










# ACCELEROMETERS



**TRANSMETRA**

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Potential Application	Model	Order Code	Dynamic Range	Page	
<b>General Purpose</b>	PA	AG714	+/- 5G to +/- 1000G	322	
	MA11	AG901,AG902,AG905	+/- 80G	323	
	MA12	AG903,AG904	+/- 80G	325	
<b>Miniature</b>	MA341/342	AG922/AG923	+/- 80G	327	
	MA21	AG913	+/- 80G	328	
	MA23	AG914	+/- 10G	329	
<b>Low Frequency</b>	MA311/312	AG915/AG916	+/- 1G to +/- 50G	330	
	MA321/322	AG917/AG918	+/- 1G to +/- 50G	331	
	JTF	AG111-AG113	+/- 5G to +/- 500G	332	
<b>High Frequency</b>	MAQ36	AG924	+/- 2000G	334	
<b>High Temperature</b>	MAQ13	AG908	+/- 800G	335	
	MAQ14	AG909,AG910	+/- 1000G	336	
	MAQ41	AG925	+/- 100G	337	
<b>Velocity Output</b>	MAV51	AG926,AG927	N/A	338	
<b>Acceleration &amp; Temperature</b>	MAT53	AG930,AG931	+/- 80G	340	
<b>Built-in Signal Conditioning</b>	MA15	AG906,AG907	+/- 50G	342	
	MAV52	AG928,AG929,AG932	+/- 50G	343	
	MA331/332	AG919/AG920	+/- 1G to +/- 50G	345	
<b>Hand Held System</b>	VM110/120	AG941/AG942	N/A	346	

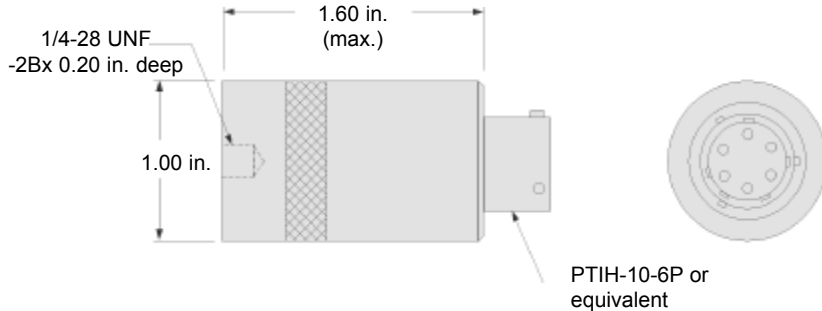
# Model PA Amplified Piezoelectric Accelerometer

Order Code AG714

- Enhanced Sensitivity
- Case Isolated
- Rugged, High Impact



## Dimensions



## Wiring Codes

- A (+) 13.5 to 16.5 VDC
- B (-) Output/ Supply common
- C (-) 13.5 to 16.5 VDC
- D (+) Output (+/- 5 VDC)
- E Not Applicable
- F Not Applicable

## Performance

Dynamic Range.....+/- 5 to +/- 1,000 G  
 Sensitivity.....See table  
 Frequency Range.....3 to 5,000 Hz  
 Full Scale Output.....+/- 5 V  
 Mounted Natural Frequency.....30 kHz  
 Transverse Sensitivity.....5% of Full Scale

## Environmental

Shock Limits.....3,000 G  
 Vibration Limits.....2,000 G  
 Temperature, Operating.....32° to 160° F

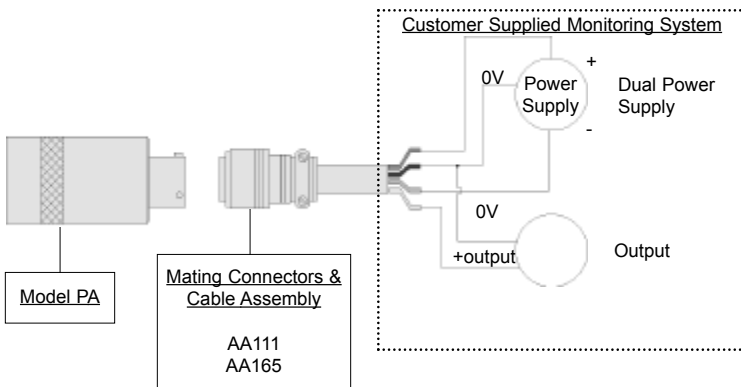
## Electrical

Input Power.....+/- 13.5 to +/- 16.5 VDC  
 Output Impedance.....100 Ohms  
 Connector.....PTIH-10-6P

## Mechanical

Weight.....3 oz.  
 Case Material.....316 Stainless Steel  
 Sealing.....Welded

## Typical System Diagram



## Range Codes

Range (G)	Sensitivity (mV/G)	Range Code
5	1,000	GJ
10	500	GK
50	100	GN
100	50	GP
500	10	GR
1,000	5	GS

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG714** **GJ**  
 Model Code      Range Code

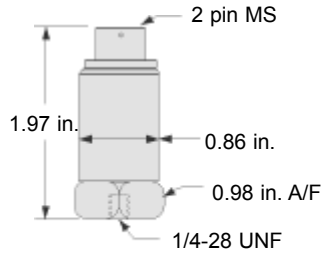
# Model MA11 Accelerometer

Order Code AG901; AG902; AG905

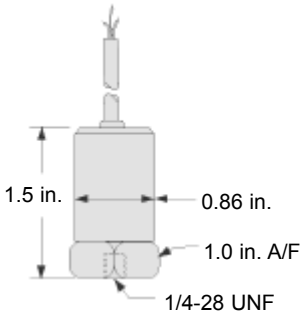
- General Purpose
- 2 Hz to 10 kHz Usable Frequency Range
- IEPE Output



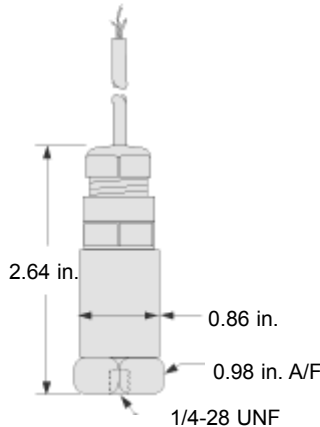
## Dimensions



Model MA11 (order code AG901)



Model MA11 (order code AG902)



Model MA11 (order code AG905)

## Wiring Codes

### AG901

Pin A (+) Supply  
Pin B Supply Return

### AG902 & AG905

White (+) Supply (+) Output  
Black Supply Return  
Shield No Connection

## Performance

Dynamic Ranges.....	+/- 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% 3db limits
Amplitude Linearity.....	Better than 1% Linearity
Mounted Base Resonance.....	18 kHz
Acceleration Range.....	+/- 80 G (dependent on sensitivity)

## Environmental

Temperature, Operating.....	-70° to 280° F
Shock Limits.....	2,000 G
Vibration Limits.....	2,000 G
Sealing	
AG901 & AG902.....	IP67/ Nema 4
AG903.....	IP68/ Nema 4x

## Electrical

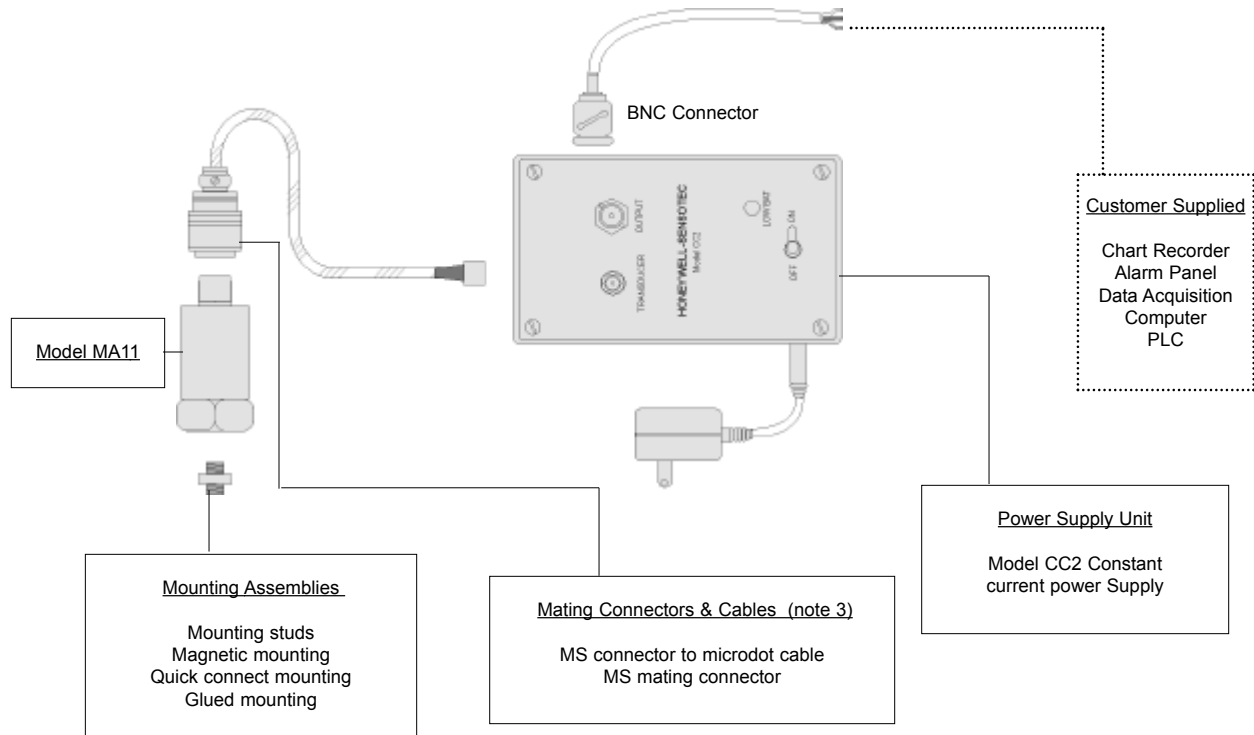
Input.....	Constant Current
Current Range.....	0.5 mA to 8 mA
Bias Voltage.....	12 Vdc
Cable (note 2)	
AG902.....	S/S overbraided PTFE
AG903.....	PU
Standard Cable Length (note 2)	
AG902.....	16 ft.
AG903.....	Specify at time of order
Electrical Noise.....	0.1 mG max.
Isolation.....	Base isolated
Mating Connector (note 1).....	MH002

# Model MA11

## Mechanical

Design.....Isolated compression in faraday cage  
 Weight  
 AG901 & AG902.....3.85 oz.  
 AG903.....5.3 oz.  
 Material.....Stainless Steel  
 Mounting Torque.....6 ft.-lb.

