te.com

MODEL EGCS-D0 & EGCS-D1S ACCELEROMETERS

Specifications

- DC Response, Critically Damped
- ±5g to ±10,000g Dynamic Range
- Rugged Design, Integral Strain Relief
- Fluid Damped, Over-Range Stops
- Temperature Compensated
- -40°C to +100°C Operating Range

Features

- Rugged Stainless Steel Housing
- DC to 5000Hz Frequency Response
- Full Bridge Design
- Linearity <1%
- 10,000g Shock Protection
- 2-15Vdc Excitation
- <3% Transverse Sensitivity

Applications

- General Purpose T&M Applications
- Vibration & Shock Monitoring
- Road Vehicle Testing
- Transient Drop Testing
- Static & Dynamic Measurements
- Engine Testing

The TE Connectivity EGCS-D0 and EGCS-D1S series accelerometers are rugged DC sensors designed for harsh measurement applications. The accelerometers are critically fluid damped and feature a full bridge output configuration with mechanical over-range stops for outstanding shock survivability. The damped EGCS-D0 and EGCS-D1S designs are available in ranges from ±5g to ±10,000g and feature 0-5000Hz frequency response (range dependent).

The EGCS-D0 and EGCS-D1S accelerometers can be powered with a range of 2-15Vdc excitation voltage. The accelerometers have a standard cross-talk accuracy of <3% and a standard ZMO (zero measurand output) of <±20mV.

The EGCS-D0 & EGCS-D1S series are environmentally sealed with IP65 protection. The -D0 option has a screw mounted flange configuration while the -D1S option has a stud mount configuration.

A triaxial mounting block, PN AC-A04686, is also offered for multi-axis measurement installations.

CLICK HERE ›
CONNECT WITH A SPECIALIST

Performance Specifications

All values are typical at +24℃, 80Hz (>50g ranges) 16Hz (≤50g ranges) and 15Vdc excitation unless otherwise stated. TE Connectivity reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC											
Range (g)	±5	±10	±25	±50	±100	±250	±500	±1000	±2500	±5000	±10000
Sensitivity (mV/g) @15Vdc	40	20	8	4	2	0.8	0.4	0.2	0.08	0.04	0.016
Frequency Response, Hz											
+5% / -10%	0-90	0-120	0-240	0-360	0-540	0-780	0-1050	0-1500	0-2100	0-2400	0-3000
+5% / -20%	0-150	0-200	0-400	0-600	0-900	0-1300	0-1750	0-2500	0-3500	0-4000	0-5000
Min Resonance Freq, Hz	300	400	800	1200	1800	2600	3500	5000	7000	8000	10000
Transverse Sensitivity	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Non-Linearity	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	± 1%	±1%
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Shock Limit (g)	±500	±1000	±2000	±5000	±10000	±1000 0	±10000	±10000	±10000	±10000	±12500

ELECTRICAL	
Zero Measurand Output	<±20 mV, differential
Excitation Voltage	2 to 15Vdc
Input Resistance	1000-2500 Ohms
Output Resistance	700-1300 Ohms
Insulation Resistance	>100 MΩ @50Vdc
Ground Isolation	Isolated from mounting surface
Warm-Up Time	<10 seconds

