

MODEL 4620 Accelerometer

Gas Damped, DC Response

High Sensitivity

Temperature Compensated

High Over Range Protection

MEMS Accelerometer

DESCRIPTION

The **Model 4620** is a low frequency DC response accelerometer offering outstanding performance over a wide operating temperature range. The accelerometer is available in ranges from ± 2 to $\pm 250g$ and incorporates a 2nd generation MEMS sensing element with integral over-range stops. The output is signal conditioned to provide a low noise amplified signal.

The model 4620 incorporates a teflon insulated cable with a rugged strain relief designed for demanding applications.



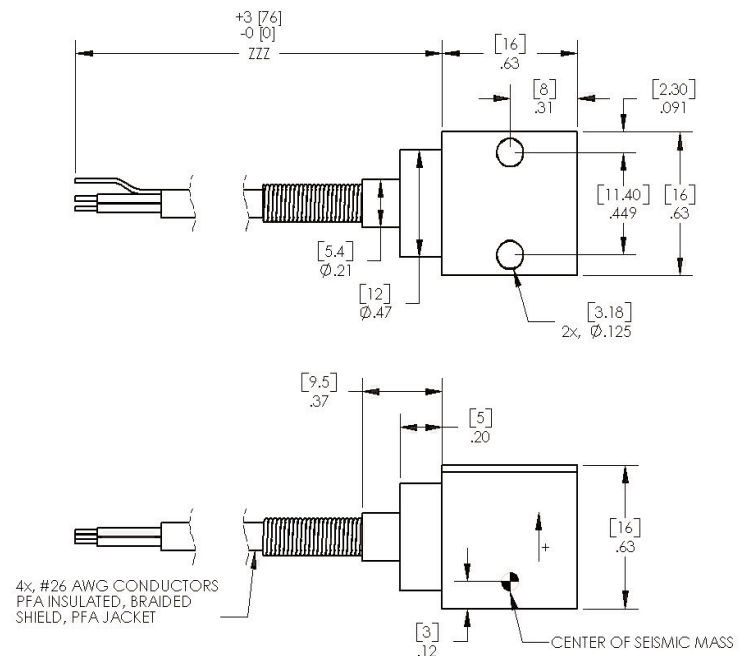
FEATURES

- ◆ $\pm 2g$ to $\pm 250g$ Dynamic Range
- ◆ Amplified Output
- ◆ Lower Power Consumption
- ◆ Gas Damping
- ◆ Integral Strain Relief
- ◆ DC, Low Frequency Response

APPLICATIONS

- ◆ Aerospace & Military Applications
- ◆ Structural Testing
- ◆ Test & Instrumentation
- ◆ Performance Testing
- ◆ Transportation

dimensions



Vibration Sensors Technical
Support:
Tel: 949-716-5377
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Model 4620 Accelerometer

performance specifications

All values are typical at 25°C, 100HZ and 12Vdc excitation unless otherwise stated.

Measurement Specialties reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC

Range	+/-2	+/-5	+/-10	+/-25	UNITS	NOTES
Sensitivity	1000	400	200	80	mV/g	Typical
Frequency Response	0-150	0-150	0-200	0-400	Hz	+/- 5%

Range	+/-50	+/-100	+/-250	UNITS	NOTES
Sensitivity	40	20	8	mV/g	Typical
Frequency Response	0-500	0-1000	0-1000	Hz	+/- 5%

Non-Linearity		+/-1		% FSO	Maximum
Transverse Sensitivity (Max)		+/-3		%	+/-1% Typical
Zero Acceleration Output		2.50+/-0.05		V	Maximum
Thermal Zero Shift (-40 to +100°C)		+/-0.02		% FSO/°C	Maximum
Thermal Sensitivity Shift (-40 to +100°C)		+/-0.02		%/°C	Maximum
Damping Ratio		0.70			Gas Damped

ELECTRICAL

Excitation Voltage	8 to 32	Vdc	
Excitation Current	5.0	mA	Typical
Reference Voltage	2.5	Vdc	
Output Impedance	100	Ohms	Maximum
Insulation Resistance (@ 50Vdc)	100	MΩ	Minimum
Ground Isolation	Isolated		

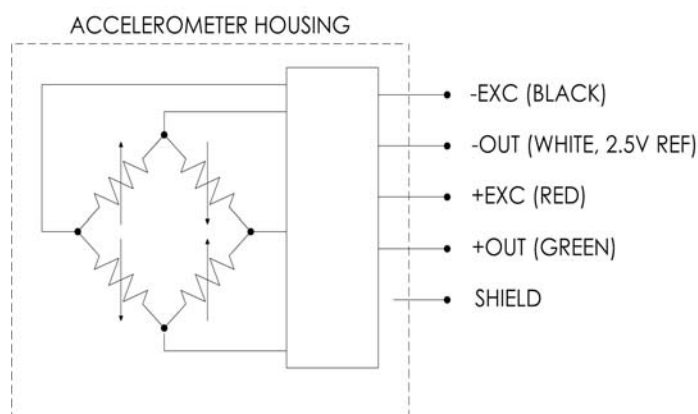
PHYSICAL

Base and Lid Material	Aluminum		Hard Anodized
Weight	14	grams	Maximum
Mounting	2x #4 or 2x M3 Screws		6 lb-in mounting torque

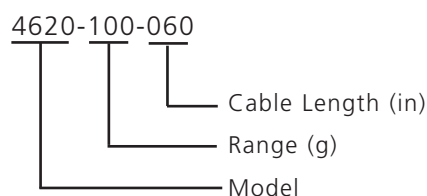
ENVIRONMENTAL

Shock Limit	5,000	g's
Operating Temperature	-54 to +121	°C
Humidity	Epoxy Sealed	

electrical schematic



ordering information



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