

ACCELEREX RBA500 ACCELEROMETER

I Digitally-compatible frequency output sensor

For a frequency output sensor, Honeywell produces the Accelerex RBA500 accelerometer. It is primarily used to supplement GPS navigation systems. It is a good choice where frequency output, high-g, small size, low power, and light weight are necessary.

The acceleration is measured as a function of the frequency difference between two vibrating quartz beams. The output of the Accelerex accelerometer is also thermally compensated through the use of an internal temperature sensor and Honeywell-supplied coefficients; when integrated over time, delta Velocity is directly provided to the user's system.

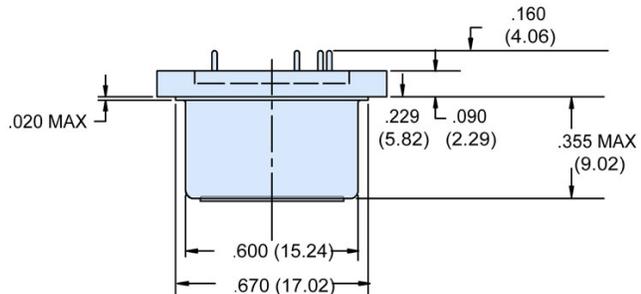
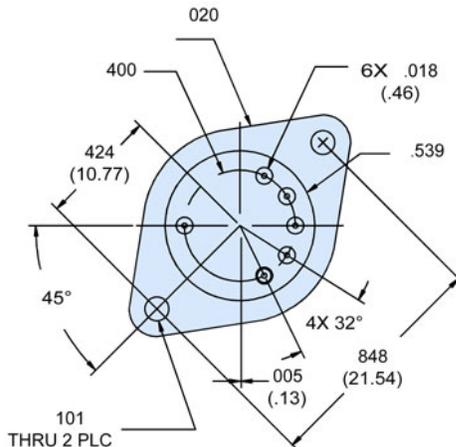


Accelerex RBA500

FEATURES

- Frequency output for direct interface to digital electronics
- Low price
- High-g capability
- Very compact design
- Integral 2 fastener mounting flange
- Low power consumption
- Hermetically sealed case
- Internal temperature sensor for thermal compensation
- Robust design and quality assurance provides superior reliability.

CONFIGURATION DRAWINGS



PERFORMANCE CHARACTERISTICS

ISO-9001 CERTIFICATION SINCE 1995

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Accelerometers exported from the United States must be done in accordance with the Export Administration Regulations (EAR) and/or the International Traffic in Arms Regulations (ITAR) as applicable.

Performance

Input Range	±70 g
Bias	
One-year Repeatability	<4g
Temperature Sensitivity	<60 µg/°C
Scale Factor	80 Hz/g
One-year Repeatability	<450 ppm
Axis Misalignment	<12 mrad
One-year Repeatability	<400 µrad
Resolution/Threshold	<1 µg
Bandwidth	> 400 Hz

Environment

Operating Temperature Range	-55 to +105 °C
Shock	250 g
Vibration	20g, peak, DC-2000 Hz

Electrical

Input voltage	+14 to +16 VDC
Current	<5 mA
Power	<75 mW @ +15 VDC

Physical

Weight	12 grams
Size	0.80 in. dia. x 0.42 in. high
Height bottom to mounting surface	.600 in. Max
Case Material	Stainless Steel

Additional product specifications, outline drawings and block diagrams and test data are available on request.

For More Information

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