

Model EGCS-S425 Accelerometer

Range 50 to 2000 g

Fluid damped

Internally compensated

ISO 6487 Compliant

DESCRIPTION

The model EGCS-S425 is a small, ISO 6487 and 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.



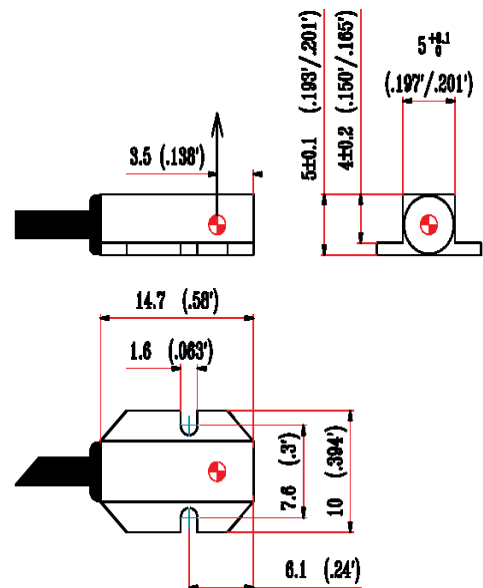
FEATURES

- ◆ 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

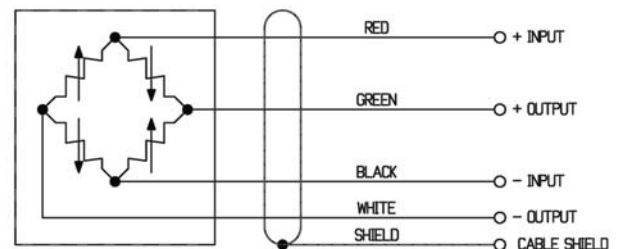
APPLICATIONS

- ◆ Auto Safety Testing
 - Crash
 - Sled
 - Dummy

dimensions



wiring



Vibration Sensors Technical
Support:
Tel: 949-716-5377
Fax: 949-916-5677
Email: vibration@meas-spec.com

measurement
SPECIALTIES

Model EGCS-S425 Accelerometer

ranges and outputs

g RANGE "FS"	g OVERRANGE LIMIT	ATTENUATION	ATTENUATION	ATTENUATION	FULL SCALE OUTPUT (mV / FSO)			Natural Frequency
		F _H	F _N	2F _H	Nom.	Min.	Max.	Min.
		AT 180 Hz	AT 300 Hz	AT 360 Hz				
± 50	± 5000	± 0.5 dB	+ 0.5dB / -2dB	+ 0.5dB / -4dB	±150	±100	±225	1 kHz
		AT 600 Hz	AT 1000 Hz	AT 1200 Hz				
± 100	± 5000	± 0.5 dB	+ 0.5dB / -2dB	+ 0.5dB / -4dB	±150	±100	±225	1.5 kHz
		AT 1000 Hz	AT 1650 Hz	AT 2000 Hz				
± 250	± 10000	± 0.5 dB	+ 0.5dB / -2dB	+ 0.5dB / -4dB	±150	±100	±225	2.5 kHz
± 500	± 10000	± 0.5 dB	+ 0.5dB / -2dB	+ 0.5dB / -4dB	±150	±100	±225	4.5 kHz
± 1000	± 10000	± 0.5 dB	+ 0.5dB / -1dB	+ 0.5dB / -2dB	±150	±100	±225	6 kHz
± 2000	± 10000	± 0.5 dB	+ 0.5dB / -0.5dB	+ 0.5dB / -1dB	±150	±100	±225	10 kHz

performance specifications

All values are typical at +21°C and 10 Vdc excitation. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters	Value	Unit	Notes
DYNAMIC			
Full Scale Output	± 150	mV	
Non-Linearity and Hysteresis	< ± 1	% FSO	
Transverse Sensitivity	1	%	Nominal
Zero Acceleration Output	± 10	mV	
Compensated Temperature Range	-10 to +50	°C	
Thermal Zero Shift (TZS)	± 3	mV	
Thermal Sensitivity Shift (TSS)	< ± 0.1	% / °C	
Damping Ratio	0.7		Nominal
ELECTRICAL			
Voltage Excitation	10	Vdc	For alternate excitations, contact MSI Sensors
Input Resistance	2000	Ω	Nominal
Output Resistance	1000	Ω	Nominal
PHYSICAL			
Weight Without Cable	< 5	grams	Standard cable length = 6 meters
Case Material			Anodized aluminum
ENVIRONMENTAL			
Operating Temperature	-20 to +80	°C	

ordering information

EGCS - **S425** - **500** - **/L2M/V5**
 Series Specification Range Options
 number

L00M, V5, CD7A

options and accessories

EXCITATION VOLTAGE:	V*	= Non-standard Excitation contact Entran
CABLE LENGTH:	STANDARD	= 6m
	L00M	= Replace "00" with total length in meters
CALIBRATION SHUNT:	RCALX00	= Replace "00" with value of % Range (ex RCAL50 → 50% FS)
CONNECTOR ASSEMBLY ON CABLE:		consult factory
IDENTIFICATION MODULE:		consult factory

Vibration Sensors Technical Support:

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