

Model EGCS3-D Triaxial Accelerometer

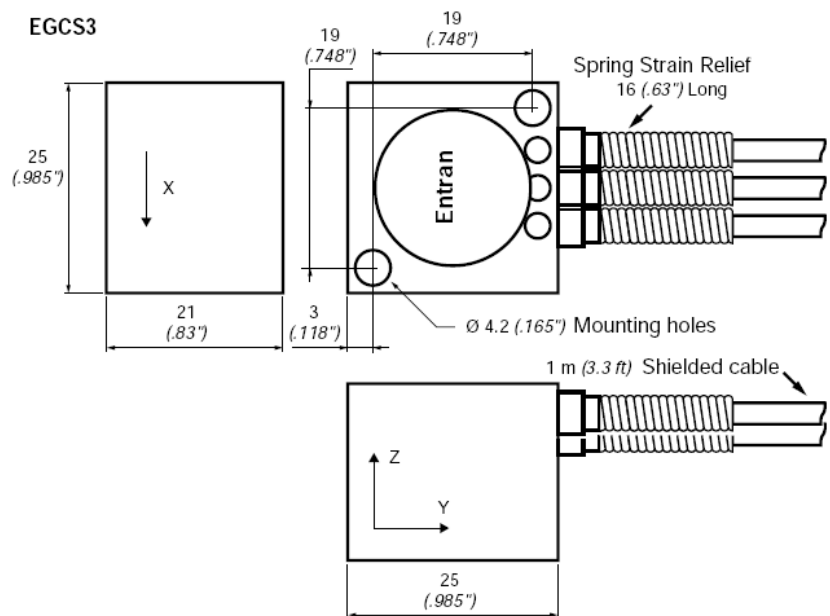


Triaxial, DC Response
10,000 g Overrange Stops
±5g to ±5000g Dynamic Range
Critically Damped



The Model EGCS3-D triaxial accelerometer is available in ranges from ±5g through ±5000g. With over-range limit to ±10,000g and spring strain relief, this rugged device is ideal for offshore, downhole and shock testing applications. Its small size and screw mounting ensure ease of installation while its low power requirements and DC output facilitate integration into data acquisition and monitoring systems. The EGCS3 also features CE Conformance to EN 61010-1, EN 50081-1 and EN 50082-1.

dimensions

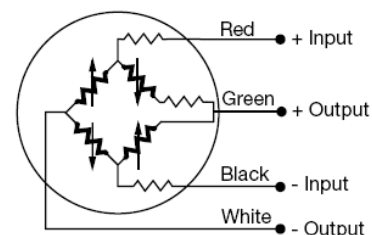


FEATURES

- ±5g to ±5000g Dynamic Range
- Heavy Duty, Rugged
- Static and Dynamic Measurement
- DC to 4000Hz Frequency Response
- ±1% Non-Linearity
- -40 °C to +120 °C Temperature Range
- 10,000g Over-range Protection

APPLICATIONS

- Blast Testing
- Machine Control
- Performance Testing
- Engine Testing
- Road Vehicle Testing



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performance specifications

All values are typical at +24°C, 100Hz and 15Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

Parameters											Notes
DYNAMIC											
Range (g)	±5	±10	±25	±50	±100	±250	±500	±1000	±2500	±5000	
Sensitivity (mV/g)	40	20	8	4	2	0.8	0.4	0.2	0.08	0.04	
Frequency Response min. (Hz)	0-80	0-120	0-240	0-350	0-500	0-750	0-1000	0-1500	0-2000	0-2400	±1/2dB
Frequency Response nom. (Hz)	0-150	0-200	0-400	0-600	0-900	0-1300	0-1750	0-2500	0-3500	0-4000	±1/2dB
Natural Frequency (Hz)	300	400	800	1200	1800	2600	3500	5000	7000	8000	
Non-Linearity (%FSO)	±1	±1	±1	±1	±1	±1	±1	±1	±1	±1	
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Nominal
Shock Limit (g)	500	1000	2000	5000	10000	10000	10000	10000	10000	10000	
ELECTRICAL											
Zero Acceleration Output (mV)	±15										Differential
Excitation Voltage (Vdc)	15 (can be used from 2 to 15Vdc but lower excitation voltage will decrease sensitivity accordingly)										
Input Resistance (Ω)	2000										Nominal
Output Resistance (Ω)	1000										Nominal
Insulation Resistance (MΩ)	>100										@50Vdc
Ground Isolation	Isolated from Mounting Surface										
ENVIRONMENTAL											
Thermal Zero Shift	±2.0mV / 50°C (±2.0mV / 100°F)										
Thermal Sensitivity Shift	±2.5% / 50°C (±2.5% / 100°F)										
Operating Temperature	-40 to +120°C (-40 to +250°F)										
Compensated Temperature	+20 to +80°C (+70 to +170°F), contact factory for other temperature compensation options										
Storage Temperature	-40 to +120°C (-40 to +250°F)										
Humidity	Epoxy Sealed										
PHYSICAL											
Case Material	Anodized Aluminum										
Cable	PFA Insulated Leads, Braided Shield, Silicone Jacket										
Weight	<50 grams										
Mounting	Screw Mount										
AWG	#28										
Wiring color code:	+Excitation = Red; -Excitation = Black; +Output = Green; -Output = White										
Calibration supplied:	CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±1/2dB Frequency Response Limit										
Optional accessories:	101 Three Channel DC Signal Conditioner Amplifier 140 Auto-zero Inline Amplifier										

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ordering info

EGCS3 - D - 100 - /Z1/L2M/C

| | Options, otherwise leave blank
| Range (100 is 100g)

Compensated Temp Ranges:

Standard = +20 to +80°C (+70 to +170°F)
Z* = Non standard, contact factory

Excitation Voltage:

Standard = 15Vdc

Special Cable Length:

V* = Non standard, contact factory
L00F = Replace "00" with length in feet

Connector Wired to Cable:

L00M = Replace "00" with length in meter
C = Microtech type male or equivalent

Example: EGCS3-D-100-/L2M

Model EGCS3, 100g Range, 2 Meter Cable Length