

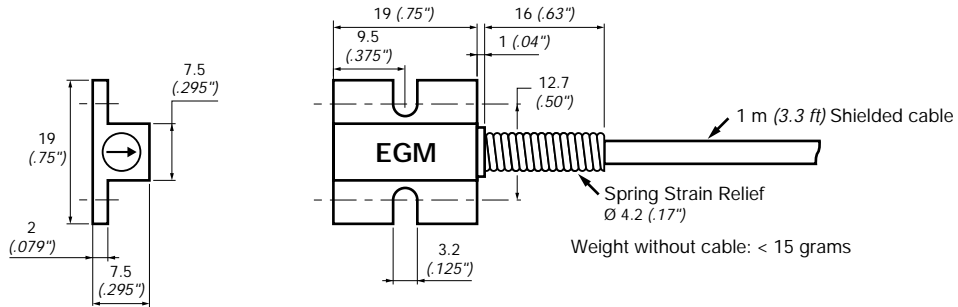
# EGM Series Accelerometers



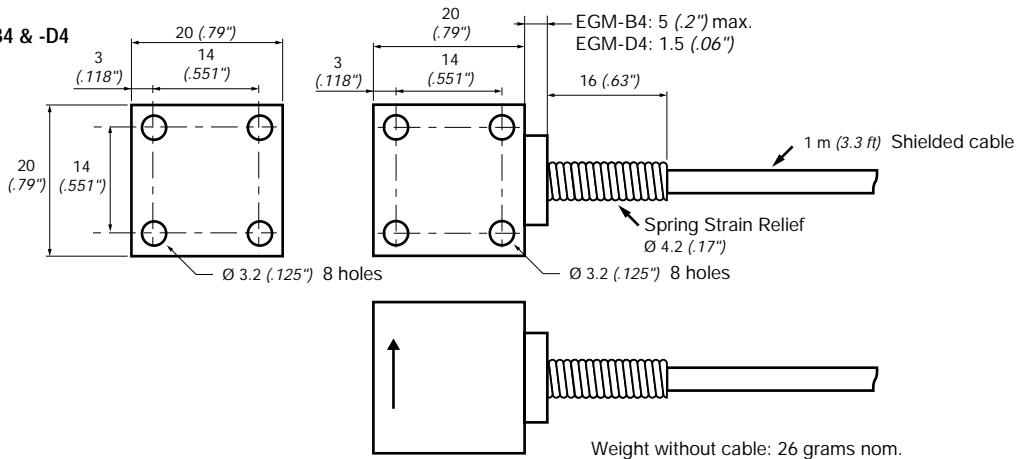
High Stability - High Accuracy

## EGM-D0, EGM-B4 & EGM-D4

EGM-D0



EGM-B4 & -D4



Dim: mm (inches)

## EGM Series

| g RANGES<br>"FS" | g OVERRANGE<br>LIMIT | FREQUENCY RESPONSE $\pm 1/2$ dB<br>nom./min. |   | NATURAL FREQUENCY<br>nom. |   | SENSITIVITY<br>mV/g nom |   | OUTPUT "FSO"<br>mV nom. |   |                       |  |
|------------------|----------------------|--|---|---------------------------|---|-------------------------|---|-------------------------|---|-----------------------|--|
|                  |                      | B  | D | B                         | D | B                       | D | B                       | D |                       |  |
|                  |                      | 0 to 30/20 Hz                                |   | 0 to 40/25 Hz             |   | 60 Hz 80 Hz             |   | 200 2                   |   | $\pm 1$ V $\pm 10$ mV |  |
| $\pm 5$          | $\pm 1000$           | 0 to 50/30 Hz                                |   | 0 to 70/50 Hz             |   | 100 Hz 150 Hz           |   | 100 1                   |   | $\pm 1$ V $\pm 10$ mV |  |
| $\pm 10$         | $\pm 1000$           | 0 to 100/60 Hz                               |   | 0 to 150/100 Hz           |   | 200 Hz 300 Hz           |   | 40 0.4                  |   | $\pm 1$ V $\pm 10$ mV |  |
| $\pm 25$         | $\pm 1000$           | 0 to 100/70 Hz                               |   | 0 to 250/150 Hz           |   | 300 Hz 500 Hz           |   | 20 0.2                  |   | $\pm 1$ V $\pm 10$ mV |  |
| $\pm 50$         | $\pm 2000$           | 0 to 250/150 Hz                              |   | 0 to 350/200 Hz           |   | 500 Hz 700 Hz           |   | 10 0.1                  |   | $\pm 1$ V $\pm 10$ mV |  |
| $\pm 100$        | $\pm 2000$           | 0 to 350/200 Hz                              |   | 0 to 500/300 Hz           |   | 700 Hz 1000 Hz          |   | 4 0.04                  |   | $\pm 1$ V $\pm 10$ mV |  |

