

## SS109HT High Performance 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	MCBJ-8P



## ENVIRONMENTAL SPECIFICATIONS:

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

## MECHANICAL SPECIFICATIONS:

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

## CONTROLS:

<b>Recommended Controls</b>	SS201 Series Desktop / Flush Mount SS202 Serial Control RS485 / RS232 / Custom RS422 Laptop/PC with SIDUS Control Panel GUI Analog with Feedback
<b>Optional Controls</b>	Option integrated functions, Pelco-D Keyboard, mouse, or joystick control digital feedback option
<b>Control Methods</b>	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

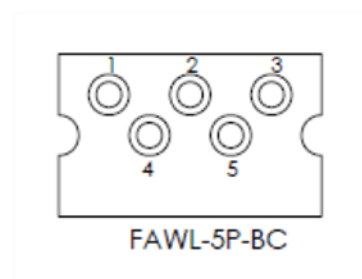
Optional integrated functions, Pelco-D  
Keyboard, mouse, or joystick control digital feedback option

## CONNECTOR PINOUTS:

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

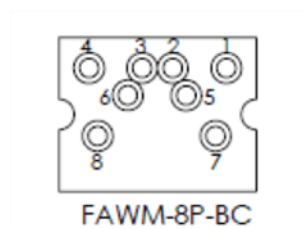
PIN	Function
1	Ground
2	+24 VDC
3	Signal Ground
4	RX
5	TX



### 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

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



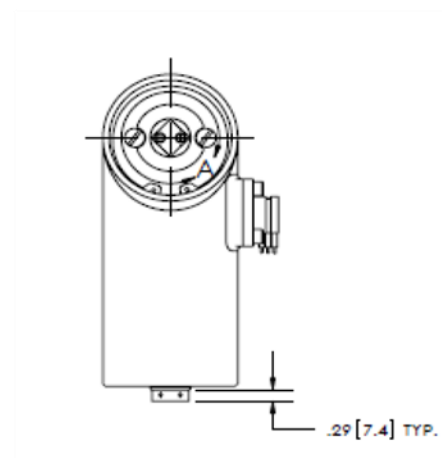
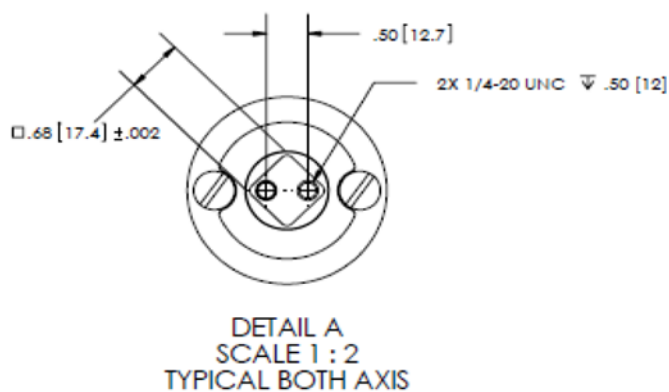
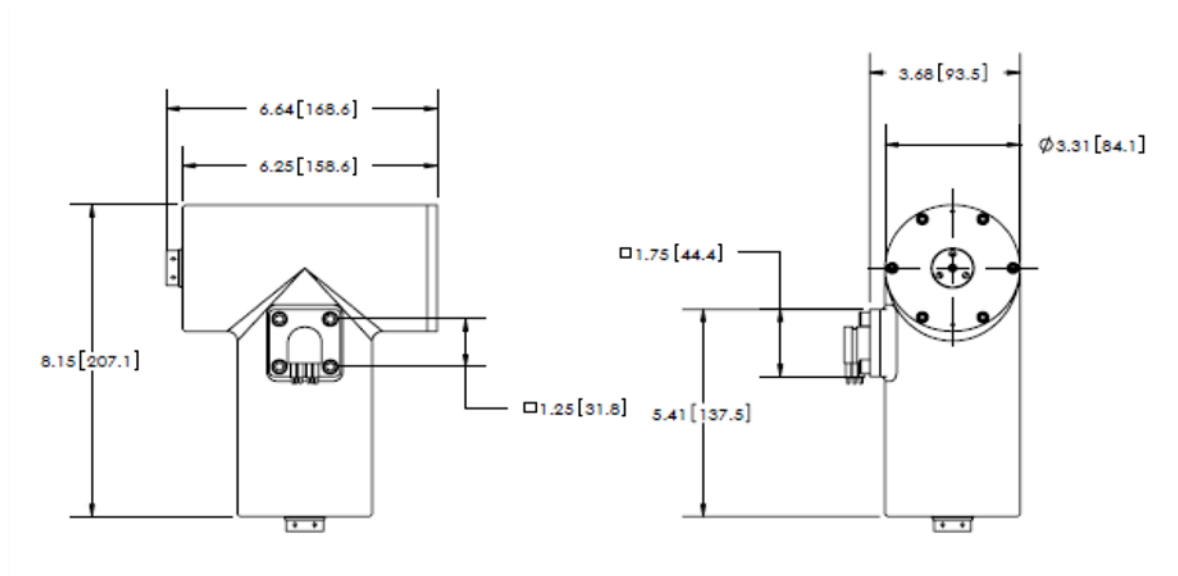
### Connector Pinout:

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



# SIDUS

## HEIGHT, WEIGHT, AND DEPTH DIMENSIONS:



## 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.

Specifications subject to change without notice and products described herein are subject to specific disclaimer.  
<https://www.sidus-solutions.com/support-resources/legal-disclaimer/>

