

Accelerex® RBA500 Accelerometer

Digitally-compatible frequency output sensor



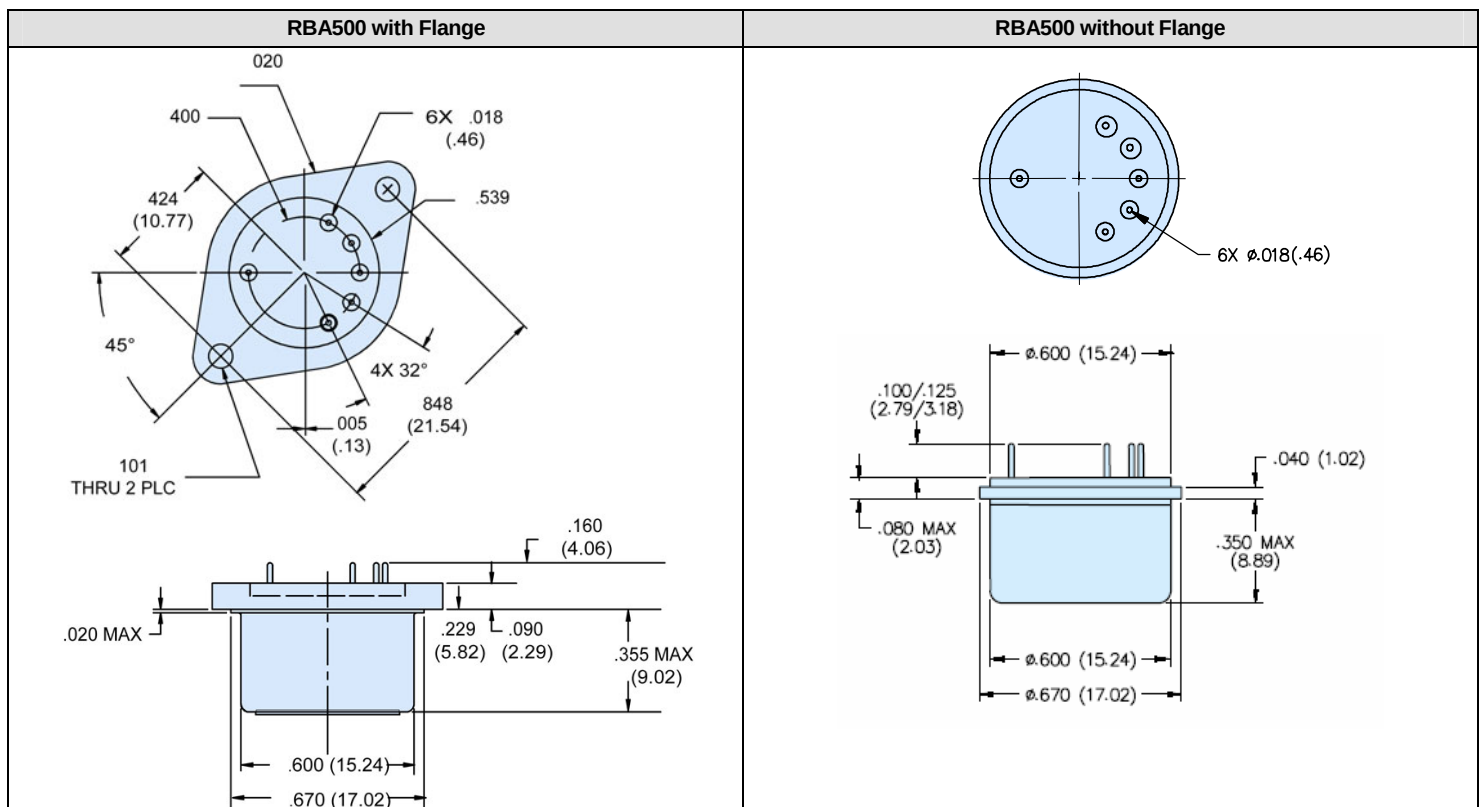
For a frequency output sensor, Honeywell produces the Accelerex RBA500 accelerometer. It is primarily used to supplement GPS navigation systems. It is a good choice where frequency output, high-g, small size, low power, and light weight are necessary.

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.

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

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

Performance	
Input range	±70 g
Bias	
- One year repeatability	<4 mg
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
Environmental	
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
Case material	Stainless Steel

Find out more:
www.inertialsensor.com

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The Honeywell logo, consisting of the word "Honeywell" in a bold, red, sans-serif font.