## Typical System Diagram



## Options

	Fast Track Manufacture	Built to Order
Sensitivity	100 mV/G	10mV/G; 1,000mV/G
Electrical Termination	2 pin MS (note 1) Cable (note 2)	
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female	

Supplied as standard

## Sensitivity Codes

Sensitivity	Sensitivity Code
10 mV/G	GU
100 mV/G	GH
1,000 mV/G	GG

## Notes

1. Only available with AG901.
2. Only available with AG902 & AG903.
3. AG902 & AG903 do not need mating connectors.

-Not RoHS Compliant

## How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG901** **GU** **17b**  
 Model Code    Sensitivity Code    Options Code

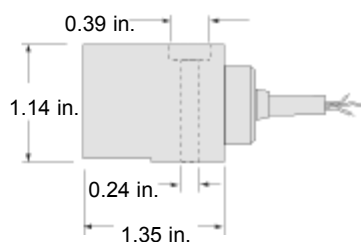
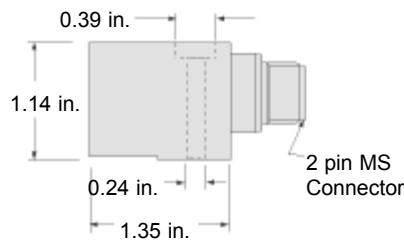
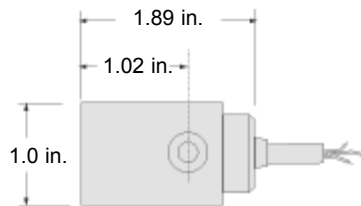
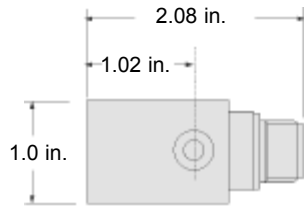
# Model MA12 Accelerometer

Order Code AG903; AG904

- General Purpose
- 2 Hz to 8 kHz Usable Frequency Range
- IEPE Output



## Dimensions



Model MA12 (order code AG903)

Model MA12 (order code AG904)

## Wiring Codes

### AG903

Pin A (+) Supply  
Pin B Supply Return

### AG904

White (+) Supply (+) Output  
Black Supply Return  
Shield Connected to Case

## Performance

Dynamic Ranges.....+/- 80G  
Sensitivity.....100 mV/G +/- 10%  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....2 Hz to 8 kHz  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....18 kHz

## Environmental

Temperature, Operating.....-70° to 280° F  
Sealing.....IP67/ Nema 4

## Electrical

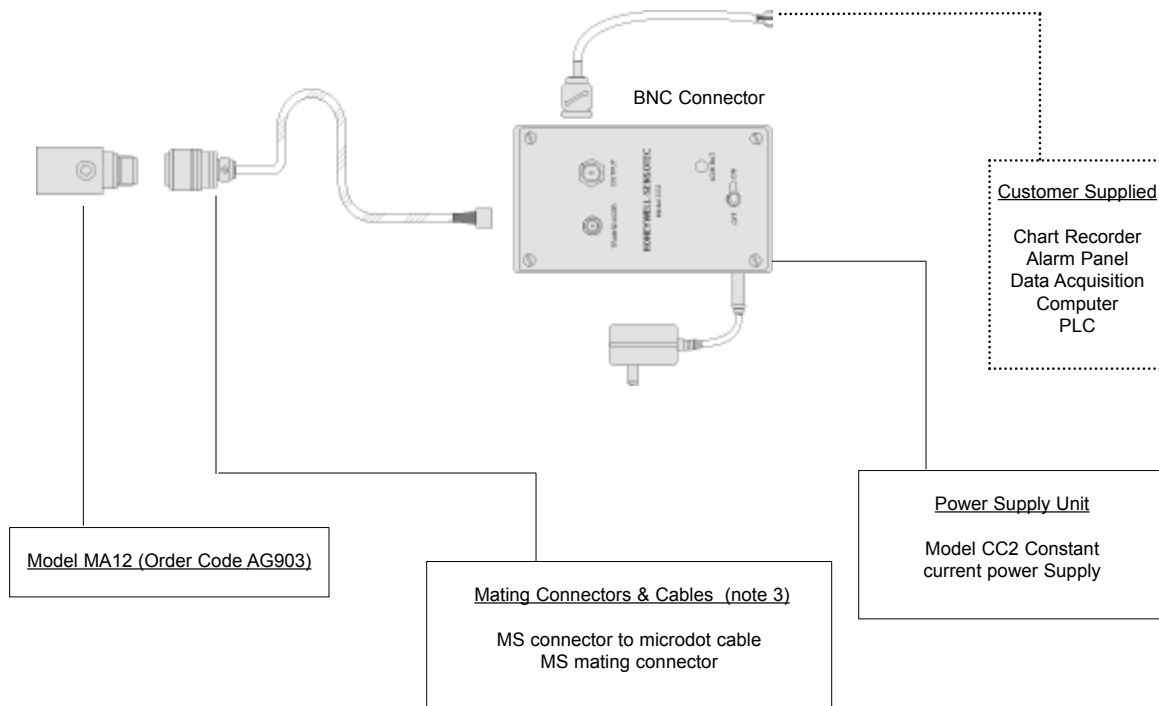
Input.....Constant Current  
Current Range.....0.5 mA to 8 mA  
Bias Voltage.....12 Vdc  
Cable (note 2).....S/S overbraided PTFE  
Electrical Noise.....0.1 mg max.  
Isolation.....Base isolated  
Mating Connector (note 1).....MH002

## Mechanical

Weight.....6 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

# Model MA12

## Typical System Diagram



## Options

	Fast Track Delivery	Built to Order
Sensitivity	100 mV/G	10mV/G; 1,000mV/G
Electrical Termination	Cable length (Specify at time of ordering)	

■ Supplied as standard

## Sensitivity Codes

Sensitivity	Sensitivity Code
10 mV/G	GU
100 mV/G	GH
1,000 mV/G	GG

## Notes

1. Not applicable for AG904.
2. Not applicable for AG903.
3. AG904 does not need mating connectors.

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG903** **GH**  
 Model Code    Sensitivity Code

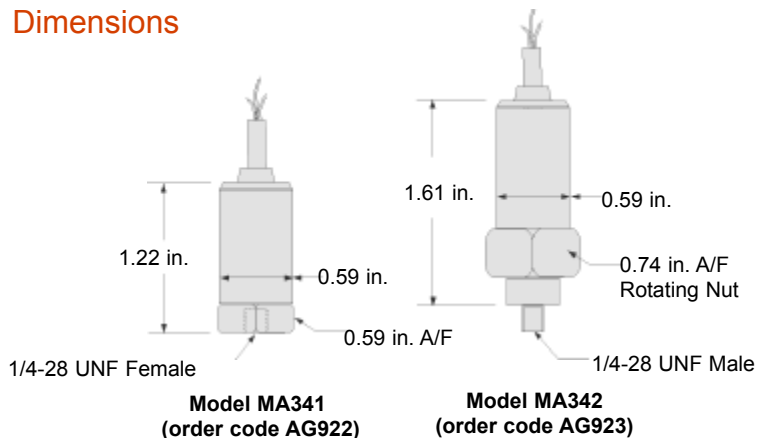
# Models MA341 & MA342 Accelerometers

Order Code AG922; AG923

- High Frequency
- 2 Hz to 15 kHz Usable Frequency Range
- IEPE Output



## Dimensions



## Wiring Codes

Black (+) Supply/ (+) Output  
White Supply Return

## Performance

Dynamic Ranges.....+/- 80G  
Sensitivity.....100 mV/G +/- 10%  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....2 Hz to 15 kHz +/- 5%  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....22 kHz

## Environmental

Temperature, Operating.....-10° to 280° F  
Sealing.....IP67/ Nema 4

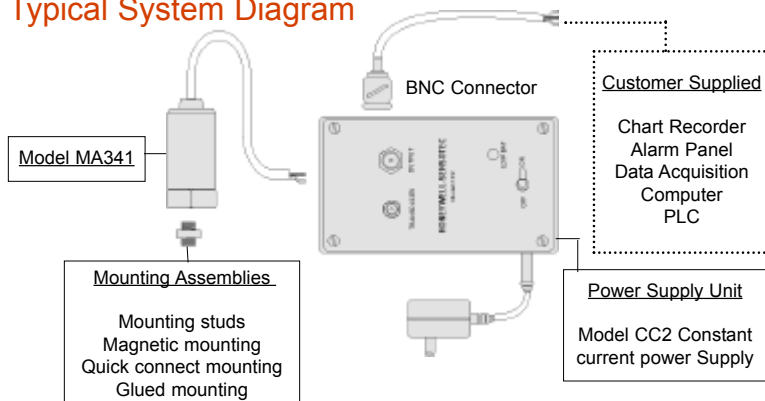
## Electrical

Input.....Constant Current  
Current Range.....0.5 mA to 8 mA  
Bias Voltage.....12 Vdc  
Cable.....S/S overbraided PTFE  
Electrical Noise.....0.1 mG max.  
Isolation.....Base isolated

## Mechanical

Weight.....1 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
10 mV/G	GU
30 mV/G	GC
100 mV/G	GH
1,000 mV/G	GG

## Options

	Fast Track Delivery	Built to Order
Sensitivity	100 mV/G	10mV/G; 1,000mV/G; 30 mV/G
Electrical Termination	Cable length (Specify at time of order)	

