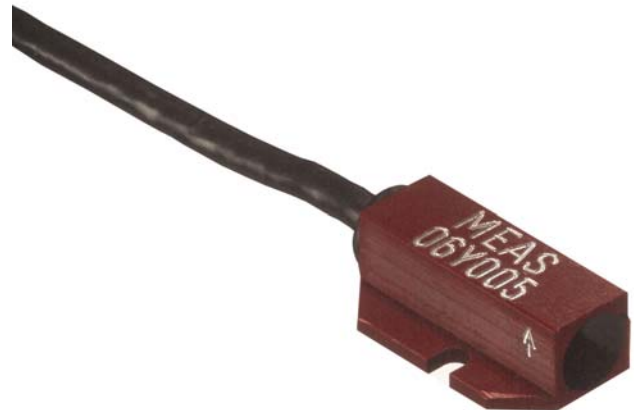


Model 40 Accelerometer

Range 50 to 2000g
Fluid Damped
Internally Compensated
SAE J211 Compliant



The **Model 40** is a small, SAE J211 compliant piezoresistive accelerometer. This unit features internal temperature compensation, anodized aluminum alloy housing and flexible cable output. This sensing element is damped with fluid to extend useful frequency range and reduce the effect of high frequencies.

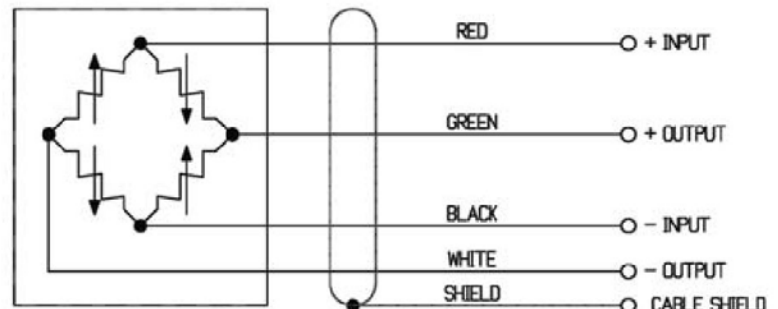
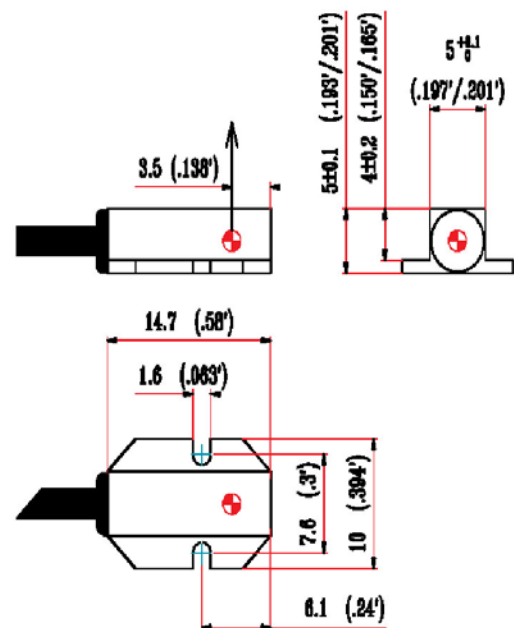
FEATURES

- Fluid damping
- Ranges from 50 g to 2000 g
- Flexible Cable
- 20°C to +80°C operating temperature range
- Built-in mechanical stops
- 10 Vdc excitation with nominal ± 150 mV output
- Low zero offset $< \pm 10$ mV
- Internal temperature compensation

APPLICATIONS

- Auto Safety Testing
 - Crash
 - Sled
 - Dummy

dimensions



Model 40 Accelerometer

performance specifications

All values are typical at $\pm 24^{\circ}\text{C}$, 100 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters							Notes
DYNAMIC							
Range(g)	± 50	± 100	± 250	± 500	± 1000	± 2000	
Full Scale Output (mV)				± 150			Nominal
Frequency Response (Hz)	0-180	0-600	0-1000	0-1000	0-1000	0-1000	+0.5dB/-4dB
	0-300	0-1000	0-1650	0-1650	0-1650	0-1650	+0.5dB/-4dB
	0-360	0-1200	0-2000	0-2000	0-2000	0-2000	+0.5dB/-4dB
Natural Frequency (Hz)	0-1000	0-1500	0-2500	0-4500	0-6000	0-10000	
Non-Linearity (% FSO)				± 1			
Transverse Sensitivity (%)				< 3			1% Available
Thermal Zero Shift (mV)				± 3			From -10 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$)				$< \pm 0.1$			From -10 to $+50^{\circ}\text{C}$
ELECTRICAL							
Zero Acceleration Output (mV)				$< \pm 10$			
Excitation (Vdc)				10			Alternatives Available
Input Resistance				2000			Nominal
Output Resistance (Ω)				1000			Nominal
Insulation Resistance ($M\Omega$)	> 100	> 100	> 100	> 100	> 100	> 100	@50Vdc
Ground Isolation			Isolated from mounting surface				
ENVIRONMENTAL							
Shock Limit (g)	5000	5000	10000	10000	10000	10000	
Operating Temperature ($^{\circ}\text{C}$)							-20 to +80
PHYSICAL							
Case Material			Anodized Aluminum				
Cable (Integral 30 Foot Cable)							4 x 32 AWG Conductors Cable Not Included
Weight (grams)				< 5			Torque 3 lb-in
Mounting			2x 0=80 x 3/16 socket head cap screws				

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Model 40 Accelerometer

performance specifications

Options and Accessories

EXCITATION VOLTAGE:	-001	= 5 Vdc excitation
CABLE LENGTH:	-CCC	= 360 inches standard
CALIBRATION SHUNT:		Consult factory
CONNECTOR ASSEMBLY ON CABLE:		Consult factory
IDENTIFICATION MODULE:		Consult factory

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ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length+1% Transverse Sensitivity+Options
 40-GGGG-CCCT-ZZZ

| | | | Options
 | | | 1% Transverse Sensitivity when "T" is present.
 | | Cable (360 is 360 inches)
 | Range (0100 is 100 g)

Example: 40-2000-360T
 Model 40, 2000g, 10V Excitation, 360" (30ft) Cable, 1% Transverse Sensitivity, No Options.