

## Model MAV52

### Accelerometer



#### DESCRIPTION

The SENSOTEC Model MAV52 amplified piezoelectric accelerometers with velocity output are designed to be used in Industrial test and automation environments; including laboratory testing, modal studies and test cells. The MAV52 is ideal for applications where velocity content of vibration is a more meaningful parameter to measure and where noise issues or system simplicity makes integration of the acceleration signal in the sensor rather than the signal conditioning more attractive. The 4 mA to 20 mA output makes it ideal in applications where noise, cable losses and long cable runs are likely to be an issue. 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 MAV52 is available in a number of configurations and options that includes connector or integral stainless steel armored cable (specify length at time of ordering), intrinsically safe option or a submersible format. The mounting hole can be supplied with different threads. The Model MAV52 can be supplied in a number of different sensitivities to suit the expected vibration levels for the application.

#### FEATURES

- Velocity measurement
- 2 Hz to 10 kHz usable frequency range
- 4 mA to 20 mA proportional to velocity
- Submersible option

# Model MAV52

## PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Dynamic range	50 G
Sensitivity	25,4 mm/s for 4 mA to 20 mA
Transverse sensitivity	Less than 5 %
Temperature sensitivity	0.145/°F
Frequency range	2 Hz to 1 kHz ±10 %
Amplitude linearity	Better than 1 % linearity
Mounted base resonance	5 kHz

## ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-23 °C to 99 °C [-10 °F to 210 °F]
Sealing, AG928 and AG932	IP67/NEMA 4
Sealing, AG929	IP68/NEMA 4x

## ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Input	Voltage
Output	4 mA to 20 mA
Supply voltage	12 V to 32 V
Current range	0.5 mA to 8 mA
Bias voltage	12 Vdc
Cable <sup>2</sup> , AG932	Stainless steel armored PTFE
Cable <sup>2</sup> , AG929	PU
Standard cable length <sup>2</sup>	4,9 m [16 ft]
Electrical noise	0.3 mG max.
Isolation	Base isolated
Mating connector <sup>1</sup>	MH008

## MECHANICAL SPECIFICATIONS

Characteristic	Measure
Weight	0,14 kg [5 oz]
Material	Stainless steel
Mounting torque	6 ft-lb

## RANGE CODES

Range Code	Range
SA	12,7 mm/s RMS
SB	25,4 mm/s RMS
SC	50,8 mm/s RMS
SD	101,6 mm/s RMS

## WIRING CODES

AG928	
Pin A	(+) ve Accel.
Pin B	No connection
Pin C	0 V

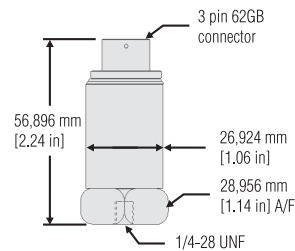
AG929	
Red	(+) Supply
Blue	(+) Output
Shield	Case ground

AG932	
White	(+) Supply
Black	(+) Output
Shield	Case ground

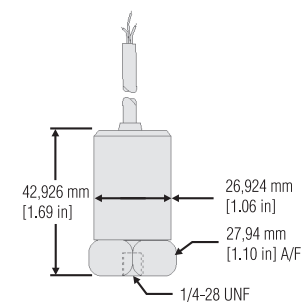
## OPTION CODES

	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.
Sensitivity	12,7 mm/s RMS; 25,4 mm/s RMS ; 50,8 mm/s RMS; 101,6 mm/s RMS
Electrical termination	3-pin 62 GB connector <sup>1</sup> Cable length <sup>2</sup> (specify cable length at time of order)
Mounting arrangement	17b. 1/4-28 UNF 17c. Quickfit female

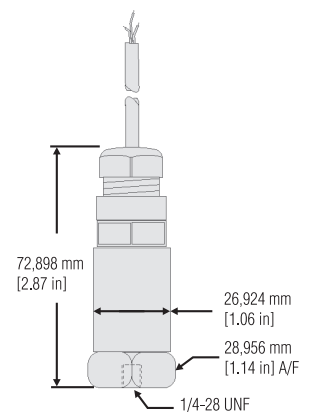
## MOUNTING DIMENSIONS



Model MAV52 (order code AG928)



Model MAV52 (order code AG932)



Model MAV52 (order code AG929)

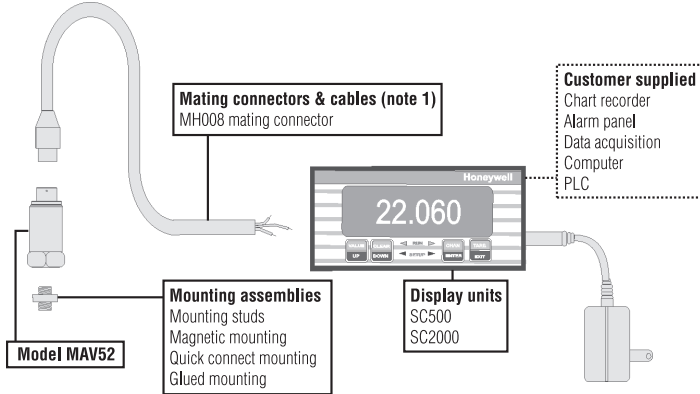
# Model MAV52

# Accelerometer

## NOTES

1. Only available with AG928.
2. Only available with AG929 and AG932.

## 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.**

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](http://www.honeywell.com/sensing)

008733-1-EN IL50 GLO  
May 2008  
Copyright © 2008 Honeywell International Inc. All rights reserved.

# Honeywell