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG913** **GH**  
Model Code Sensitivity Code

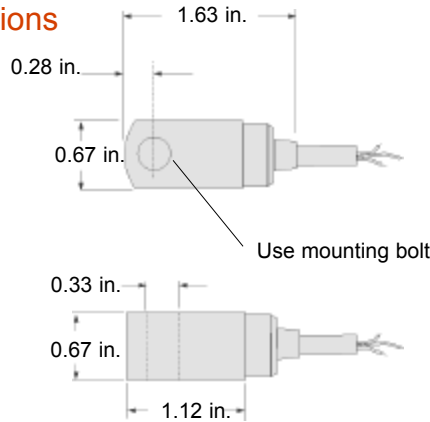
# Model MA21 Accelerometer

Order Code AG913

- Miniature Size
- Low Profile
- IEPE Output



## Dimensions



## Wiring Codes

White (+) Supply (+) Output  
 Black Supply Return  
 Shield Connected to Case

## Performance

Dynamic Ranges.....+/- 80 G  
 Sensitivity.....100 mV/G +/- 10% @ 80 Hz  
 Transverse Sensitivity.....Less than 5%  
 Temperature Sensitivity.....0.145/ °F  
 Frequency Range.....2 Hz to 9 kHz  
 Amplitude Linearity.....Better than 1% Linearity  
 Mounted Base Resonance.....18 kHz

## Environmental

Temperature, Operating.....10° to 280° F  
 Sealing.....IP67/ Nema 4

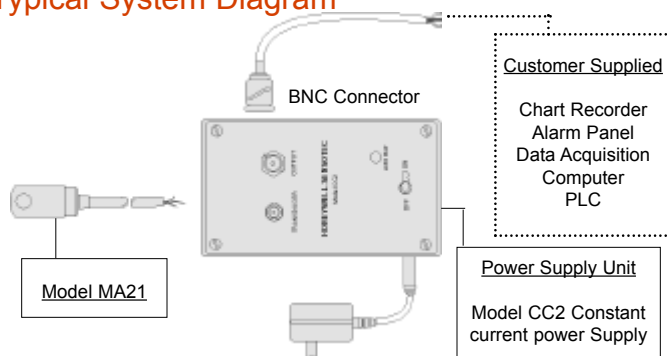
## Electrical

Input.....Constant Current  
 Current Range.....0.5 mA to 8 mA  
 Bias Voltage.....12 Vdc  
 Cable.....S/S overbraided PTFE  
 Standard Cable Length.....16 ft.  
 Electrical Noise.....0.1 mG max.  
 Isolation.....Base isolated

## Mechanical

Weight.....3.90 oz.  
 Material.....Stainless Steel  
 Mounting Torque.....6 ft.-lb.

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
10 mV/G	GU
30 mV/G	GC
100 mV/G	GH
1,000 mV/G	GG

## Options

	Fast Track Delivery	Built to Order
Sensitivity	100 mV/G	10mV/G; 1,000mV/G; 30 mV/G
Electrical Termination	Cable length (Specify at time of order)	

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG913** **GH**  
 Model Code    Sensitivity Code

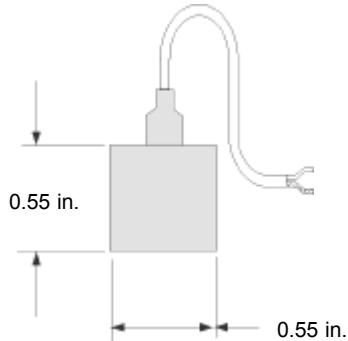
# Model MA23 Accelerometer

Order Code AG914

- Miniature Size
- Low Profile
- IEPE Output



## Dimensions



## Wiring Codes

Center (+) Supply (+) Output  
Shield Supply Return

## Performance

Dynamic Ranges.....+/- 10G  
Sensitivity.....1V/G  
Transverse Sensitivity.....5% max.  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....5 Hz to 14 kHz +/- 10%  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....25 kHz

## Environmental

Temperature, Operating.....-70° to 250° F  
Sealing.....IP65/ Nema 2

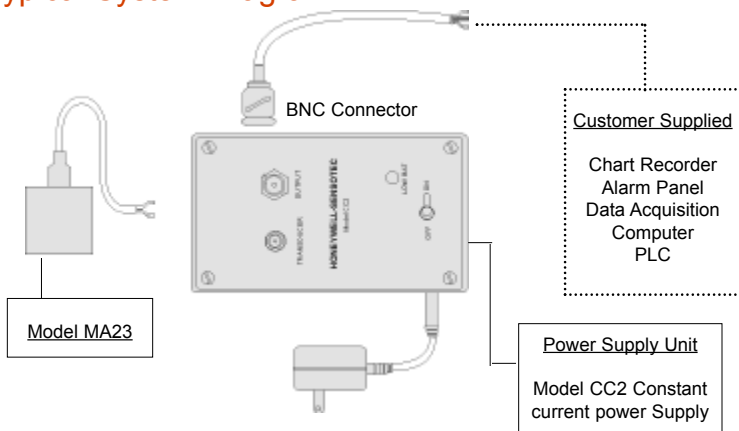
## Electrical

Input.....Constant Current  
Current Range.....18-30 V  
Bias Voltage.....12 V  
Cable.....PTFE  
Standard Cable Length.....16 ft.  
Electrical Noise.....0.1 mG max.  
Isolation.....Base isolated

## Mechanical

Weight.....0.3 oz.  
Material.....HE 30 Aluminum  
Mounting.....Beeswax or adhesive

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
100 mV/G	GH
1000 mV/G	GG

## Options

	Fast Track Delivery	Built to Order
Sensitivity	1000 mV/G	100mV/G
Electrical Termination	Cable length(Specify at time of order)	

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired sensitivity code.

Sample Code: **AG914** **GH**  
Model Code Sensitivity Code

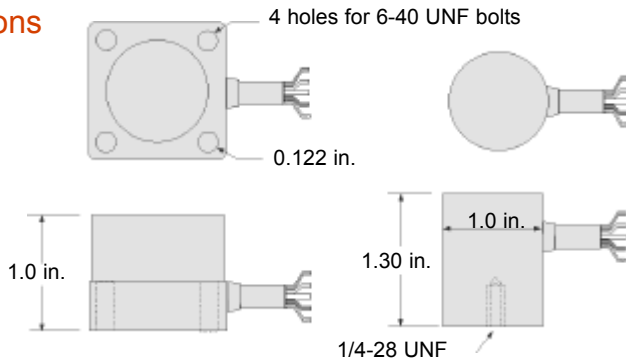
# Model MA311 & MA312 Accelerometer

Order Code AG915; AG916

- DC Response
- Amplified Voltage Output
- Up to 0-1800 Hz Usable Range



## Dimensions



Model MA311 (order code AG915)

Model MA312 (order code AG916)

## Wiring Codes

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

## Performance

Sensitivity.....	100 mV/G
Transverse Sensitivity.....	Less than 5%
Temperature Sensitivity.....	0.145/ °F
Frequency Range.....	dependent on dynamic range +/- 5% (see below)
+/- 1G & +/- 2G.....	DC to 250 Hz
+/- 5G.....	DC to 300 Hz
+/- 10G.....	DC to 500 Hz
+/- 20G.....	DC to 700 Hz
+/- 50G.....	DC to 1 kHz
Amplitude Linearity.....	Better than 1% Linearity
Mounted Base Resonance.....	18 kHz
Acceleration Limits.....	x 20 of dynamic range

## Environmental

Temperature, Operating.....	0° to 180° F
Sealing.....	IP65/ Nema 2

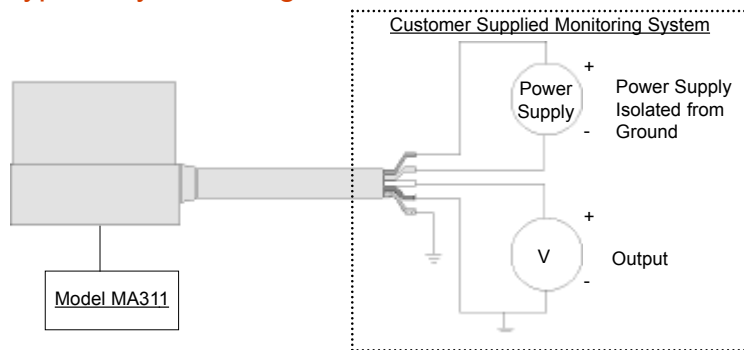
## Electrical

Input.....	Voltage
Supply Voltage.....	12-24V @ 7mA
Output Impedance.....	50 Ohms
Cable.....	Stainless Steel overbraided PTFE
Standard Cable Length.....	16 ft.
Electrical Noise.....	10 mG
Isolation.....	Base isolated

## Mechanical

Weight.....	1.40 oz.
Case Material.....	Stainless Steel

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
100 mV/G	GH

## Options

	Fast Track Delivery
Dynamic Range	+/- 1, 2, 5, 10, 20, 50 G
Electrical Termination	Cable length (Specify at time of order)
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female

-Not RoHS Compliant

## How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG915** **GH** **17c**  
Model Code    Sensitivity Code    Options Code

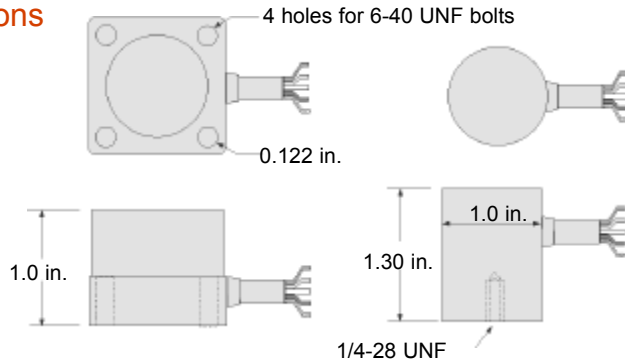
# Model MA321 & MA322 Accelerometer

Order Code AG917; AG918



- DC Response
- 4-20 mA Output Proportional to G
- Built-in Signal Conditioning

## Dimensions



Model MA321 (order code AG917)