|   |  |                                 |
|---|--|---------------------------------|
| <b>EXCITATION:</b>                              | B = 28VDC (14-32VDC)                                       | D = 10VDC                       |
| <b>ELECTRICAL IN:</b>                           | B = 15mA max.  | D = 1100 $\Omega$ nom.          |
| <b>ELECTRICAL OUT:</b>                          | B = 1000 $\Omega$ nom.                                     | D = 1000 $\Omega$ nom.          |
| <b>ZERO OFFSET AT 20°C (70°F):</b>              | B = $\pm 100$ mV typ.                                      | D = $\pm 0.5$ mV typ.           |
| <b>THERMAL ZERO SHIFT:</b>                      | B = $\pm 5$ mV/50°C (/100°F)                               | D = $\pm 0.05$ mV/50°C (/100°F) |
| <b>THERMAL SENSITIVITY SHIFT (TSS):</b>         | $\pm 1\%/50^\circ\text{C}$ ( $\pm 1\%/100^\circ\text{F}$ ) |                                 |
| <b>ZERO &amp; SENSITIVITY STABILITY:</b>        | <1%FSO/6 months  |                                 |
| <b>COMBINED NON-LINEARITY &amp; HYSTERESIS:</b> | $\pm 0.5\%$  |                                 |
| <b>TRANSVERSE SENSITIVITY:</b>                  | 2% max   |                                 |
| <b>DAMPING RATIO AT 20°C (70°F):</b>            | 0.7 nom. (0.5 to 0.9)                                      |                                 |
| <b>OVERRANGE STOPS:</b>                         | Integral   |                                 |
| <b>OPERATING TEMPERATURE:</b>                   | -40°C to 120°C (-40°F to 250°F)                            |                                 |
| <b>COMPENSATED TEMPERATURE:</b>                 | 20°C to 80°C (70°F to 170°F)                               |                                 |
| <b>CE CONFORMANCE:</b>                          | EN 61010-1, EN 50081-1, EN 50082-1                         |                                 |

|                    |  |   |       |        |
|--------------------|--|---|-------|--------|
| <br>www.entran.com | <b>EGM ACCELEROMETERS</b><br>High Stability<br>High Accuracy | <b>Entran Sensors &amp; Electronics</b><br>USA: Fairfield, NJ<br>UK: Garston, Watford, Herts, England<br>Europe: Les Clayes-sous-Bois, France |       |        |
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# EGM specifications continued ...

## Options and Accessories:

### COMPENSATED TEMPERATURE RANGES:

#### STANDARD

Z1  
Z2  
Z4  
Z\*

= 20°C to 80°C (70°F to 170°F)  
= -20°C to 40°C (0°F to 100°F)  
= 0°C to 60°C (32°F to 140°F)  
= 40°C to 90°C (100°F to 200°F)  
= Non-standard, contact Entran

### EXCITATION VOLTAGE for -D only:

#### STANDARD

V00  
  
V\*

= 10VDC  
= Replace "00" with Excitation between 1 and 10.  
If less than 10, Sensitivity (FSO) will decrease accordingly.  
= Non-standard Excitation with standard FSO and non-standard TSS, contact Entran.

### SPECIAL LEAD LENGTH:

L00F  
L00M

= Replace "00" with total length in feet.  
= Replace "00" with total length in meters.

### WATERPROOFING LEAD EXIT:

X

= For short term waterproofing, contact Entran.  
Limited to 105°C (220°F).

### CONNECTOR WIRED TO CABLE:

C  
RS

= Microtech type male or equivalent (w/o mate)  
= RJ Telephone type male for cable (w/o mate)

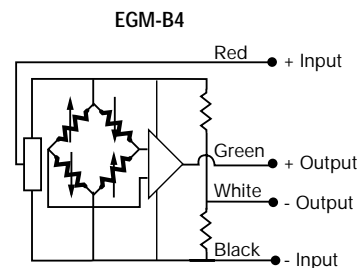
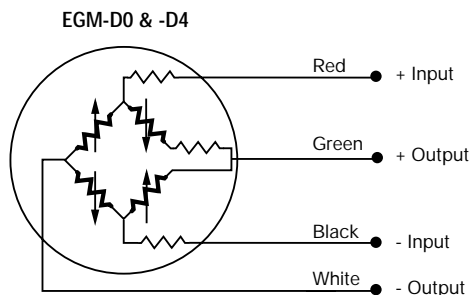
### MATING CONNECTORS FOR CONNECTOR OPTIONS:

See Cable and Connector Bulletins

## Model Number construction:

| EGM Series | -D Specifications | 0 Housings                  | - 100 Range | - /Z1/L2M/RS Options                            |
|------------|-------------------|-----------------------------|-------------|---|
|            | -B<br>-D          | 0 ("D" Specs only)<br><br>4 |             | C or RS<br>L00F or L00M<br>X<br>Z1,Z2,Z4, or Z* |

## Wiring:



Common mode output voltage of +5V nom. referred to -Input

|         |                    |               |       |        |
|---------|--------------------|---------------|-------|--------|
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