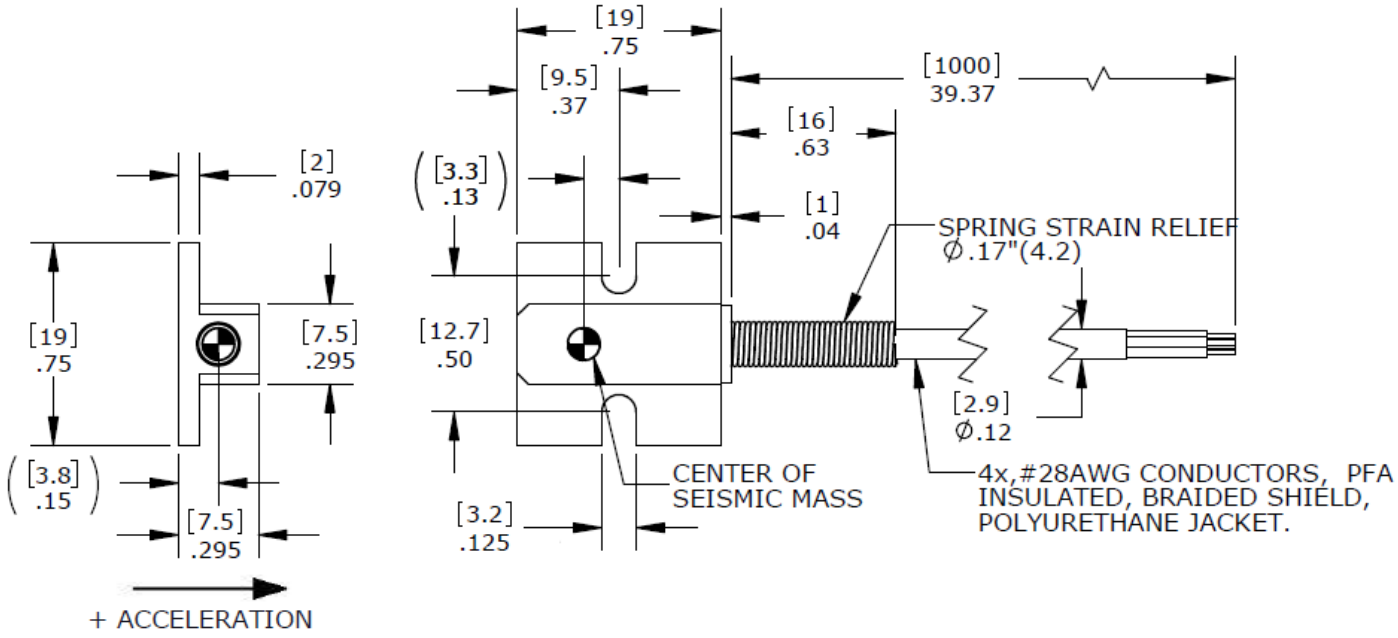
ENVIRONMENTAL	
Thermal Zero Shift	±2.0mV / 50℃ (±2.0mV / 100℉)
Thermal Sensitivity Shift	±2.5% / 50℃ (±2.5% / 100℉)
Operating Temperature	-40℃ to +100℃
Compensated Temp	+20℃ to +80℃, contact factory fo r other temperature compensation options
Humidity	Epoxy Sealed, IP66

PHYSICAL	
Case Material	Stainless Steel
Cable	4x #28 AWG Leads, PFA Insulated, Braided Shield, Polyurethane Jacket
Weight	10grams for EGCS-D0, 12grams for EGCS-D1S, cable not included
Mounting	Screw Mount for EGCS-D0 (2x #4-40 or M3), Stud Mount for EGCS-D1S (#10-32 stud)

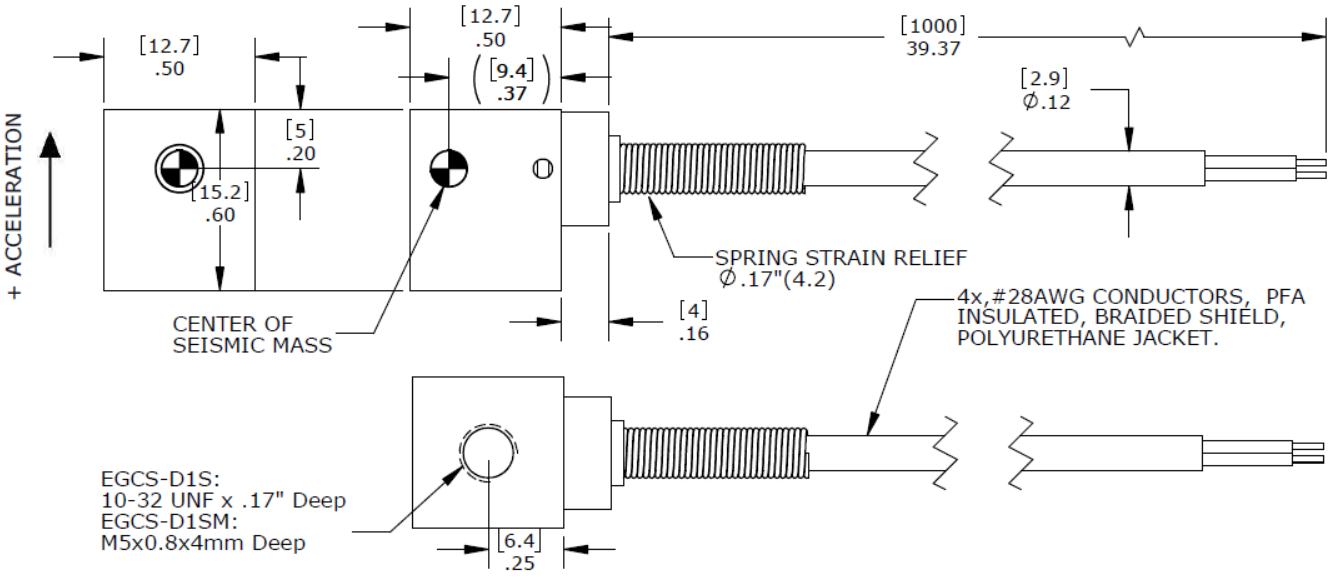
[1] Output is ratiometric to excitation voltage