Model MA322 (order code AG918)

## Wiring Codes

- Red (+) Supply
- Blue (+) Supply
- Shield Not Connected

## Performance

Output.....	4-20 mA range, 12 mA @ 0 G with sensitivity scaled to a full range output, i.e. +/- 5 G = 1.6 mA/G
Transverse Sensitivity.....	Less than 5%
Temperature Sensitivity.....	0.145/ °F
Frequency Range.....	dependent on dynamic range +/- 5% (see below)
+/- 1G & +/- 2G.....	DC to 250 Hz
+/- 5G.....	DC to 300 Hz
+/- 10G.....	DC to 500 Hz
+/- 20G.....	DC to 700 Hz
+/- 50G.....	DC to 1 kHz
Amplitude Linearity.....	Better than 1% Linearity
Mounted Base Resonance.....	18 kHz
Acceleration Limits.....	x 20 of dynamic range

## Environmental

Temperature, Operating.....	0° to 180° F
Sealing.....	IP65/ Nema 2

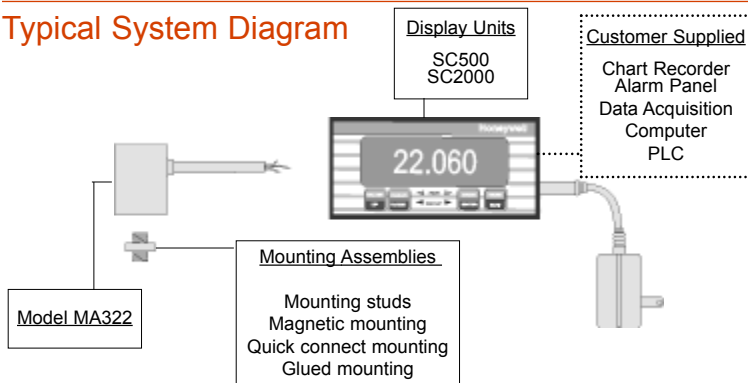
## Electrical

Input.....	Voltage
Supply Voltage.....	10 to 30V
Output Impedance.....	3,000 Ohms
Cable.....	Stainless Steel overbraided PTFE
Standard Cable Length.....	16 ft.
Electrical Noise.....	10 mG
Isolation.....	Base isolated

## Mechanical

Weight.....	1.40 oz.
Case Material.....	Stainless Steel

## Typical System Diagram



## Options

	Fast Track Delivery	Built to Order
Dynamic Range	+/- 1, 2, 5, 10, 20, 50 G	
Electrical Termination	Cable length	
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female	10-32 UNF Female

-Not RoHS Compliant

## How to Order

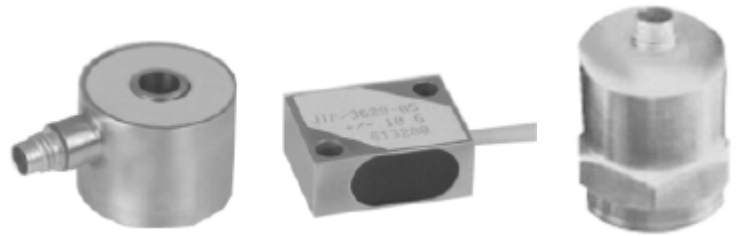
The order code consists of the product model and the available options.

Sample Code: **AG918** **17c**  
Model Code      Options Code

# Model JTF General Purpose Accelerometer

Order Code AG111; AG112; AG113

- Zero Hertz Operation
- Easy Calibration
- Low Impedance

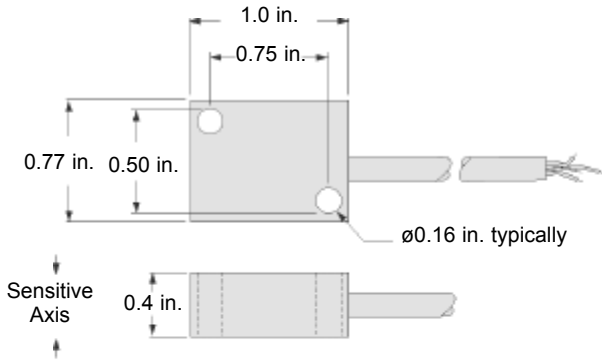


Model JTF Bolt Mount

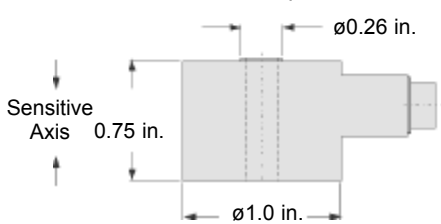
Model JTF Screw Mount

Model JTF Stud Mount

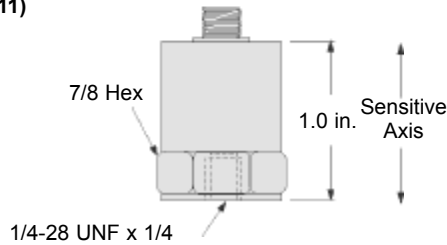
## Dimensions



Model JTF Screw Mount (order code AG111)



Model JTF Bolt Mount (order code AG112)



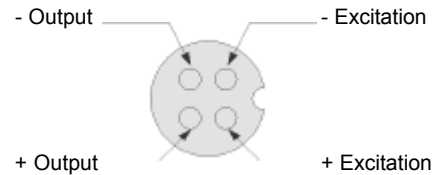
Model JTF Stud Mount (order code AG113)

## Wiring Codes

### Screw Mount

- Red (+) Excitation
- Black (-) Excitation
- Green (-) Output
- White (+) Output

### Bolt or Stud Mount



## Performance

Dynamic Ranges.....	+/- 5 to 500 Peak G
Sensitivity.....	See table
Transverse Sensitivity.....	Less than 5%
Frequency Range.....	See table
Frequency Response.....	+/- 5% (note 1)
Non-Linearity & Hysteresis.....	+/- 1% Full Scale
Mounted Base Resonance.....	See table
Damping Ratio (nominal).....	0.7 C @ 70° F

## Environmental

Temperature, Operating.....	-40° to 250° F
Temperature, Compensated.....	70° to 200° (note 1)
Temperature Effect	
Zero (max.).....	0.02% Full Scale/ ° F
Sensitivity (max.).....	+/- 10%

## Electrical

Excitation (calibration).....	5 VDC
Excitation (acceptable).....	Up to 10 VDC
Electrical Termination	
AG111.....	Teflon Cable 5'
AG112 & AG113.....	10-32 UNF 4-pin connector
Mating Connector.....	10-32 UNF socket plug (note 2)

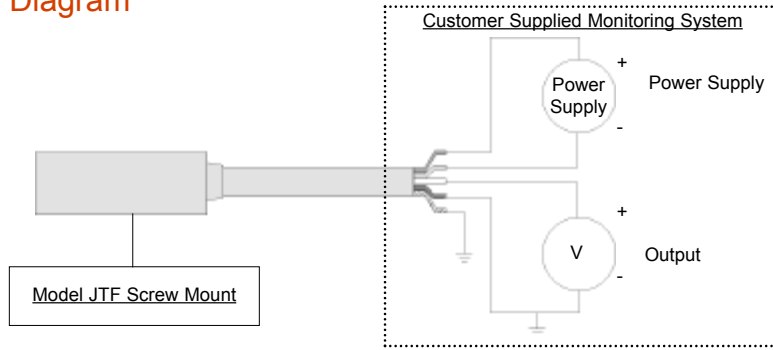
Available Range (peak G)	Sensitivity Nominal (mV/G)	Sensitivity Range (mV/G)	Usable Frequency Range (Hz)	Mounted Resonant Frequency (Hz)
+/- 5	8	5.0-12	0-300	800
+/- 10	3.8	2.4-5.0	0-400	1,00
+/- 20	1.8	1.2-2.4	0-600	1,500
+/- 50	0.8	0.5-1.2	0-1,000	2,000s
+/- 100	0.38	0.24-0.5	0-1,500	3,000
+/- 200	0.18	0.12-0.24	0-2,000	4,000
+/- 500	0.08	0.05-0.12	0-2,400	5,000

# Model JTF

## Mechanical

Acceleration Limits (any direction).....20x  
 Weight  
 AG111.....1 oz.  
 AG112 & AG113.....2.1 oz.  
 Case Material  
 AG111.....Anodized Aluminum  
 AG112 & AG113.....Stainless Steel

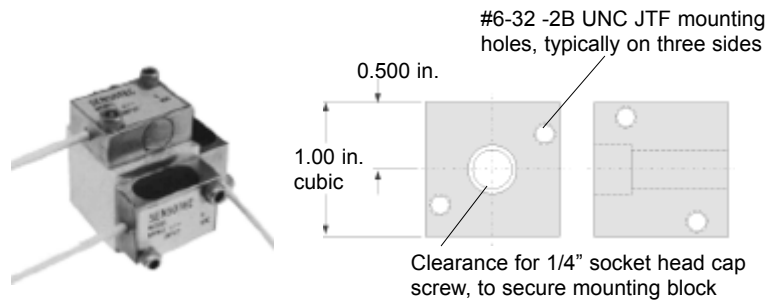
## Typical System Diagram



## Options

	Same Day Ship	Built to Order
<b>AG111</b>		
Range	10, 50G	5, 20, 100, 200, 500G
<b>AG112&amp; AG113</b>		
Range		5, 10, 20, 50, 100, 200, 500G

### Triaxial Mounting Block (order code AA235) for Model AG111



## Specifications

Range Codes	Available Ranges (peak G)	Sensitivity		Usable Frequency Range (Hz)	Mounted Resonant Frequency (Hz)
		Nominal (mV/G)	Range (mV/G)		
GJ	+/-5	8	5.0-12	0-300	800
GK	+/-10	3.8	2.4-5.0	0-400	1000
GL	+/-20	1.8	1.2-2.4	0-600	1500
GN	+/-50	0.8	0.5-1.2	0-1000	2000
GP	+/-100	0.38	0.24-0.5	0-1500	3000
GV	+/-200	0.18	0.12-0.24	0-2000	4000
GR	+/-500	0.08	0.05-0.12	0-2400	5000

