Models MA311 and MA312



Accelerometer

DESCRIPTION

The MA311/312 Series accelerometers are available in a variety of configurations and can be stud or bolt mounted to meet specific application requirements. Welded austenitic stainless steel construction ensures dependable performance in harsh indus-

trial environments. Designed with low impedance strain gages, the frequency ranges extend down to dc, sensitivity to noise is minimized, and amplifier electronics are simplified.

FEATURES

- ac and dc response
- Amplified voltage output
- 0 Hz to 1800 Hz usable range
- Stud or bolt mounted
- mV/G output

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PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Sensitivity	100 mV/G
Transverse sensitivity	Less than 5 %
Temperature sensitivity	0.145/ °F
Frequency range	Dependent on dynamic range ±5 % (see below)
±1 G and ±2 G	dc to 250 Hz
±5 G	dc to 300 Hz
±10 G	dc to 500 Hz
±20 G	dc to 700 Hz
±50 G	dc to 1 kHz
Amplitude linearity	Better than 1 % linearity
Mounted base resonance	18 kHz
Acceleration limits	x20 of dynamic range

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-18 °C to 82 °C [0 °F to 180 °F]
Sealing	IP65/NEMA 2

ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Input	Voltage
Supply voltage	12 V to 24 V @7 mA
Output impedance	50 Ohm
Cable	Stainless steel overbraided PTFE
Standard cable length	4,9 m [16 ft]
Electrical noise	10 mG
Isolation	Base isolated

MECHANICAL SPECIFICATIONS

Characteristic	Measure
Weight	0,04 kg [1.4 oz]
Material	Stainless steel

SENSITIVITY CODES

Sensitivity Code	Sensitivity
GH	100 mV/G

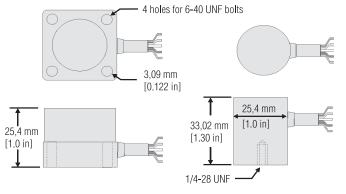
OPTION CODES

	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.
Dynamic range	±1 G, ±2 G, ±5 G, ±10 G, ±20 G, ±50 G
Electrical termination	Cable length (specify at time of ordering)
Mounting arrangement	17b. 1/4-28 UNF* 17c. Quickfit female*

WIRING CODES

Wire	
Red	(+) Supply
Blue	(-) Supply
Yellow	(+) Output
Green	(-) Output
Shield	Not connected

MOUNTING DIMENSIONS



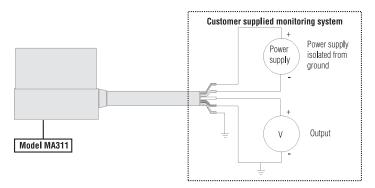
Model MA311 (order code AG915)

Model MA312 (order code AG916)

Models MA311 and MA312

Accelerometer

TYPICAL SYSTEM DIAGRAM

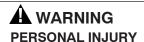


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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

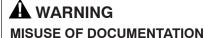
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• DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

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



- 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.

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