Calibration supplied:	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±1dB Frequency Limit
Optional accessories:	AC-A04686	Triaxial Mounting Block for EGCS-D0 Version
	121	3-Channel Precision Low Noise DC Amplifier

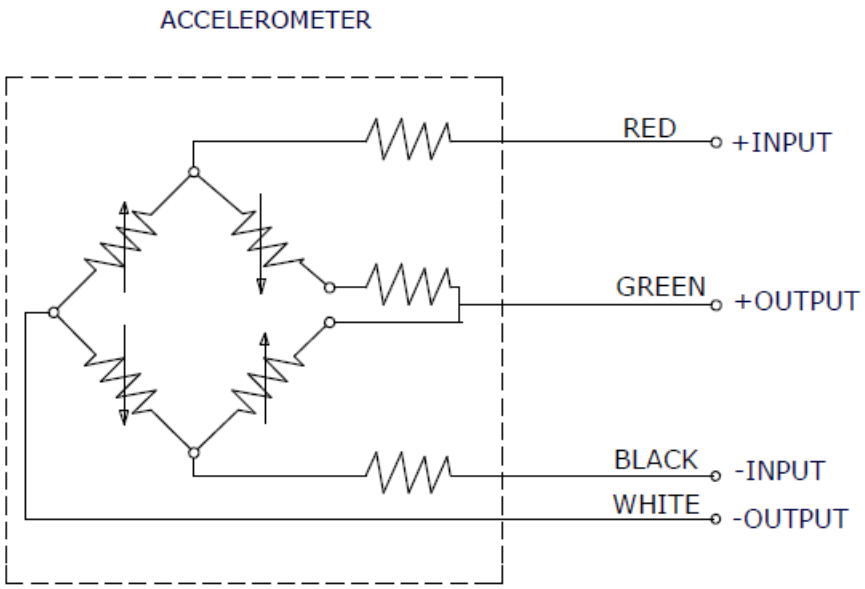
Dimensions, Model EGCS-D0



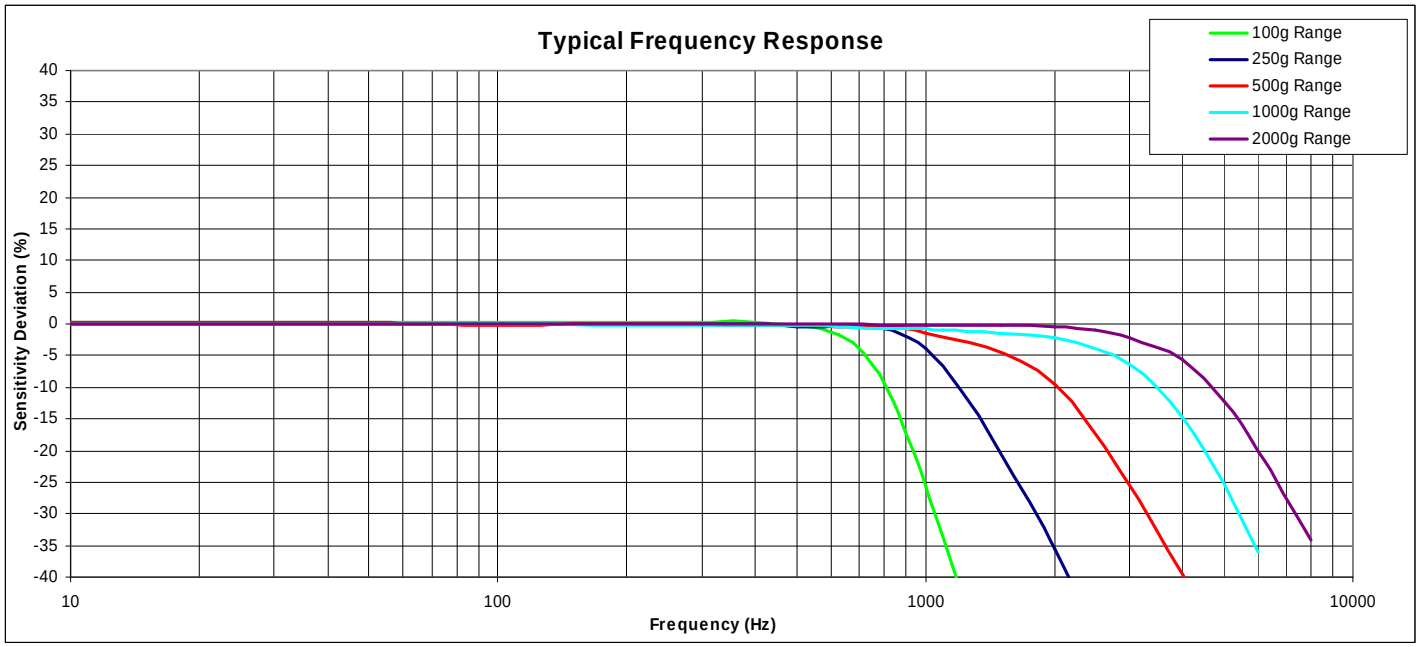
Dimensions, Model EGCS-D1S



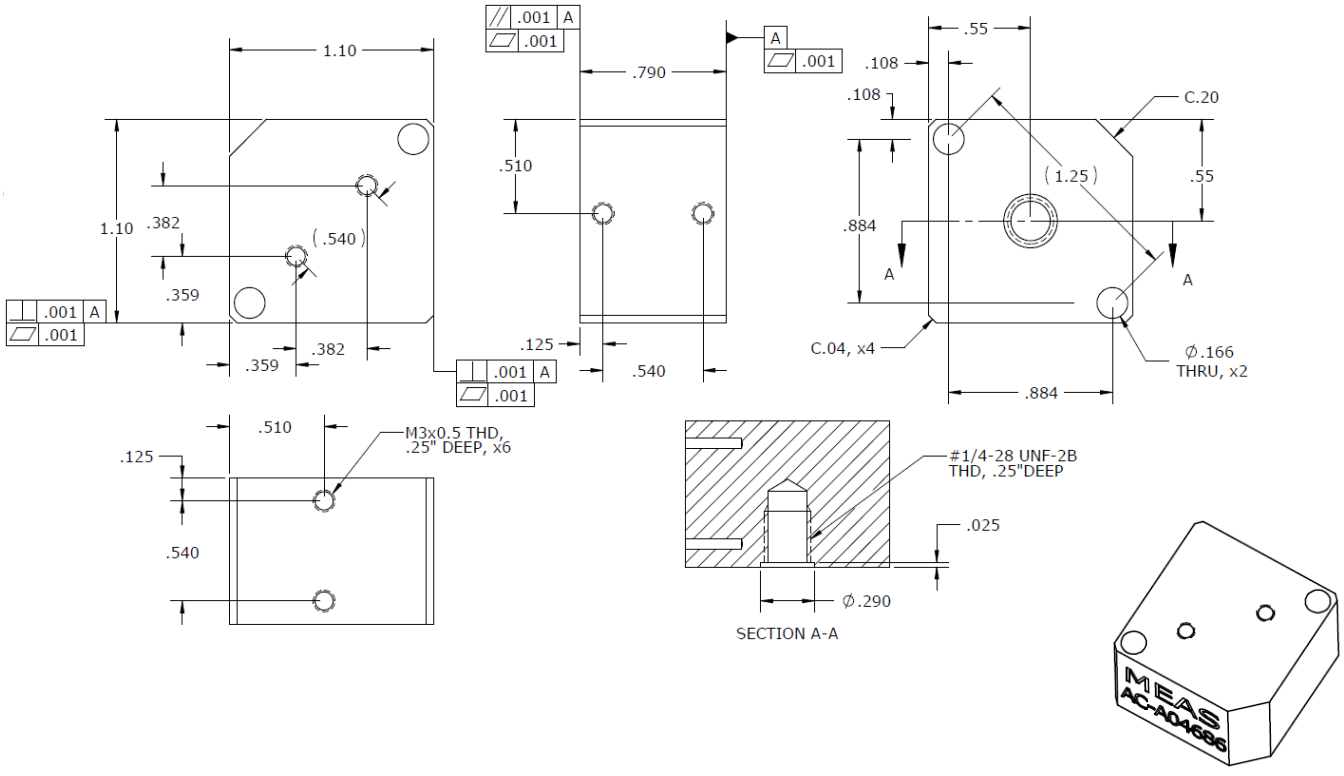
Schematic, for both EGCS-D0 and EGCS-D1S



