ARS-P242-3A
Dual Axis Gyro

Description:
ARS-P242-3A is made for performance. This gyro has excellent stability, low bias, high scale factor accuracy and ease of use

Watson Industries has been designing and manufacturing solid-state gyros since 1980. Based on proven technology, this gyro is built under AS9100 quality standards with new features including built-in test and enhanced EMI/RFI protection.

The ARS-P242-3A has excellent performance for acceleration insensitivity, low mounting sensitivity and vibration rejection. This is achieved by having a sensing element that is finely tuned and temperature compensated. The advanced tuning methods allow better relative tolerances and better signal to noise performance. Special internal mounting holds the gyro sensing element in a stable alignment while rejecting linear vibration.

Upgrades that are standard for ARS-P232-3A include available rate ranges up to 475 degrees per second, internal power regulation for power input between 8 volts and 45 volts, and a case mounted connector.

Watson ARS-P242-3A features:
- Accurate in severe environments
- Excellent performance (time, temperature, vibration)
- Rugged
- Wide bandwidth
- Low drift
- Low noise
- High reliability
- Two-year warranty

Applications:
- Aircraft flight instrumentation and control
- Platform stabilization (antenna, camera, etc.)
- Robotics
- Short-term navigation
- Vehicle test instrumentation
- Train tilt controls

Watson Industries, Inc.
3035 Melby Street Eau Claire, Wisconsin 54703 U.S.A
Phone: +1 (715) 839-0628 Fax: +1 (715) 839-8248
e-mail: support@watson-gyro.com Website: www.watson-gyro.com

ARS-P242-3A Specifications

Angular Rate

Range: Y, Z	±200°/sec	
Resolution:	0.05°/sec	
Analog Scale Factor:	25mV/°/sec	40°/sec/V
Scale Factor Accuracy:	0.2%	At constant room temperature
Scale Factor Temp Coefficient:	0.5%	Over temperature range
Bias: Y, Z	±0.1°/sec	At room temp
Bias: Over Temp Range	±0.5°/sec	
Warmup Drift:	±0.6°/sec	
Non-Linearity:	< 0.15%	Full scale range
Bandwidth:	70 Hz	
Noise:	< 0.5°/sec rms	1 Hz to 100 Hz

Environmental

Temperature: Operating	-40°C to +85°C	
Temperature: Storage	-55°C to +85°C	
Vibration: Operating	5g rms	20 Hz to 2 KHz
Vibration: Survival	10g rms	20 Hz to 2 KHz
Shock: Survival	500g	10mS ½ sine wave

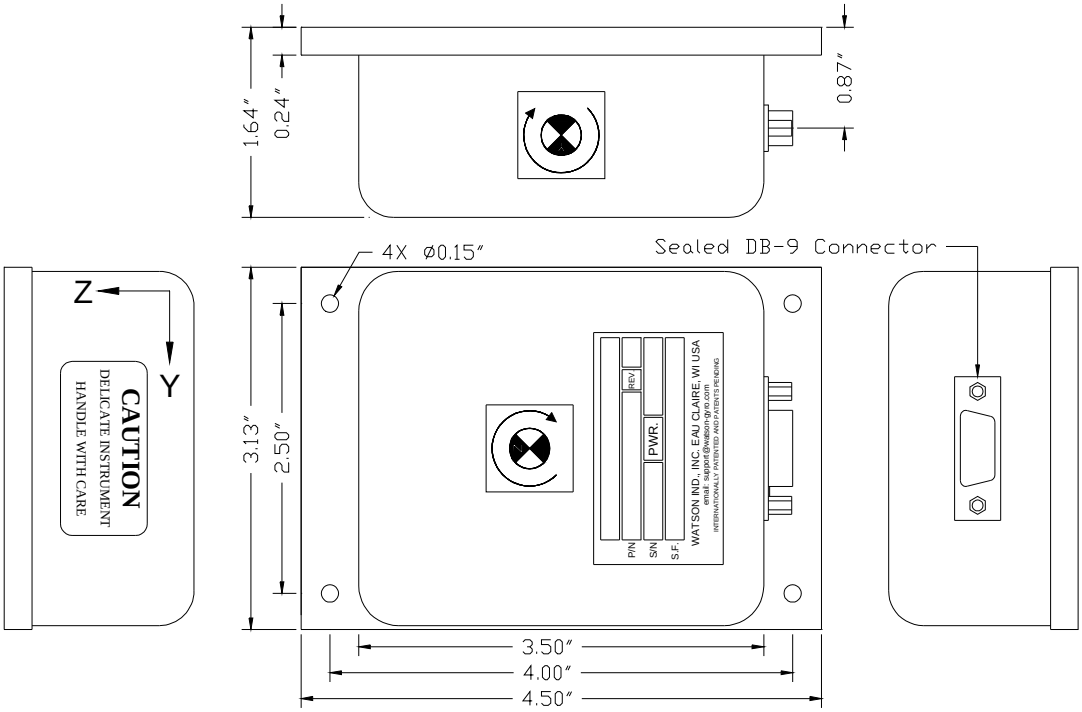
Electrical

Input Power:	8 to 45VDC	Reverse protected
Input Current:	120mA @ 12VDC	1.6W
Analog Output:	±5VDC	
Analog Output Impedance:	1000 Ohm	5%

Physical

Axis Alignment:	< 0.2°	
Size: Including Mounting Flanges	3.13"W x 4.50"L x 1.64"H	8.0 x 11.4 x 4.2 (cm)
Weight:	12.2 oz (0.8lb)	345 grams (0.3Kg)
Connection:	9 pin male “D” subminiature	

- Specifications are subject to change without notice.
- This product may be subject to export restrictions. Export Classification ECCN EAR99.



10/17 TJH

Watson Industries, Inc.

3035 Melby Street Eau Claire, Wisconsin 54703 U.S.A

Phone: +1 (715) 839-0628 Fax: +1 (715) 839-8248

e-mail: support@watson-gyro.com Website: www.watson-gyro.com