

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.



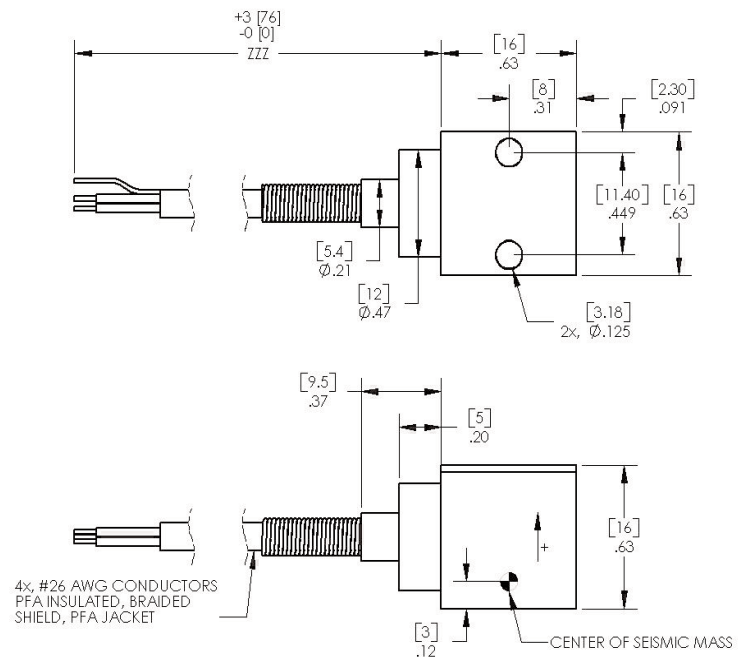
FEATURES

- ◆ $\pm 2g$ 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:
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Model 4620 Accelerometer

performance specifications

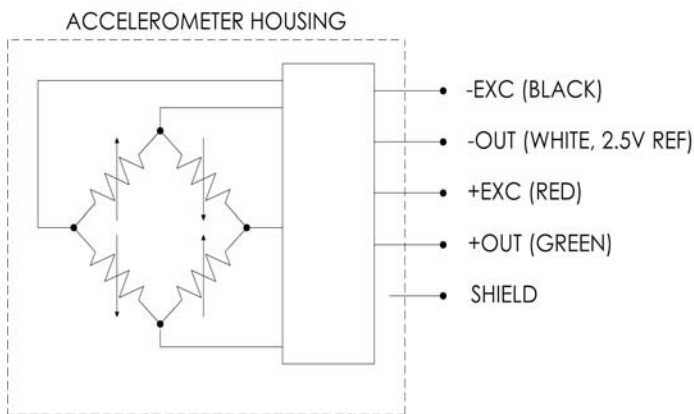
All values are typical at 25°C, 100Hz and 12Vdc excitation unless otherwise stated.

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

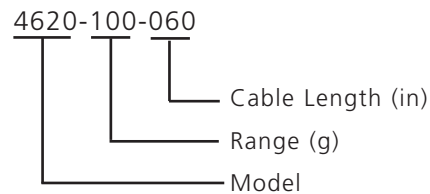
PARAMETERS

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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