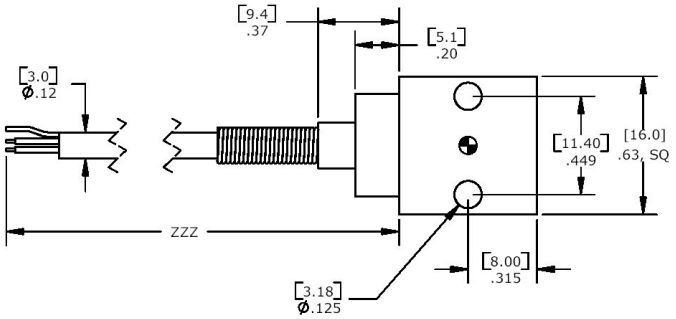
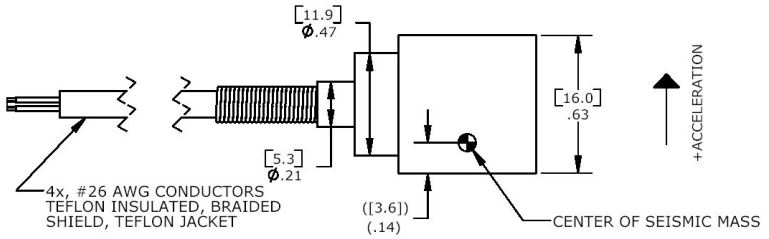
Model 4620 Accelerometer

Gas Damped, DC Response
High Sensitivity
Advanced Temp Compensation
High Over Range Protection
MEMS Accelerometer

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 ±500g and incorporates a 3rd 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.

dimensions



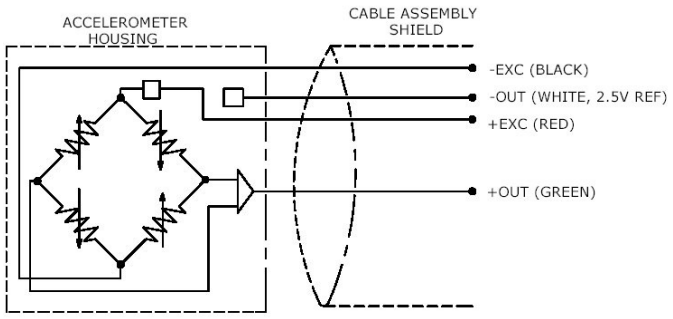


FEATURES

- ±2g to ±500g Dynamic Range
- Amplified Output
- Lower Power Consumption
- Gas Damping
- Integral Strain Relief
- DC, Low Frequency Response
- 7 to 30Vdc Excitation Voltage

APPLICATIONS

- Flight Testing
- Structural Testing
- Test & Instrumentation
- Performance Testing
- Transportation



32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 enduser@meas-spec.com

Model 4620 Accelerometer

performance specifications

All values are typical at +24°C, 100Hz and 12Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters									
DYNAMIC									**Notes**
Range (g)	±2	±5	±10	±25	±50	±100	±250	±500	
Sensitivity (mV/g)	1000	400	200	80	40	20	10	4	
Frequency Response (Hz)	0-150	0-150	0-200	0-400	0-600	0-1000	0-1000	0-1000	±5%
Natural Frequency (Hz)	700	800	1000	1500	4000	6000	8000	10000	
Non-Linearity (%FSO)	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<3	<3	<1 Typical
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	
Shock Limit (g)	10000	10000	10000	10000	10000	10000	10000	10000	
ELECTRICAL									
Zero Acceleration Output (mV)	±50	±50	±50	±50	±50	±50	±50	±50	Differential
Excitation Voltage (Vdc)	7 to 30	7 to 30	7 to 30	7 to 30	7 to 30	7 to 30	7 to 30	7 to 30	
Excitation Current (mA)	<5	<5	<5	<5	<5	<5	<5	<5	
Bias Voltage (Vdc)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Output Resistance (Ω)	<100	<100	<100	<100	<100	<100	<100	<100	
Insulation Resistance (MΩ)	>100	>100	>100	>100	>100	>100	>100	>100	@100Vdc
Turn On Time (msec)	<100	<100	<100	<100	<100	<100	<100	<100	
Residual Noise (µV RMS)	500	300	300	350	400	400	400	400	Passband
Ground Isolation	Isolated from Mounting Surface								
ENVIRONMENTAL									
Thermal Zero Shift (%FSO/°C)	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	Typical
Thermal Sensitivity Shift (%/°C)	±0.010	±0.010	±0.010	±0.010	±0.010	±0.010	±0.010	±0.010	Typical
Operating Temperature (°C)	-55 to 125								
Compensated Temperature (°C)	-40 to 100								
Storage Temperature (°C)	-55 to 125								
PHYSICAL									
Case Material	Anodized Aluminum								
Cable	Teflon Insulated Leads, Braided Shield, Teflon Jacket								
Weight (grams)	14								
Mounting	2x #4 or M3 Screws								
Mounting Torque	6 lb-in (0.7 N-m)								
AWG	#26								

Wiring color code: +Excitation = Red; -Excitation = Black; +Output = Green; -Output = White;

ordering info

PART NUMBERING Model Number+Range+Cable Length

4620-GGG-CCC
I I
I I_____Cable (060 is 60 inches)
I_____Range (025 is 25g)

Example: 4620-025-060
Model 4620, 25g, 060" (5ft) Cable

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