



## MODEL 606M1 ACCELEROMETER

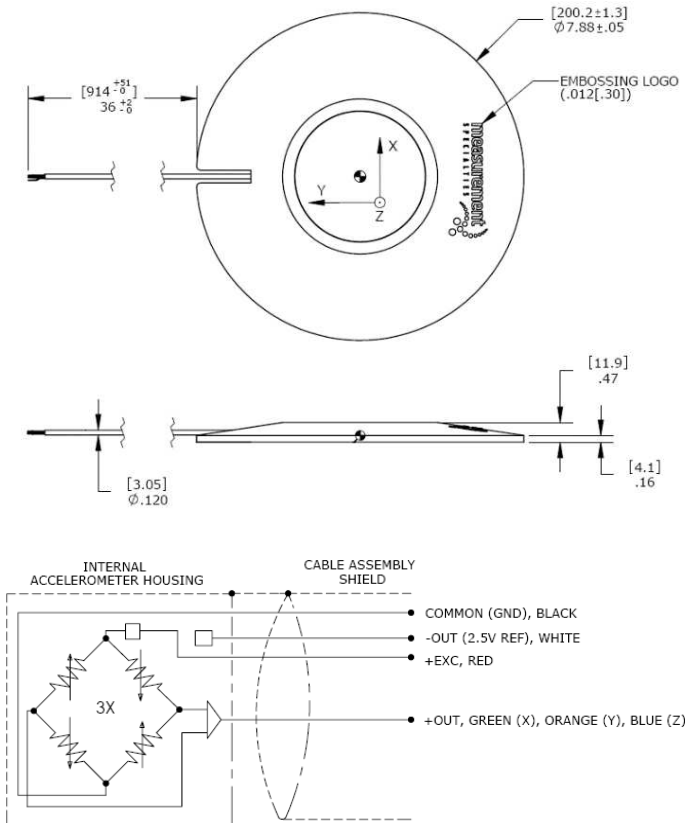
### SPECIFICATIONS

- ◆ **Seat Pad Accelerometer**
- ◆ **MEMS, Triaxial Sensors**
- ◆ **DC Response**
- ◆ **Accurate Temp Compensation**
- ◆ **ISO 10326-1 Configuration**

The **Model 606M1** is a MEMS triaxial seat pad accelerometer with both static and dynamic responses designed specially for characterizing whole body vibration in accordance with ISO 2631-1 and ISO 8041. The DC response of the silicon MEMS sensors is the key to yield accurate velocity and displacement results from the raw acceleration data.

The **606M1** incorporates integral temperature compensation that provides a stable output over a wide operating range. The on-board voltage regulation circuit works with power supply from 8 to 32Vdc.

### DIMENSIONS



### FEATURES

- ◆ Three Independent Circuits
- ◆ Low Current Consumption
- ◆ Ranges:  $\pm 25g$
- ◆ Gas Damped, DC Response
- ◆ High Over-Range Protection
- ◆ Low Transverse Sensitivity

### APPLICATIONS

- ◆ Whole Body Vibration Study
- ◆ Vibration/Shock Monitoring
- ◆ Helicopter Flight Testing
- ◆ Heavy Equipment Testing
- ◆ Biodynamic Study

**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 the specifications without notice.

**Parameters**

**DYNAMIC**

		Notes
Range (g)	±25	
Sensitivity (mV/g)	80	
Frequency Response (Hz)	0-800	±5%
Frequency Response (Hz)	0-1000	±1dB
Natural Frequency (Hz)	4000	
Non-Linearity (%FSO)	±1.0	
Transverse Sensitivity (%)	<3	
Damping Ratio	0.7	
Shock Limit (g)	5000	

**ELECTRICAL**

Zero Acceleration Output (mV)	±100	Differential
Excitation Voltage (Vdc)	8 to 36	
Excitation Current (mA)	<15	
Bias Voltage (Vdc)	2.5	
Output Impedance (Ω)	<100	
Insulation Resistance (MΩ)	>100	@100Vdc
Turn On Time (msec)	<100	
Residual Noise (µV RMS)	800	Passband
Ground Isolation	Isolated from Mounting Surface	

**ENVIRONMENTAL**

Thermal Zero Shift (%FSO)	±3	Typical
Thermal Sensitivity Shift (%)	±3.5	Typical
Operating Temperature (°C)	-20 to 85	
Compensated Temperature (°C)	-20 to 85	
Storage Temperature (°C)	-20 to 85	

**PHYSICAL**

Case Material (Seat Pad)	Nitrile Rubber
Cable	6x #28 AWG Conductors, PFA Insulated, Braided Shield, TPE Jacket
Weight (grams)	380

**Calibration supplied:** CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±5% Frequency Response Limit

**Optional accessories:** 121 Three Channel DC Signal Conditioner Amplifier

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**ORDERING INFORMATION**

PART NUMBERING    Model Number

606M1

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