

# Model EGCS-D0/D1S Accelerometer

Rugged Design  
DC Response  
10,000 g Overage Stops  
Broad Temperature Range



**The Model EGCS-D0/D1S** accelerometer combines a damping ratio of 0.7 (Nominal) with built-in overrange stops that are set to protect the unit against 10,000 g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload in order to make a low g measurement. These units feature a Wheatstone Bridge output with compensated temperature range of 20 to 80 °C.

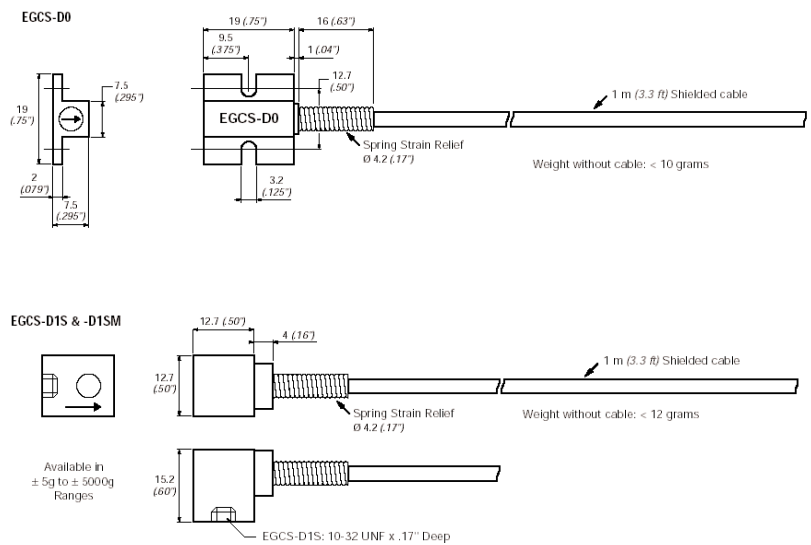
## FEATURES

- Compact
- Heavy Duty
- Static and Dynamic Measurement
- Frequency Response through 4000 Hz
- ±1% Non-Linearity
- -40 °C to +120 °C Operating Temperature Range
- 10,000g Overage Protection

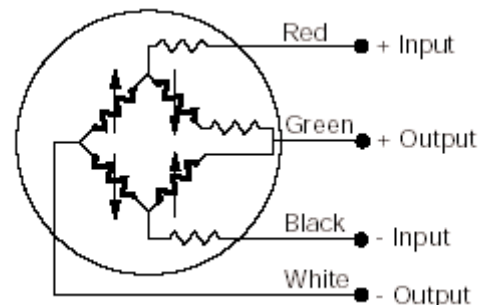
## APPLICATIONS

- General Purpose
- Machine Control
- Inspection
- Engine Testing

## dimensions



Dimensions in mm (inch)



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## performance specifications

All values are typical at 24 °C and at 15 Vdc excitation unless otherwise stated. Measurement Specialties, Inc. 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
Sensitivity (mV/g)	30	20	8	4	2	0.8	0.4	0.2	0.08	0.04
Frequency Response (Hz)	0-150	0-200	0-400	0-600	0-900	0-1300	0-1750	0-2500	0-3500	0-4000
Resonance (Hz)	300	400	800	1200	1800	2600	3500	5000	7000	8000

Non-Linearity (%)	±1									
Transverse Sensitivity (% MAX)	2									
Zero Acceleration Output (±mV)	15									
Thermal Zero Shift(50°C/100°F)	±2.0mV/±2.0mV									
Thermal Sensitivity Shift (50°C/100°F)	±2.5%/±2.5%									
Damping Ratio (Nominal)	0.7									

#### ELECTRICAL

Voltage Excitation (Vdc)	15									
Input Resistance (Ohms)	2K									
Output Resistance (Ohms)	1K									
Cable Output Connections	Red	+EXC								
	Black	-EXC								
	Green	+OUT								
	White	-OUT								

#### PHYSICAL

Case Material	Stainless Steel									
Cable Connections (meter/feet)	1 / 3.3									
Weight (DO/D1S)	10 / 12 grams									
Mounting (DO/D1S)	Screw/Stud									

#### ENVIRONMENTAL

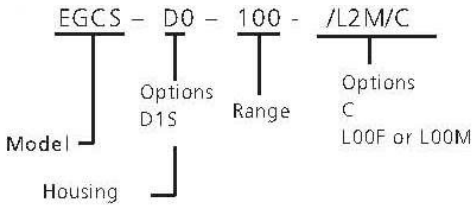
Shock Limit Sensitive Axis (g)	500	1000	2000	5000	10000	10000	10000	10000	10000	10000
Operating Temperature (°C)	-40 to 120									
Compensated Temperature (°C)	20 to 80									

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## ordering info



**COMPENSATED TEMPERATURE RANGES:** STANDARD = 20°C to 80°C (70°F to 170°F)  
 Z\* = Non-standard, contact factory

**EXCITATION VOLTAGE:** STANDARD = 15VDC

**SPECIAL CABLE LENGTH:** L00F = Replace "00" with total length in feet.  
 L00M = Replace "00" with total length in meters.

**CONNECTOR WIRED TO CABLE:** C = Microtech type male or equivalent