TRIAXIAL ANGULAR RATE SENSOR

ARS-C332-3A

Description:
Watson Industries has manufactured and developed inertial systems since 1980. The company holds numerous patents and is committed to being a leader in the development of inertial products.

The triaxial angular rate sensor is capable of surviving 500 g's of shock. Various output ranges are available. Watson Industries manufactures other systems including angle sensing devices, magnetic instruments, magnetic heading systems, as well as a complete line of individual gyros.

Applications:
This ARS can be used for marine, automotive, medical, antenna stabilization, robotics and many applications where accurate measurement of angular rate is required.

- Low Unit Price
- Good Environmental Performance
- Analog Voltage Output
- Available Angular Rate Ranges of 30 to 300 °/second
- Solid State Reliability
- One Year Limited Warranty
- Engineering Support

Watson Industries, Inc.
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ARS-C332-3A Specifications

Angular Rate

Range: Roll, Pitch, Yaw	±100°/sec	
Resolution:	0.1°/sec	
Analog Scale Factor:	20°/sec/V	±5V Output
Scale Factor Accuracy:	1%	Constant temperature
Scale Factor Temp Coefficient:	3%	Over temperature range
Bias: Roll, Pitch, Yaw	< 1.5°/sec	
Bias: Over Temp Range	±10°/sec	
Warmup Drift:	±1°/sec	
Non-Linearity:	< 0.05%	Full scale range
Bandwidth:	50 Hz	
Noise:	< 0.1°/sec rms	

Environmental

Temperature: Operating	-20°C to +50°C	-40°C to +85°C w/ reduced spec
Temperature: Storage	-55°C to +85°C	
Vibration: Operating	2.5g rms	20 Hz to 2 KHz
Vibration: Survival	10g rms	20 Hz to 2 KHz
Shock: Survival	500g	10mS ½ sine wave

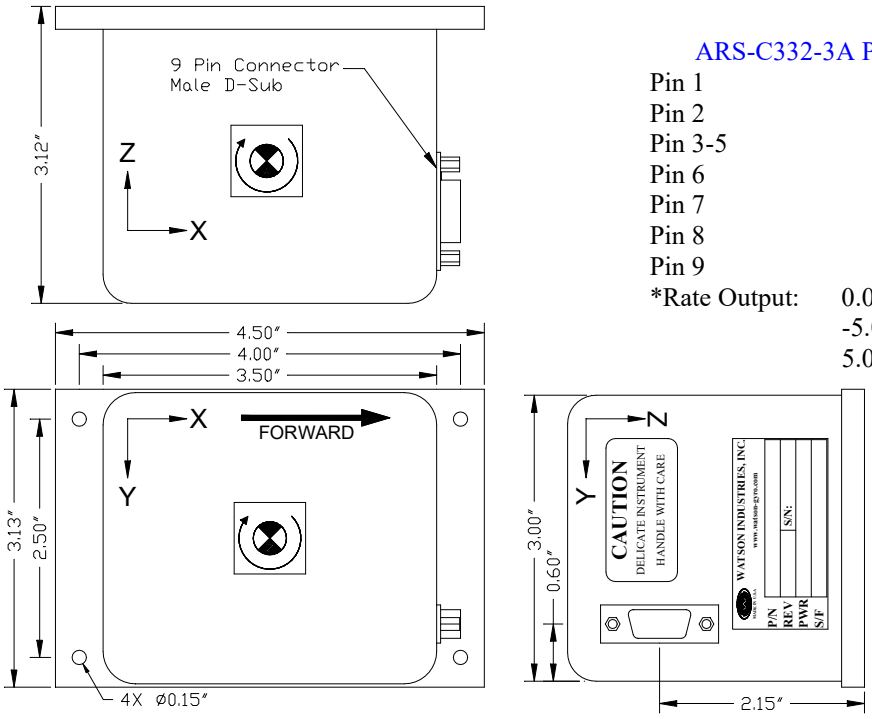
Electrical

Input Power:	10 to 35VDC	0.36W
Input Current:	28mA @ 12VDC	
Analog Output:	±5VDC	
Analog Output Impedance:	1000 Ohm	

Physical

Axis Alignment:	< 2°	
Size: Including Mounting Flanges	3.13"W x 4.50"L x 3.12"H	8 x 11.4 x 7.9 (cm)
Weight:	14oz (0.9lb)	397 grams (0.4Kg)
Connection:	9 pin male "D" subminiature	

- Specifications are subject to change without notice.
- This product may be subject to export restrictions. Export Classification ECCN 7A994



ARS-C332-3A Pinout (Male D-sub 9 pin)

Pin 1	Ground
Pin 2	+12 VDC at 28 mA
Pin 3-5	No connection
Pin 6	X Rate Output*
Pin 7	Y Rate Output*
Pin 8	Z Rate Output*
Pin 9	No connection
*Rate Output:	0.00 VDC at 0°/second
	-5.00 VDC at –100°/second
	5.00 VDC at +100°/second

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