## Notes

1. Output voltage is proportional to input voltage.
2. Only available with AG112 & AG113.

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG111** **GV**  
 Model Code Range Code

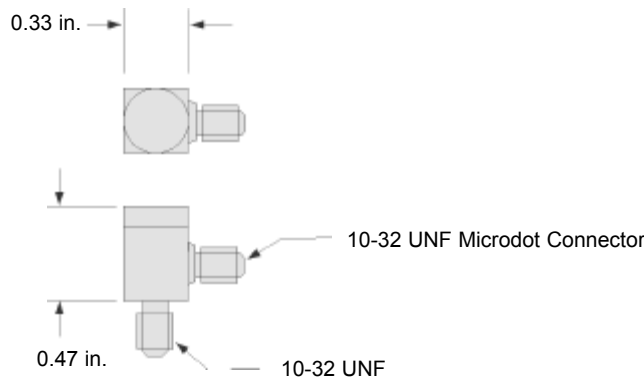
# Model MAQ36 Accelerometer

Order Code AG924

- Sub-Miniature
- Charge Output
- 45 kHz Mounted Frequency



## Dimensions



## Wiring Codes

Center (+) Output  
Shield Case Ground

## Performance

Dynamic Ranges.....+/- 2,000 G  
Sensitivity.....5 pC/g +/- 10%  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.045/ °F  
Frequency Range.....1 Hz to 30 kHz  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....45 kHz

## Environmental

Temperature, Operating.....-70° to 480° F  
Sealing.....IP67/ Nema 4

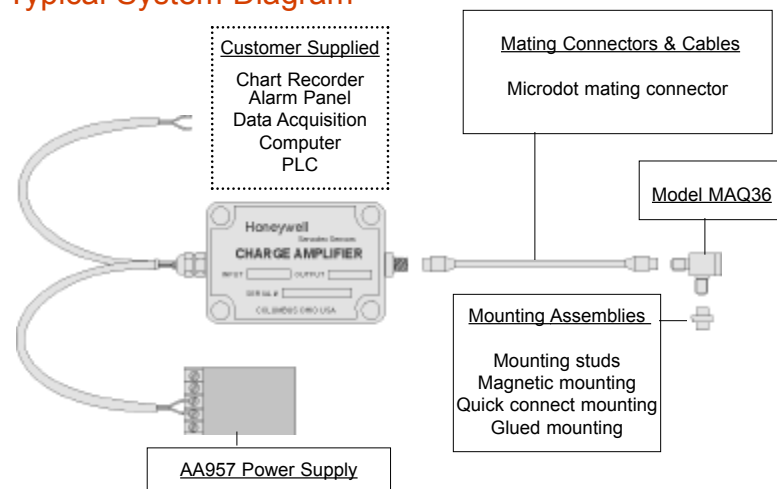
## Electrical

Input.....Self Generating  
Output.....Charge  
Charge Amplitude Required.....CA2  
Mating Connector.....Microdot  
Capacitance.....300 pf  
Isolation.....Base isolated

## Mechanical

Weight.....0.25 oz.  
Material.....Stainless Steel  
Mounting Torque.....2 ft.-lb.

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
0.5 pC/G	YA
5 pC/G	YB
50 pC/G	YF

## Options

	Fast Track Delivery	Built to Order
Sensitivity	5 pC/G	0.5 pC/g; 50 pC/G

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired range code.

Sample Code: **AG924** **YA**  
Model Code    Sensitivity Code

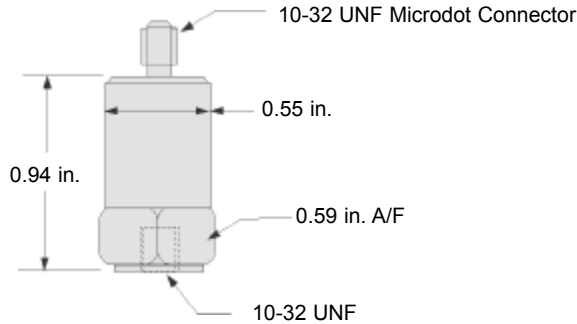
# Model MAQ13 Accelerometer

Order Code AG908

- Small Size
- Charge Output
- 30 kHz Mounted Frequency
- General Purpose



## Dimensions



## Wiring Codes

Center (+) Output  
Shield Case Ground

## Performance

Dynamic Ranges.....+/- 800 G  
Sensitivity.....10, 20, 30 pC/G  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....dependent on charge amplifier  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....30 kHz

## Environmental

Temperature, Operating.....-70° to 480° F  
Sealing.....IP67/ Nema 4

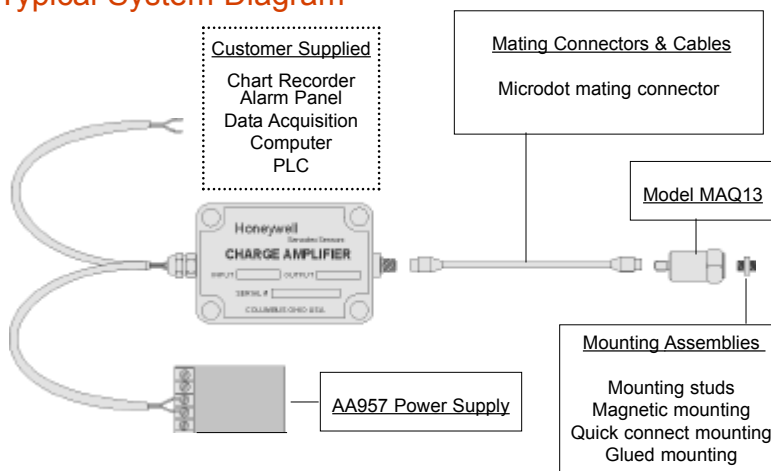
## Electrical

Input.....Self Generating  
Output.....Charge  
Charge Amplitude Required.....CA2  
Mating Connector.....Microdot  
Capacitance.....450 pf  
Isolation.....Base isolated

## Mechanical

Weight.....1.00 oz.  
Material.....Stainless Steel  
Mounting Torque.....2 ft.-lb.

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
10 pC/G	YC
20 pC/G	YD
30 pC/G	YE

## Options

	Fast Track Delivery	Built to Order
Sensitivity	20 pC/G	10, 30 pC/G

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired sensitivity code.

Sample Code: **AG908** **YC**  
Model Code Sensitivity Code

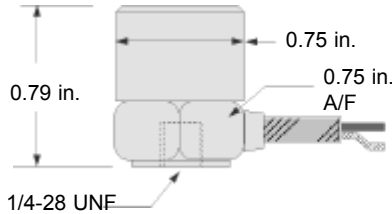
# Model MAQ14 Accelerometer

Order Code AG909; AG910

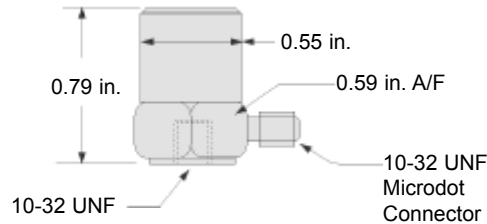
- Small Size
- Charge Output
- 18 kHz Mounted Frequency
- General Purpose



## Dimensions



**Model MAQ14**  
(order code AG910)



**Model MAQ14**  
(order code AG909)

## Wiring Codes

### AG909

Center Shield (+) Output  
Case Ground

### AG910

Center Shield (+) Output  
Case Ground

## Performance

Dynamic Ranges.....1,000 G  
Sensitivity.....10, 30, 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

Temperature, Operating.....-70° to 480° F  
Sealing.....IP67/ Nema 4

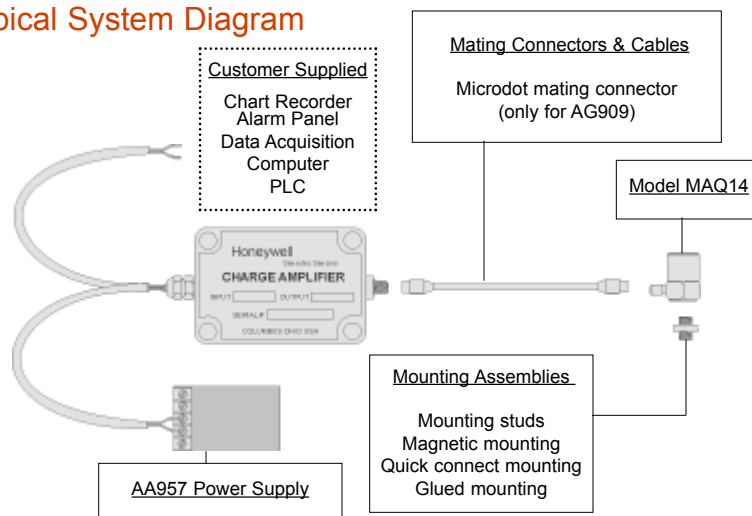
## Electrical

Input.....Self Generating  
Standard Cable Length.....16 ft. (only AG910)  
Charge Amplitude Required.....CA2  
Mating Connector.....Microdot (only AG909)  
Capacitance.....450 pf  
Isolation.....Base isolated

## Mechanical

Weight.....1.20 oz.  
Material.....Stainless Steel  
Mounting Torque.....2 ft.-lb.

## Typical System Diagram



## Sensitivity Codes

Sensitivity	Sensitivity Code
10 pC/G	YC
30 pC/G	YE
50 pC/G	YF

## Options

	Fast Track Delivery	Built to Order
Sensitivity	50 pC/G	10, 30 pC/G

-Not RoHS Compliant

## How to Order

The order code consists of the product model and the desired sensitivity code.

