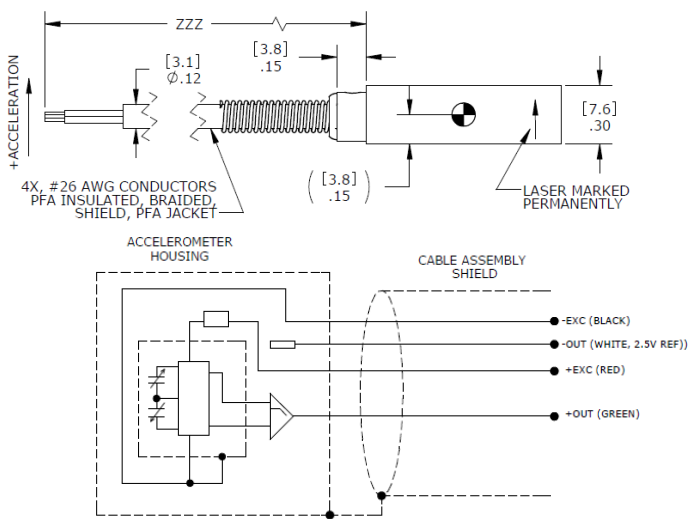
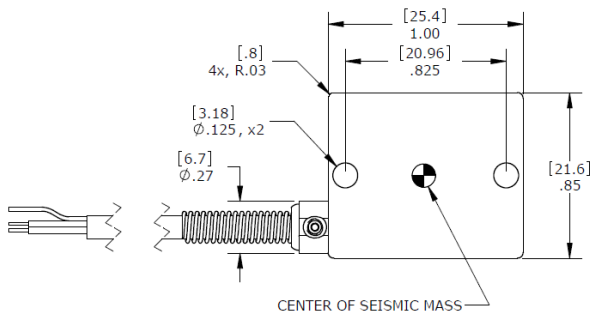


MODEL 4604 ACCELEROMETER



DIMENSIONS



SPECIFICATIONS

- Advanced Temp Compensation
- Robust Strain Relief
- Amplified, Signal Conditioned
- DC Response, Ultra-Stable

The Model 4604 is a rugged, low-profile MEMS accelerometer designed for both static and dynamic applications. The accelerometer is available in ranges from ± 2 to $\pm 200g$ and offers outstanding thermal performance. The output is signal conditioned with exceptional long term stability. The model 4604 incorporates a PFA insulated cable with a rugged strain relief designed for demanding applications

FEATURES

- $\pm 2g$ to $\pm 200g$ Dynamic Range
- Amplified Output
- Low Power Consumption
- Gas Damping
- #26 AWG PFA Cable
- DC, Low Frequency Response
- 8 to 36Vdc Excitation Voltage

