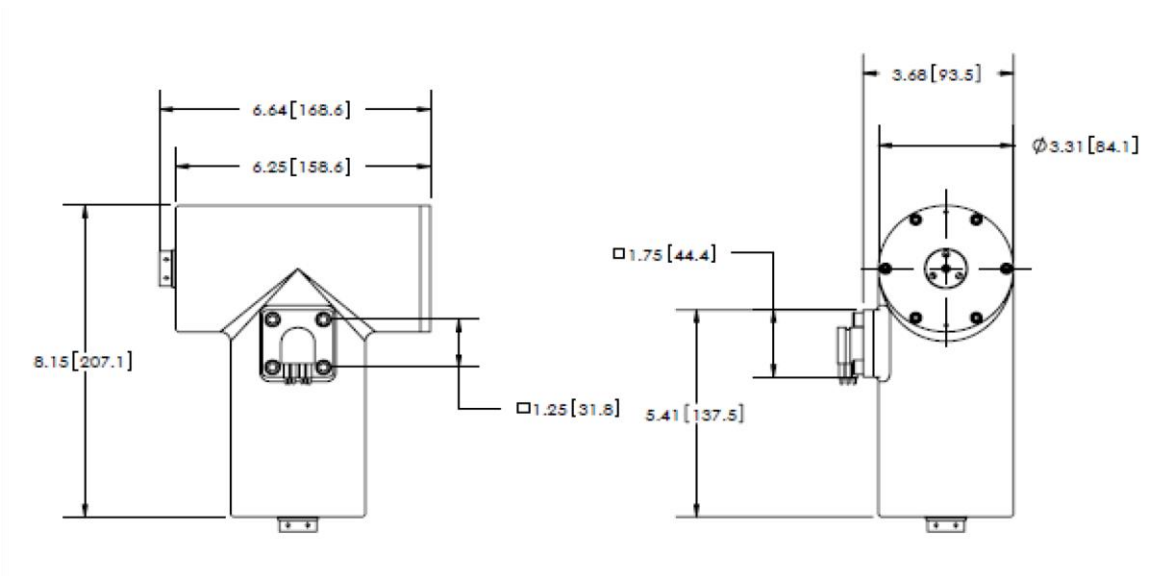
Pin 1: Ground	Pin 1: Ground	Pin 1: Ground
Pin 2: +24VDC	Pin 2: Tilt CCW	Pin 2: +24VDC
Pin 3: N.C	Pin 3: Tilt CW	Pin 3: Signal Ground
Pin 4: D+	Pin 4: Pan CW	Pin 4: RX
Pin 5: D-	Pin 5: Pan CCW	Pin 5: TX

Connector Pinout:

Pin 1: Ground	Pin 1: Pan CCW
Pin 2: Tilt CCW	Pin 2: Tilt Feedback
Pin 3: Tilt CW	Pin 3: Pan Feedback
Pin 4: Pan CW	Pin 4: Not connected



Height, Weight, and Depth Dimensions



DESIGN:

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