Sample Code: **AG909** **YC**  
Model Code Sensitivity Code

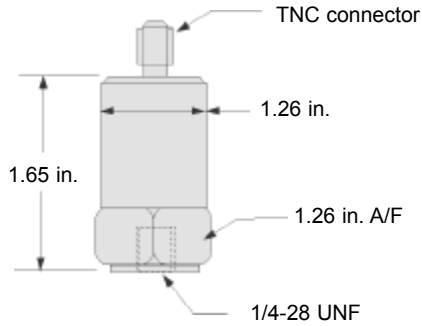
# Model MAQ41 Accelerometer

Order Code AG925

- Enhanced Output
- Charge Output
- 10 kHz Mounted Frequency



## Dimensions



## Wiring Codes

Center (+) Output  
Shield Case Ground

## Performance

Dynamic Ranges.....+/- 100 G  
Sensitivity.....1,100 pC/G +/- 10%  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....dependent on charge amplifier  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....10 kHz

## Environmental

Temperature, Operating.....-70° to 480° F  
Sealing.....IP67/ Nema 4

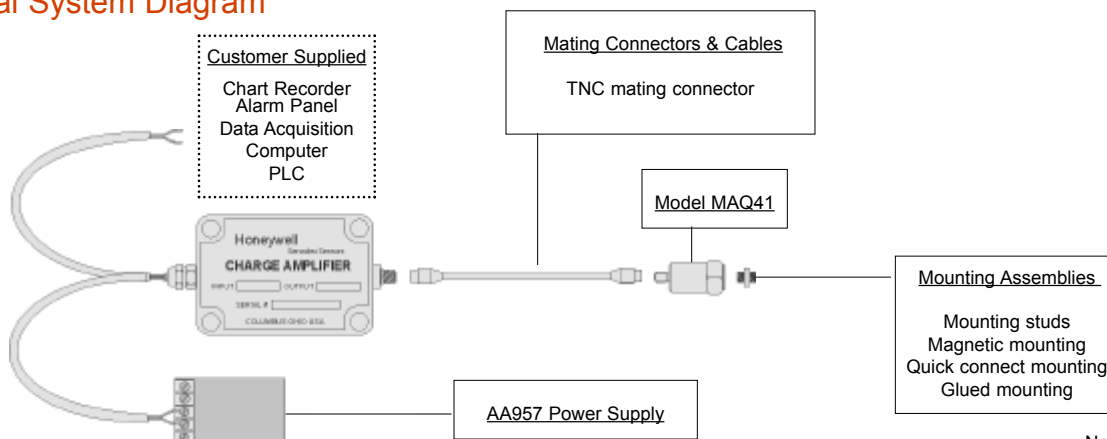
## Electrical

Input.....Self Generating  
Charge Amplitude Required.....CA2  
Mating Connector.....TNC  
Capacitance.....4,000 pf  
Isolation.....Non-isolated

## Mechanical

Weight.....3.50 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

## Typical System Diagram



-Not RoHS Compliant

## How to Order

Sample Code: **AG925**  
Model Code

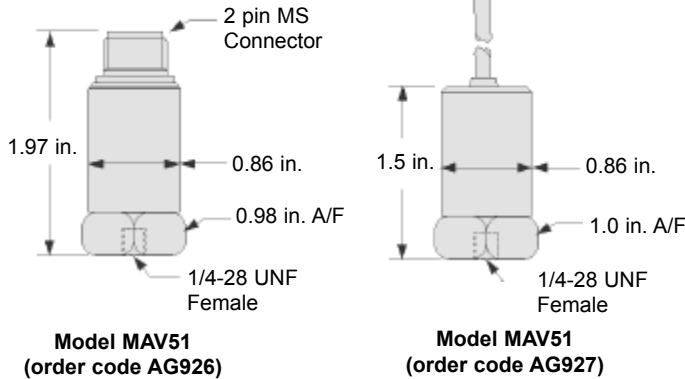
# Model MAV51 Accelerometer

Order Code AG926; AG927

- Velocity Measurement
- 5 Hz to 4 kHz +/- 5% Usable Frequency Range
- IEPE Output



## Dimensions



## Wiring Codes

### AG926

Pin A (+) Supply/ (+) Output  
Pin B Supply Return

### AG927

White (+) Supply (+) Output  
Black Supply Return  
Shield Not Connected

## Performance

Sensitivity.....100 mV/in./sec  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....0.145/ °F  
Frequency Range.....5 Hz to 4 kHz +/- 5%  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....18 kHz nominal

## Environmental

Temperature, Operating.....-10° to 280° F  
Sealing.....IP67/ Nema 4

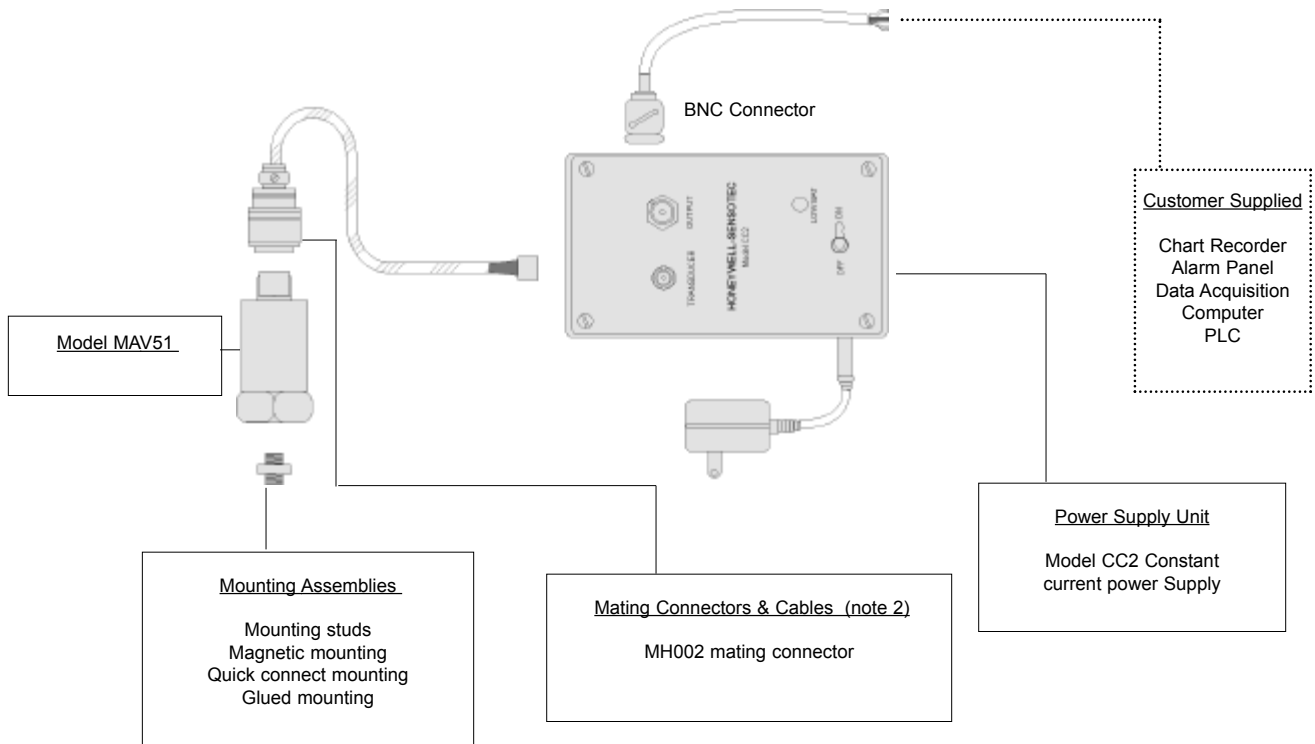
## Electrical

Input.....Constant Current  
Current Range.....0.5 mA to 8 mA  
Bias Voltage.....12 Vdc  
Cable (note 1).....S/S overbraided PTFE  
Standard Cable Length (note 1).....16 ft.  
Electrical Noise.....0.3 mG max.  
Isolation.....Base isolated  
Mating Connector (note 2).....MH002

## Mechanical

Weight.....3.88 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

Typical System Diagram



Options

	Fast Track Delivery
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female

Notes

1. Not applicable for AG926.
2. Not applicable for AG927.

-Not RoHS Compliant

How to Order

The order code consists of the product model and the available options.

Sample Code: **AG926** **17c**  
 Model Code      Options Code

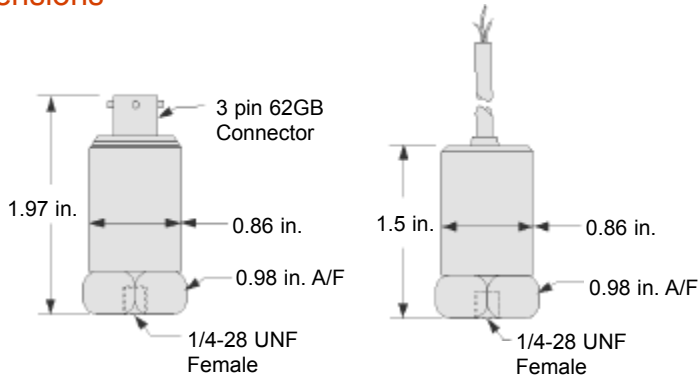
# Model MAT53 Accelerometer

Order Code AG930; AG931

- Temperature & Vibration Output
- 2 Hz to 10 kHz Usable Frequency Range
- IEPE Output
- Current O/P for Temperature



## Dimensions



**Model MAT53**  
(order code AG930)

**Model MAT53**  
(order code AG931)

## Wiring Codes

### AG930

Pin A (+) Supply/ (+) Output  
Pin B Supply Return  
Pin C (+) Temperature

### AG931

White (+) Supply (+) Output  
Black (+) Temperature  
Shield Supply Return

## Performance

Dynamic Ranges.....+/- 80G  
Sensitivity.....100 mV/G +/- 10%  
Temperature Range.....0 - 200°F  
Transverse Sensitivity.....Less than 5%  
Temperature Sensitivity.....10 mV/ °F  
Frequency Range.....2 Hz to 10 kHz +/- 5%  
Amplitude Linearity.....Better than 1% Linearity  
Mounted Base Resonance.....18 kHz

