

# Q-FLEX QA-750 ACCELEROMETER

## I Cost-effective inertial-grade sensor

For Q-Flex performance and reliability in an economical package, Honeywell produces the QA-750 for a broad array of high-performance industrial applications.

The QA-750 is a popular choice for marine applications, used in both surface and underwater applications, building and bridge tilt, sway monitoring, railway monitoring and industrial controls.

As with the entire Q-Flex family of accelerometers, the QA-750 features a patented Q-Flex etched-quartz-flexure seismic system. An amorphous quartz proof-mass structure provides excellent bias, scale factor and axis alignment stability.

The integral electronics develops an acceleration proportional output current, providing both static and dynamic acceleration measurements. By use of a customer supplied output load resistor, appropriately scaled for the acceleration range of the application, the output current can be converted into a voltage.

As an option, the QA-750 can be provided with the temperature-compensating algorithm where bias, scale factor and axis misalignment performance are dramatically improved.



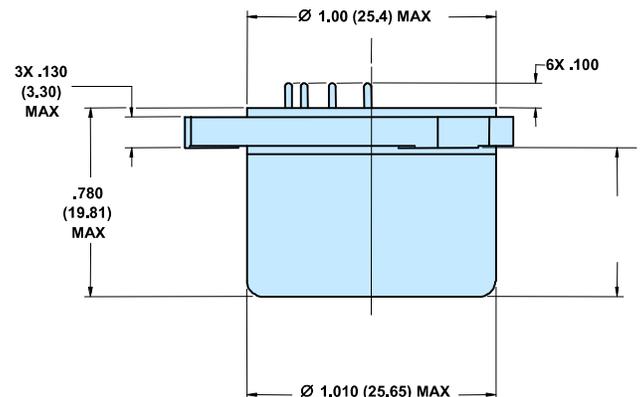
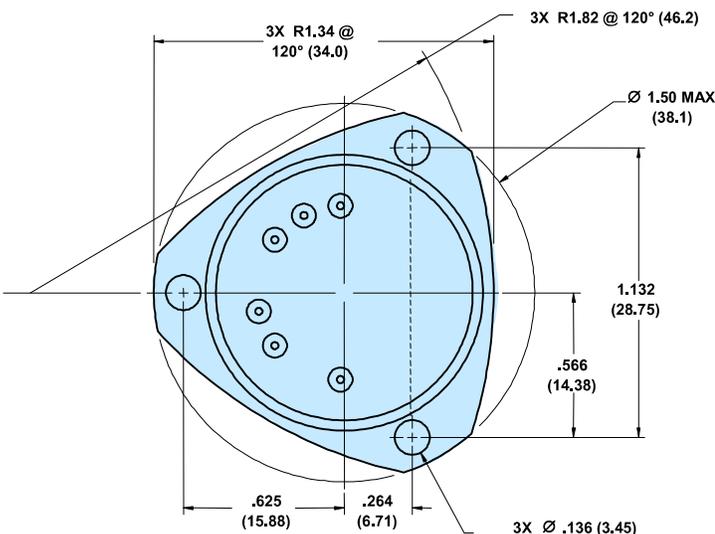
Q-Flex QA-750



## FEATURES

- Robust design and quality assurance provide superior reliability
- High value: precision at an affordable price
- Environmentally rugged
- Analog output
- Compact design
- Field-adjustable range
- Built-in test
- Optional thermal compensation

## CONFIGURATION DRAWINGS



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## PERFORMANCE CHARACTERISTICS

Performance	
Input Range	±30 g
Bias	<8 µg
One-year Composite Repeatability	<1000 µg (w/o model data)
Temperature Sensitivity	<60 µg/°C
Scale Factor	1.20 to 1.46 mA/g
One-year Composite Repeatability	<1000 ppm (w/o model data)
Temperature Sensitivity	<190 ppm/°C
Axis Misalignment	<7000 µrad
One-year Composite Repeatability	<300 µrad
Vibration Rectification	<60 µg/g <sup>2</sup> rms (50-500 Hz) <200 µg/g <sup>2</sup> rms (50-500 Hz)
Intrinsic Noise	<7 µg-rms (0-10 Hz) <70 µg-rms (10-500 Hz)
Environment	
Operating Temperature Range	-55 to +95 °C
Shock	200 g
Vibration Peak Sine	20 g @ 30-500 Hz
Resolution/Threshold	<1 µg
Bandwidth	>300 Hz
Thermal Modeling	-010 No -020 Yes
Electrical	
Quiescent Current per Supply	<16 mA
Quiescent Power	<480 mW @ ±15 VDC
Electrical Interface	Temp Sensor Voltage Self Test Power / Signal Ground
Input Voltage	±13 to ±18
Physical	
Weight	52.5 ±4 grams
Diameter below mounting surface	Ø1.07 ±0.01 in.
Height bottom to mounting surface	.600 in. Max
Case Material	300 Series Stainless Steel

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

### For More Information

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N61-2512-000-000 | 08/2020  
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## ISO-9001 CERTIFICATION SINCE 1995

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MAKE IT

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