Typical Frequency Response



Triaxial Mounting Block



Ordering Information

EGCS-D0 or EGCS-D1S	GGGG	-/VX	/LZZ

Range
5 = 5g
10 = 10g
25 = 25g
50 = 50g
100 = 100g
250 = 250g
500 = 500g
1000 = 1000g
2500 = 2500g
5000 = 5000g
10000 = 10,000g

Excitation Voltage
Leave blank for standard 15Vdc
V5 = 5Vdc excitation
V10 = 10Vdc excitation

Cable length
Leave blank for standard 1 meter cable length
L2M = 2 meters
L5M = 5 meters
L10M = 10 meters

Example; EGCS-D0-100-/L2M
Model EGCS-D0, 100g range, 2 meters cable length

CLICK HERE ›
CONNECT WITH A SPECIALIST

NORTH AMERICA
Measurement Specialties, Inc.,
a TE Connectivity Company
Tel: 800-522-6752
customercare.hmpt@te.com

EUROPE
MEAS France SAS
a TE Connectivity Company
Tel: +31 73 624 6999
customercare.lcsb@te.com

ASIA
Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Tel: 0400-820-6015
customercare.shzn@te.com

te.com

Version # 10/2020

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Thick Film Resistors - SMD ***category:***

Click to view products by TE Connectivity ***manufacturer:***

Other Similar products are found below :

CR-05FL7--150R CR-05FL7--698K CR-12JP4--680R M55342K08B46E4SWL M55342K08B62J0SUL M55342K08B6J20SWB MCR01MZPF1202 MCR01MZPF1601 MCR01MZPF1800 MCR01MZPF6201 MCR01MZPF9102 MCR01MZPJ113 MCR01MZPJ121 MCR01MZPJ125 MCR01MZPJ751 MCR03EZHJ103 MCR03EZPFX2004 MCR03EZPJ270 MCR03EZPJ821 MCR10EZPF1102 RC1005F1152CS RC1005F1372CS RC1005F2052CS RC1005F471CS RC1005F4751CS RC1005F5621CS RC1005F6041CS RC1005J121CS RC1005J122CS RC1005J180CS RC1005J181CS RC1005J202CS RC1005J391CS RC1005J512CS RC1005J683CS RC1005J823CS RC1608F333CS RC1608F5110CS RC1608J121CS RC2012F2493CS RC2012F2740CS RC2012J105CS RC2012J470CS RC2012J561CS RC2012J8R2CS RC3216F100CS RC3216F272CS RC3225F30R1CS RCP0603W100RGED RCWP1100100KFKS3