## Environmental

Temperature, Operating.....-10° to 280° F  
Sealing.....IP67/ Nema 4

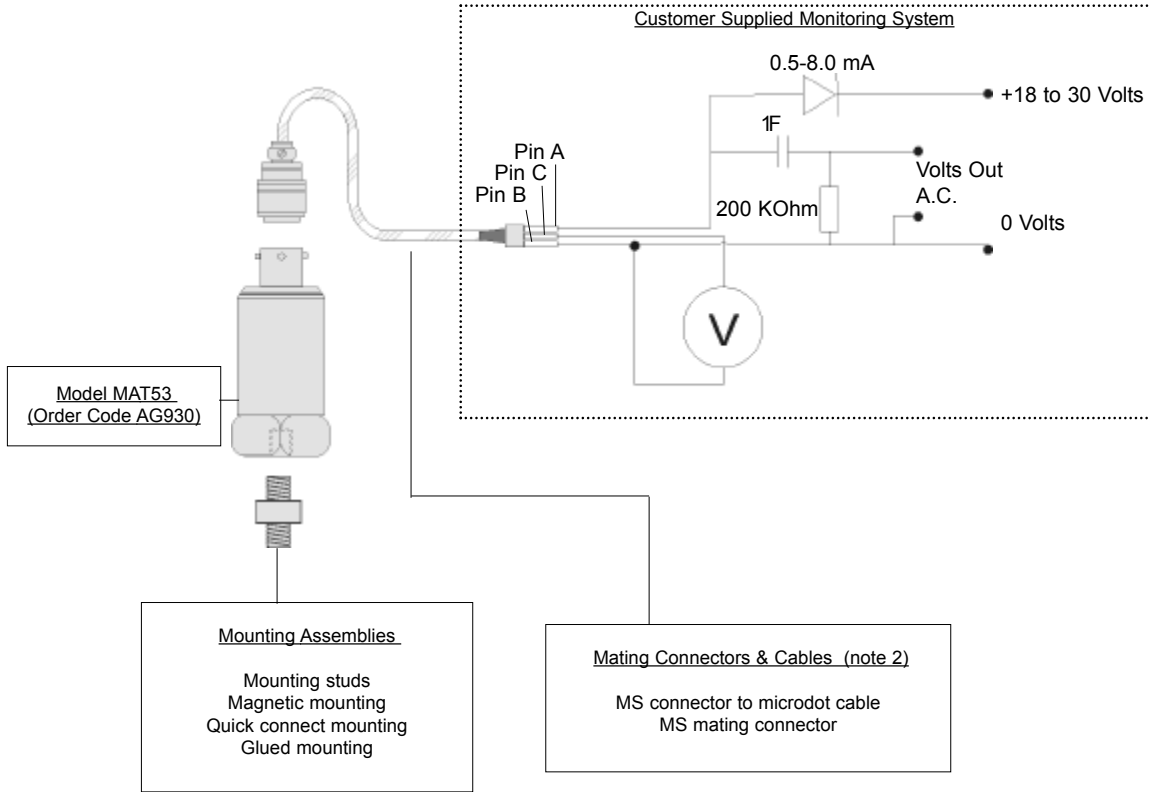
## Electrical

Input.....Constant Current  
Current Range.....0.5 mA to 8 mA  
Bias Voltage.....12 Vdc  
Cable (note 1).....S/S overbraided PTFE  
Standard Cable Length (note 1).....16 ft.  
Electrical Noise.....0.3 mG max.  
Isolation.....Base isolated  
Mating Connector (note 2).....MH008

## Mechanical

Weight.....3.80 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

Typical System Diagram



Options

	Fast Track Delivery	Built to Order
Sensitivity	100 mV/G	10mV/G; 1,000mV/G; 30 mV/G
Electrical Termination	Cable (note 2)	
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female	

Sensitivity Codes

Sensitivity	Sensitivity Code
10 mV/G	GU
30 mV/G	GB
100 mV/G	GH
1,000 mV/G	GG

Notes

1. Not applicable for AG930.
2. Not applicable for AG931.

-Not RoHS Compliant

How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG930** **GH** **17c**  
 Model Code    Sensitivity Code    Options Code

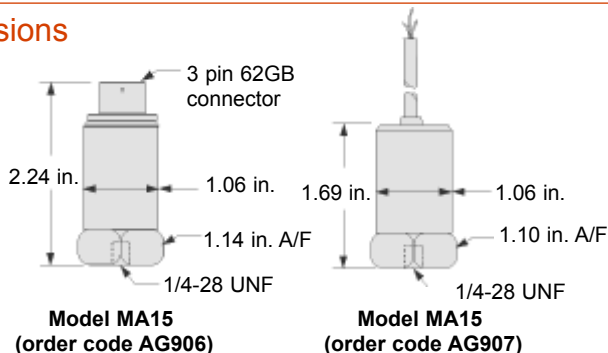
# Model MA15 Accelerometer

Order Code AG906; AG907



- General Purpose
- 4-20 mA Proportional to G
- 2 Hz to 1 kHz Usable Range

## Dimensions



## Wiring Codes

### AG906

Pin A (+) Supply  
Pin B No Connection  
Pin C (+) Output

### AG907

White (+) Supply  
Black (+) Output  
Shield Case Ground

## Performance

Dynamic Ranges.....+/- 1G to +/-50 G  
Range.....4-20 mA for 50 G  
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

Temperature, Operating.....-10° to 210° F  
Sealing.....IP67/ Nema 4

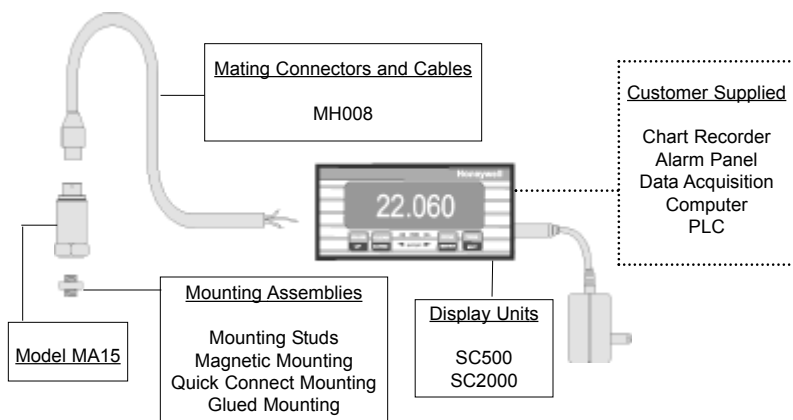
## Electrical

Input.....Voltage  
Output.....4-20 mA for 50 G  
Supply Voltage.....12-32 V  
Cable (AG907).....Stainless Steel overbraided PTFE  
Standard Cable Length (AG907).....16 ft.  
Mating Connector (AG906).....MH008  
Electrical Noise.....0.3 mG max.  
Isolation.....Base isolated

## Mechanical

Weight.....5 oz.  
Material.....Stainless Steel  
Mounting Torque.....6 ft.-lb.

## Typical System Diagram



## Range Codes

Range	Range Code
1G	GE
2G	GF
5G	GJ
10G	GK
20G	GL
50G	GN

## Options

	Fast Track Delivery	Built to Order
Dynamic	50G	1, 2, 5, 10, 20G
Electrical Termination	17b. 1/4-28 UNF 17c. Quickfit Female	

-Not RoHS Compliant

## How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG906** **GE** **17c**  
Model Code Range Code Options Code

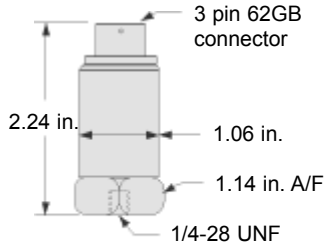
# Model MAV52 Accelerometer

Order Code AG928; AG932; AG929

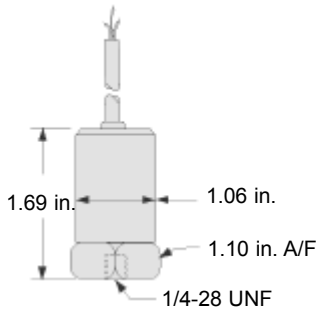


- Velocity Measurement
- 2 Hz to 10 kHz Usable Frequency Range
- 4-20 mA Proportional to Velocity
- Submersible Option

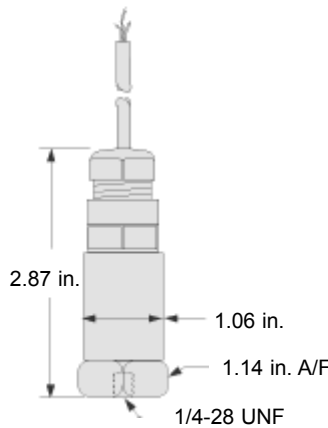
## Dimensions



Model MAV52 (order code AG928)



Model MAV52 (order code AG932)



Model MAV52 (order code AG929)

## Wiring Codes

### AG928

Pin A (+) ve Accel.  
Pin B No Connection  
Pin C 0 volts

### AG932

White (+) Supply  
Black (+) Output  
Shield Case Ground

### AG929

Red (+) Supply  
Blue (+) Output  
Shield Case Ground

## Performance

Dynamic Ranges.....50G  
Sensitivity.....1 in./sec for 4-20 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

Temperature, Operating.....-10° to 210° F  
Sealing  
AG928 & AG932.....IP67/ Nema 4  
AG929.....IP68/ Nema 4x

