Honeywell

# Model MAQ14

## Accelerometer



### DESCRIPTION

The Model MAQ14 charge output miniature accelerometer is designed to be used in Industrial test and automation environments; including laboratory testing, modal studies and test cells where high temperatures are likely to be encountered and where space is limited and small size is desired or a high natural frequency is required. The MAQ14 is a self generating piezoelectric transducer which has no internal electronics and requires no external power for operation. These units are usually connected to a local charge amplifier that is mounted as near as possible in a lower temeperature environment. The seismic element is mechanically isolated from the mounting base, resulting in a low base strain sensitivity. The stainless steel materials are non-magnetic resulting in very low magnetic field susceptibility. These features, together with a sealed body, assure accurate and reliable data.

### FEATURES

- Small size
- Charge output (pC/G)
- 18 kHz mounted frequency
- General purpose
- Side entry microdot connector

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# Model MAQ14

## PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|---|---|
| Dynamic range | 1000 G |
| Sensitivity | 50 pC/G |
| Transverse sensitivity | Less than 5 % |
| Temperature sensitivity | 0.145/°F |
| Frequency range | 1 Hz to 10 kHz |
| Amplitude linearity | Better than 1 % linearity |
| Mounted base resonance | 18 kHz |

## ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|---|---|
| Temperature, operating | -57 °C to 249 °C [-70 °F to 480 °F] |
| Sealing | IP67/NEMA 4 |

## ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|---|---|
| Input | Self generating |
| Standard cable length (AG910) | 4,9 m [16 ft] (only AG910) |
| Charge amplitude required | CA2 |
| Mating connector (AG909) | Microdot (only AG909) |
| Capacitance | 450 pF |
| Isolation | Base isolated |

## MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|---|---|
| Weight | 0,03 kg [1.2 oz] |
| Material | Stainless steel |
| Mounting torque | 2 ft-lb |

## SENSITIVITY CODES

| Sensitivity Code | Sensitivity |
|---|---|
| **YC** | 10 pC/G |
| **YE** | 30 pC/G |
| **YF** | 50 pC/G |

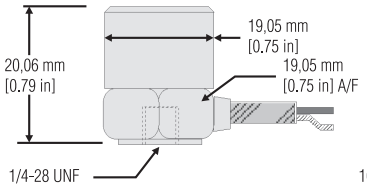
## WIRING CODES

| Wire | |
|---|---|
| Center | (+) Output |
| Shield | Case ground |

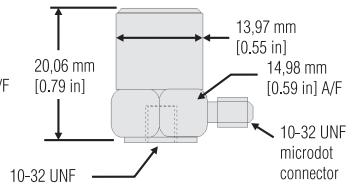
## OPTION CODES

| | |
|---|---|
| | **Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings.** |
| **Sensitivity** | 10 pC/G, 30 pC/G, 50 pC/G |

## MOUNTING DIMENSIONS

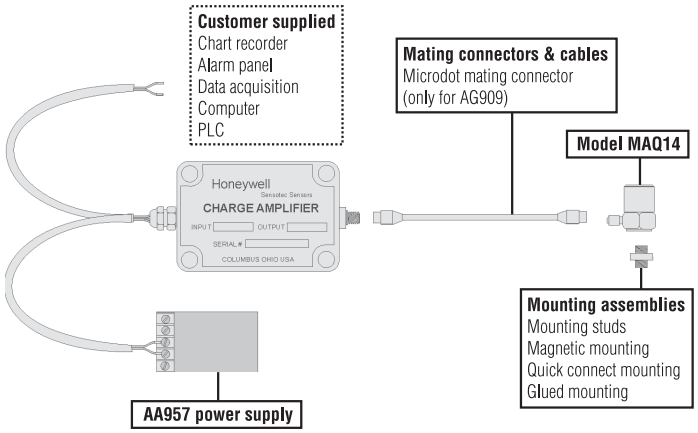



**Model MAQ14 (order code AG910)**




**Model MAQ14 (order code AG909)**

## TYPICAL SYSTEM DIAGRAM






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Accelerometer

**Warranty.** Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847
Email inquiries to info.sc@honeywell.com

**⚠ WARNING**

**PERSONAL INJURY**

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

**⚠ WARNING**

**MISUSE OF DOCUMENTATION**

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

Sensing and Control
Automation and Control Solutions
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422 USA
+1-815-235-6847
**www.honeywell.com/sensing**

Honeywell

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