APPLICATIONS

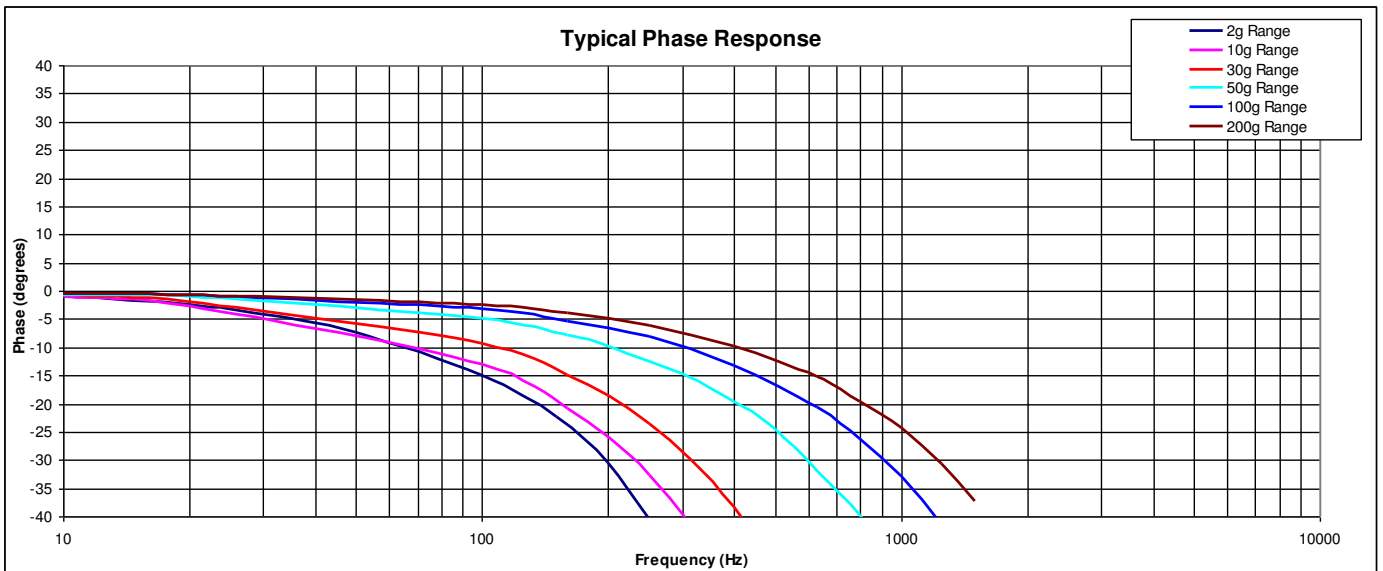
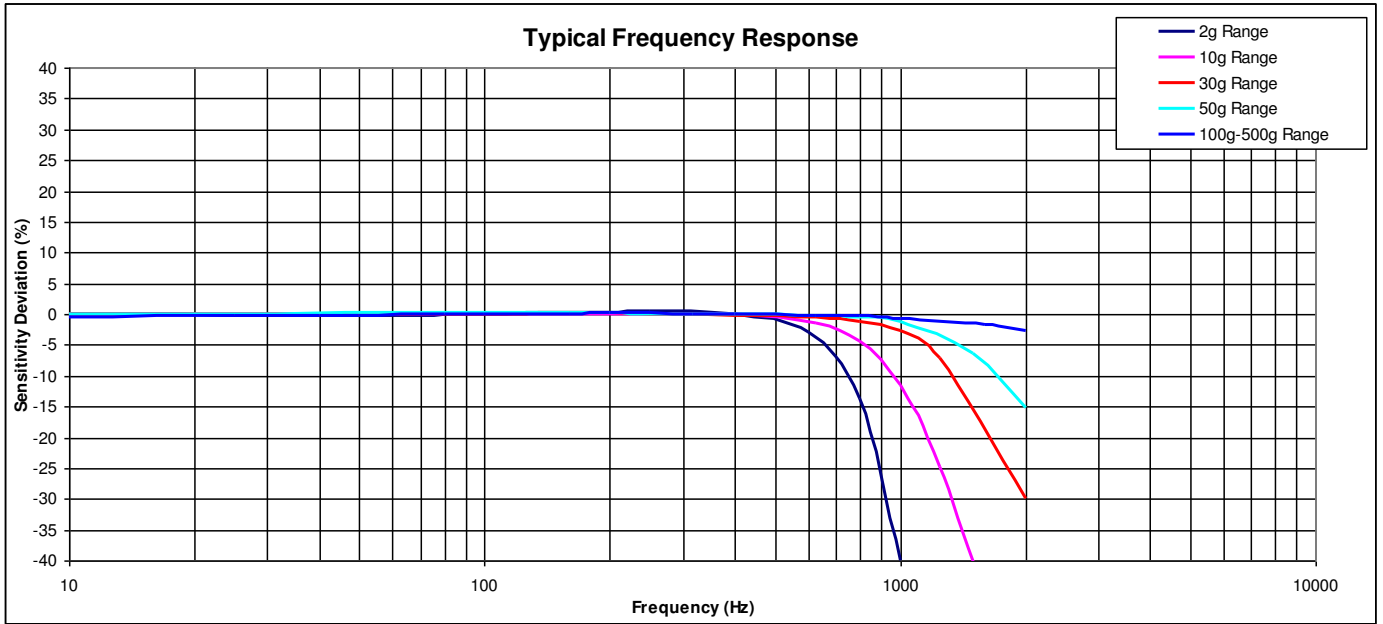
- Flight Testing
- Flutter and Nacelle Vibrations
- Road Vehicle Testing
- Structural Testing
- Test and Instrumentation
- Transportation

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 12Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters								Notes
DYNAMIC								
Range (g)	±2	±5	±10	±30	±50	±100	±200	
Sensitivity (mV/g)	1000	400	200	67	40	20	10	±10%
Frequency Response (Hz)	0-250	0-700	0-1000	0-1000	0-1000	0-1000	0-1000	±5% ¹
Natural Frequency (Hz)	700	800	1000	1500	4000	6000	8000	
Non-Linearity (%FSO)	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	
Transverse Sensitivity (%)	<2	<2	<2	<2	<2	<2	<2	<1 Typical
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
Shock Limit (g)	5000	5000	5000	5000	5000	5000	5000	
Residual Noise (µV RMS)	600	750	800	800	800	800	800	Passband
Spectral Noise (µg/√Hz)	38	71	126	378	632	1265	2530	Passband
ELECTRICAL								
Zero Acceleration Output (mV)	±50							Differential
Excitation Voltage (Vdc)	8 to 36							
Excitation Current (mA)	<5							
Bias Voltage (Vdc)	2.5							
Full Scale Output Voltage (V)	±2							
Output Resistance (Ω)	<100							
Insulation Resistance (MΩ)	>100							@100Vdc
Turn On Time (msec)	<100							
Ground Isolation	Isolated from Mounting Surface							
ENVIRONMENTAL								
Thermal Zero Shift (%FSO/°C)	±0.004							Typical
Thermal Sensitivity Shift (%/°C)	±0.010							Typical
Operating Temperature (°C)	-55 to 125							
Storage Temperature (°C)	-55 to 125							
Humidity (Active Element & Electronics)	Hermetically Sealed							
Humidity (Housing)	Epoxy Sealed, IP65							
PHYSICAL								
Case Material	Anodized Aluminum							
Cable	4x, #26 AWG Conductors, PFA Insulated, Braided Shield, PFA Jacket							
Weight (grams)	10							
Mounting	2x #4 or M3 Screws							
Mounting Torque	6 lb-in (0.7 N-m)							
Calibration supplied:	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±5% Frequency Response Limit ¹						
Supplied accessories:	AC-A02285	2x #4-40 (7/16 length) Socket Head Cap Screw and Washer						
Optional accessories:	AC-D02669 121	Triaxial Mounting Block 3-Channel Precision Low Noise DC Amplifier						

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ORDERING INFORMATION

PART NUMBERING Model Number+Range+Cable Length

4604-GGG-ZZZ-C

| |
| | Cable (060 is 60 inches)
| Range (010 is 10g)

Example: 4604-010-060-C
Model 4604, 10g, 060" (5ft) Cable

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