## Electrical

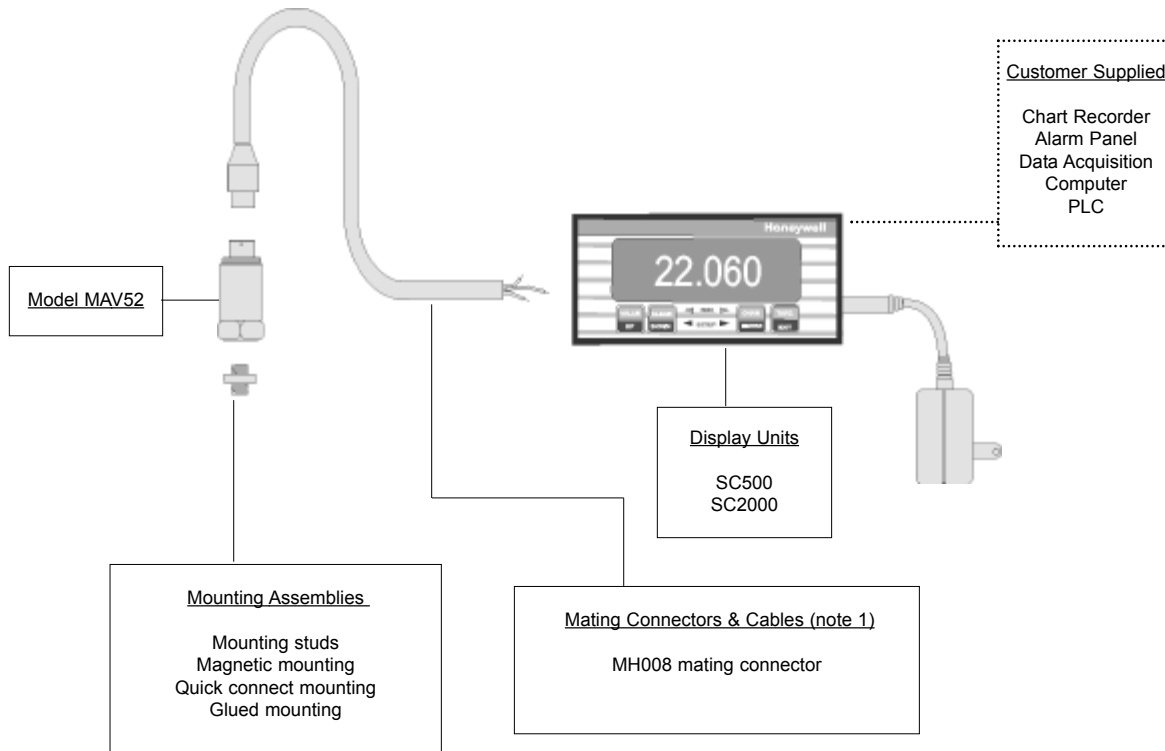
Input.....Voltage  
Output.....4-20 mA  
Supply Voltage.....12-32 V  
Current Range.....0.5 mA to 8 mA  
Bias Voltage.....12 Vdc  
Cable (note 2)  
AG932.....Stainless Steel armored PTFE  
AG929.....PU  
Standard Cable Length (note 2).....16 ft.  
Electrical Noise.....0.3 mG max.  
Isolation.....Base isolated  
Mating Connector (note 1).....MH008

# Model MAV52

## Mechanical

Weight.....5 oz.  
 Material.....Stainless Steel  
 Mounting Torque.....6 ft.-lb.

## Typical System Diagram



## Options

	Fast Track Delivery	Built to Order
Sensitivity	1 in./sec RMS	0.5, 2, 4 in/sec RMS
Electrical Termination	Cable length (note 2)	
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female	

Supplied as standard

## Range Codes

Range	Range Code
0.5 in./sec RMS	SA
1 in./sec RMS	SB
2 in./sec RMS	SC
4 in./sec RMS	SD

## Notes

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

-Not RoHS Compliant

## How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG928** **SA** **17b**  
 Model Code      Range Code      Options Code

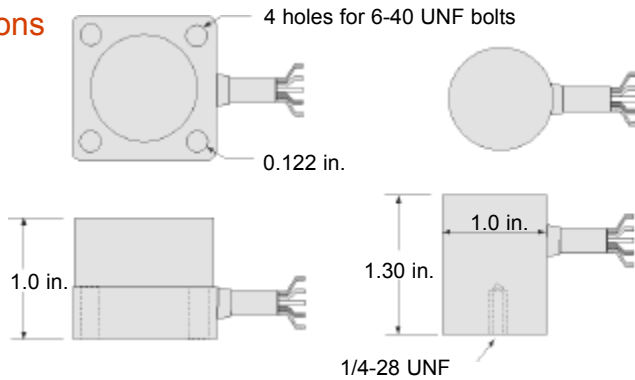
# Model MA331 & MA332 Accelerometer

Order Code AG919; AG920



- DC Response
- mV Output
- For Use With Strain Gage Amps

## Dimensions



Model MA331 (order code AG919)      Model MA332 (order code AG920)

## Wiring Codes

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

## Performance

Output.....	15-75 mV Full Scale
Transverse Sensitivity.....	Less than 5%
Temperature Sensitivity.....	0.145/ °F
Frequency Range.....	dependent on dynamic range +/- 5% (see below)
+/- 1G & +/- 2G.....	DC to 250 Hz
+/- 5G.....	DC to 300 Hz
+/- 10G.....	DC to 500 Hz
+/- 20G.....	DC to 700 Hz
+/- 50G.....	DC to 1 kHz
Amplitude Linearity.....	Better than 1% Linearity
Mounted Base Resonance.....	18 kHz
Acceleration Limits.....	x 20 of dynamic range

## Environmental

Temperature, Operating.....	0° to 180° F
Sealing.....	IP65/ Nema 2

## Electrical

Input.....	Voltage
Supply Voltage.....	5V @ 7mA
Output Impedance.....	3,000 Ohms
Cable.....	Stainless Steel overbraided PTFE
Standard Cable Length.....	16 ft.
Electrical Noise.....	10 mG
Isolation.....	Base isolated

## Mechanical

Weight.....	1.40 oz.
Case Material.....	Stainless Steel

## Typical System Diagram



## Range Codes

Range	Range Code
1G	GE
2G	GF
5G	GJ
10G	GK
20G	GL
50G	GN

## Options

	Fast Track Delivery	Built to Order
Dynamic Range	1, 2, 5, 10, 20, 50G	
Electrical Termination	Cable length	
Mounting Arrangement	17b. 1/4-28 UNF 17c. Quickfit Female	10-32 UNF Female

-Not RoHS Compliant

## How to Order

The order code consists of the product model, the desired range code and the available options.

Sample Code: **AG919**   **GE**   **17c**  
Model Code      Range Code      Options Code

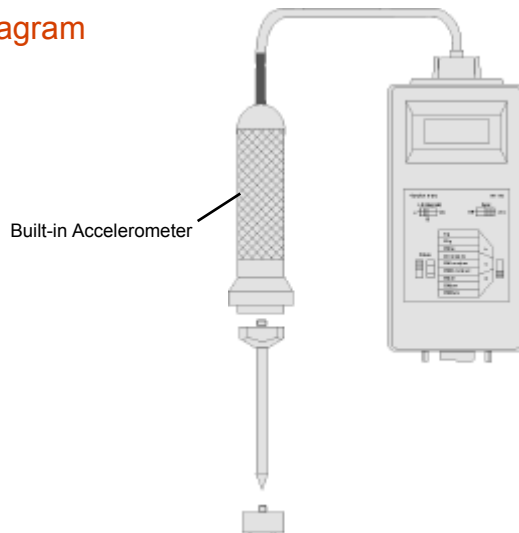
# Models VM110 & VM120 Vibration Meter Kit

Order Code AG941; AG942

- Hand Held
- LCD Display
- Battery Powered



## Typical System Diagram



## Performance

Acceleration.....	2, 20, 200 G
Ranges	
Velocity.....	2 in./sec., 20 in./sec., 200 in./sec.
Displacement.....	2 thou, 20 thou, 200 thou
Upper Frequency.....	Selectable low pass filters of 5 kHz, 10 kHz and 20 kHz
Lower Frequency.....	Fixed, Acceleration: 5 Hz, Velocity: 10 Hz, Displacement: 15Hz
Detector.....	RMS or Peak switch selectable
Display.....	1/2 in., 3.5 digit LCD (3 readings per second)

## Electrical

Accuracy	
Acceleration.....	1.5% RMS, 3% Peak
Velocity.....	2.5% RMS, 4% Peak
Displacement.....	3.5% RMS, 5% Peak
Noise	
Acceleration.....	2 mG RMS; 6 mG Peak
Velocity.....	0.01 in./sec. RMS; 0.03 in./sec. Peak
Displacement.....	0.02 in. RMS; 0.06 in. Peak
Input.....	10 mV/G from hand held accelerometer or other MA Series via cal hood
Output.....	AC 200 mV, full range as selected; DC 200 mV, full range as selected
Power.....	(2) PP3 9-volt battery, low battery indicator on display
	Battery life 15 hours approximately
Kit Contents.....	(1) Vibration Meter; (1) Hand held probe; (1) Magnet; (1) 4 in. Spike; (1) Carrying case

## Accessories

MTN/1100C	100 mV/G accelerometer, 5 meters integral PTFE cable
MTN/1100	100 mV/G, 2 pin MS connector
MTN/1020	100 mV/G, TNC connector
MTN/CA42	Coiled cable assembly 2 pin MS to IA110 for use with MTN/1100
MTN/CA43	Coiled cable assembly TNC to IA110 for use with MTN/1020
MTN/2100	Hand held probe
MTN/CA61	IA110 adapter for use with MTN/1100C
MTN/MM1	Magnet, 1/4" UNF mounting, 35 mm, strength 20 kg
MTN/PS1	Hand held spike, 25 mm, 1/4" UNF mounting
MTN/PS2	Hand held spike, 100 mm, 1/4" UNF mounting
MTN/PS3	Hand held spike, 150 mm, 1/4" UNF mounting
MTN/PS4	Hand held spike, 300 mm, 1/4" UNF mounting
MTN/HE1	Carrying case with foam cut outs

## Options

Other MA Series accelerometers

-Not RoHS Compliant

## How to Order

Sample Code: **AG941**  
Model Code

1-888-282-9891

[www.honeywell.com/sensotec](http://www.honeywell.com/sensotec)