

## Model MA11

### Accelerometer

---



#### DESCRIPTION

The Model MA11 amplified piezoelectric accelerometers are designed to be used in Industrial test and automation environments; including laboratory testing, modal studies and test cells. 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.

The Model MA11 is available in a number of configurations and options that includes connector or integral stainless steel armored cable (specify length at time of ordering), or a submersible format. The Model MA11 can be supplied in a number of different dynamic ranges to suit the expected vibration levels for the application.

#### FEATURES

- General purpose
- 2 Hz to 10 kHz usable frequency range
- IEPE output
- mV/G output
- Intrinsically safe option
- Multiple termination options

# Model MA11

## PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Dynamic range	±80 G
Sensitivity	100 mV/G ±10 %
Transverse sensitivity	Less than 5 %
Temperature sensitivity	0.145/°F
Frequency range	2 Hz to 10 kHz ±5 % 3 dB limits
Amplitude linearity	Better than 1 % linearity
Mounted base resonance	18 kHz
Acceleration range	±80 G (dependent on sensitivity)

## ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-57 °C to 138 °C [-70 °F to 280 °F]
Shock limits	2000 G
Vibration limits	2000 G
Sealing, AG901 and AG902	IP67/NEMA 4
Sealing, AG905	IP68/NEMA 4x

## ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Input	Constant current
Current range	0.5 mA to 8 mA
Bias voltage	12 Vdc
Cable <sup>2</sup> , AG902	Stainless steel overbraided PTFE
Cable <sup>2</sup> , AG905	PU
Standard cable length <sup>2</sup> , AG902	4,9 m [16 ft]
Standard cable length <sup>2</sup> , AG905	Specify at time of order
Electrical noise	0.1 mG max.
Isolation	Base isolated
Mating connector <sup>1</sup>	MH002

## MECHANICAL SPECIFICATIONS

Characteristic	Measure
Design	Isolated compression in faraday cage
Weight, AG901 and AG902	0,11 kg [3.85 oz]
Weight, AG905	0,15 kg [5.3 oz]
Material	Stainless steel
Mounting torque	6 ft-lb

## SENSITIVITY CODES

Sensitivity Code	Sensitivity
<b>GU</b>	10 mV/G
<b>GH</b>	100 mV/G
<b>GG</b>	1000 mV/G

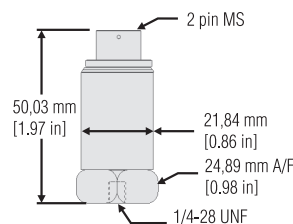
## OPTION CODES

	<b>Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see <a href="http://sensing.honeywell.com/TMsensor-ship">http://sensing.honeywell.com/TMsensor-ship</a> for updated listings.</b>
<b>Sensitivity</b>	10 mV/G; 100 mV/G; 1000 mV/G
<b>Electrical termination</b>	2 pin MS <sup>1</sup> Cable length (specify at time of ordering) <sup>2</sup>
<b>Mounting arrangement</b>	17b. 1/4-28 UNF 17c. Quickfit female

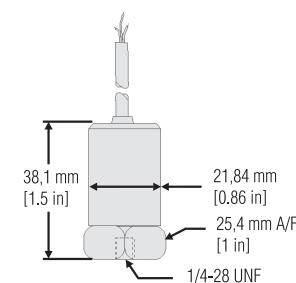
## WIRING CODES

<b>AG901</b>	
Pin A	(+) Supply
Pin B	Supply return
<b>AG902 and AG905</b>	
White	(+) Supply (+) output
Black	Supply return
Shield	No connection

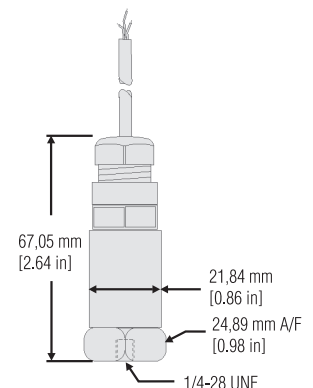
## MOUNTING DIMENSIONS



Model MA11 (order code AG901)



Model MA11 (order code AG902)

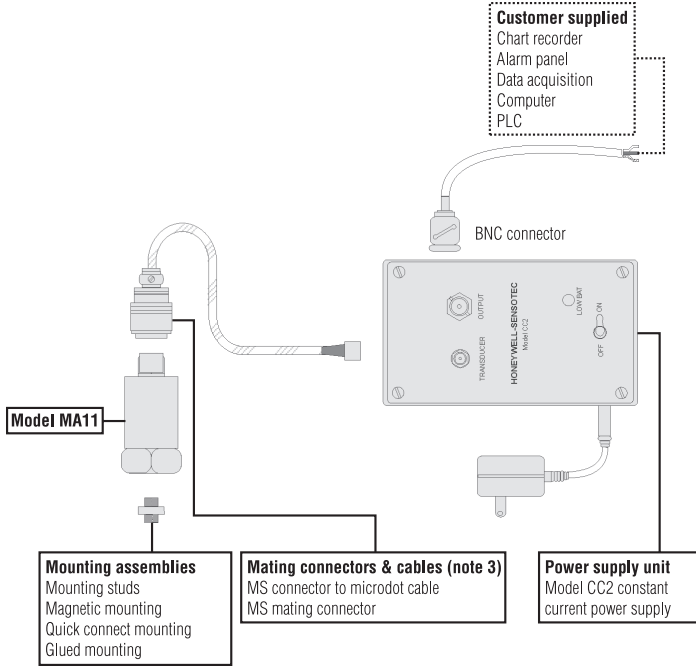


Model MA11 (order code AG905)

## NOTES

1. Only available with AG901.
2. Only available with AG902 and AG903.
3. AG902 and AG905 do not need mating connectors.
4. Intrinsically safe (2N) only available with cable exit.

## TYPICAL SYSTEM DIAGRAM



**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](http://www.honeywell.com/sensing) or call +1-815-235-6847

Email inquiries to [info.sc@honeywell.com](mailto: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.**