

# M150

## World's Smallest Stringpot

Ultra Miniature String Pot • Voltage Divider Output

1½-inch Stroke Range

Precision High-Cycle Potentiometer

Designed for Test and Space-Critical Applications



### GENERAL

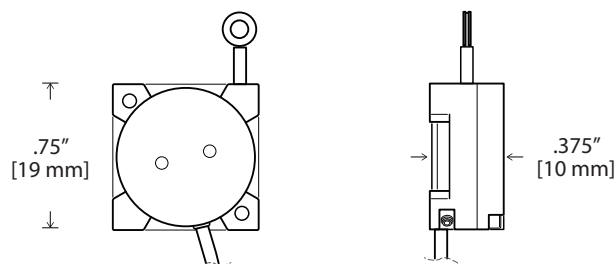
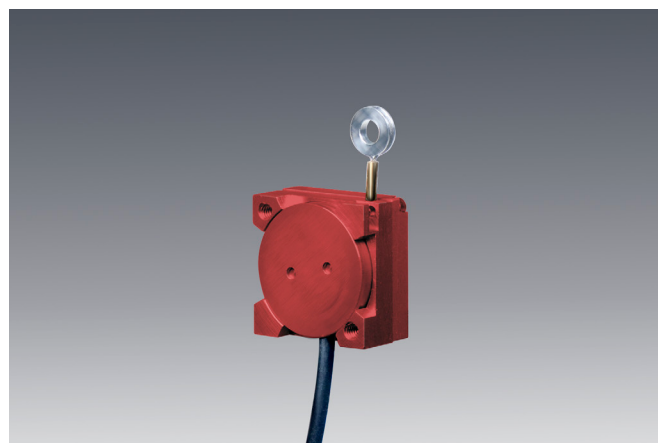
|                                      |                                             |
|--------------------------------------|---------------------------------------------|
| Full Stroke Range                    | 0-1.5 inches                                |
| Output Signal Options                | voltage divider (potentiometer)             |
| Accuracy                             | ± 1% full stroke                            |
| Resolution                           | essentially infinite                        |
| Sensitivity                          | 897 – 924 mV/V full stroke                  |
| Measuring Cable                      | .014-inch dia. nylon-coated stainless steel |
| Measuring Cable Tension              | 4 oz. ±25%                                  |
| Maximum Measuring Cable Acceleration | 39 g                                        |
| Enclosure Material                   | anodized aluminum                           |
| Sensor                               | conductive plastic precision potentiometer  |
| Potentiometer Cycle Life             | 5 million cycles                            |
| Weight                               | 0.5 oz. max.                                |

### ELECTRICAL

|                                   |              |
|-----------------------------------|--------------|
| Input Resistance                  | 5K ±10% ohms |
| Recommended Output Signal Current | < 1μA        |
| Recommended Maximum Input Voltage | 20 VDC       |

### ENVIRONMENTAL

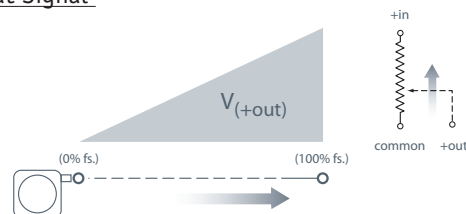
|                                      |                                 |
|--------------------------------------|---------------------------------|
| Enclosure                            | NEMA 12, IP 50                  |
| Operating Temperature                | -40° to 185°F (-40° to 85°C)    |
| Temp. Coefficient of Sensing Element | .0028%/°F (.005%/°C)            |
| Vibration                            | up to 10 g at 30 – 2000 Hz max. |



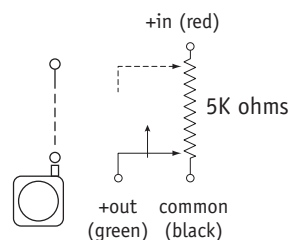
Introducing the world's smallest stringpot. The M150 is smaller than a thumbprint and occupies a tiny space of only .74 x .74 x .38 inches. With a full stroke measurement range of 1.5 inches, the M150 has been designed for many aerospace and automotive space-critical test applications such as throttle position and crash-test instrumentation.

The heart of the M150 is a precision high-cycle conductive plastic potentiometer that delivers a high-linearity voltage position feedback signal. With its rugged all aluminum construction, the M150 has been engineered for reliability and to provide quick, easy and hassle-free installation.

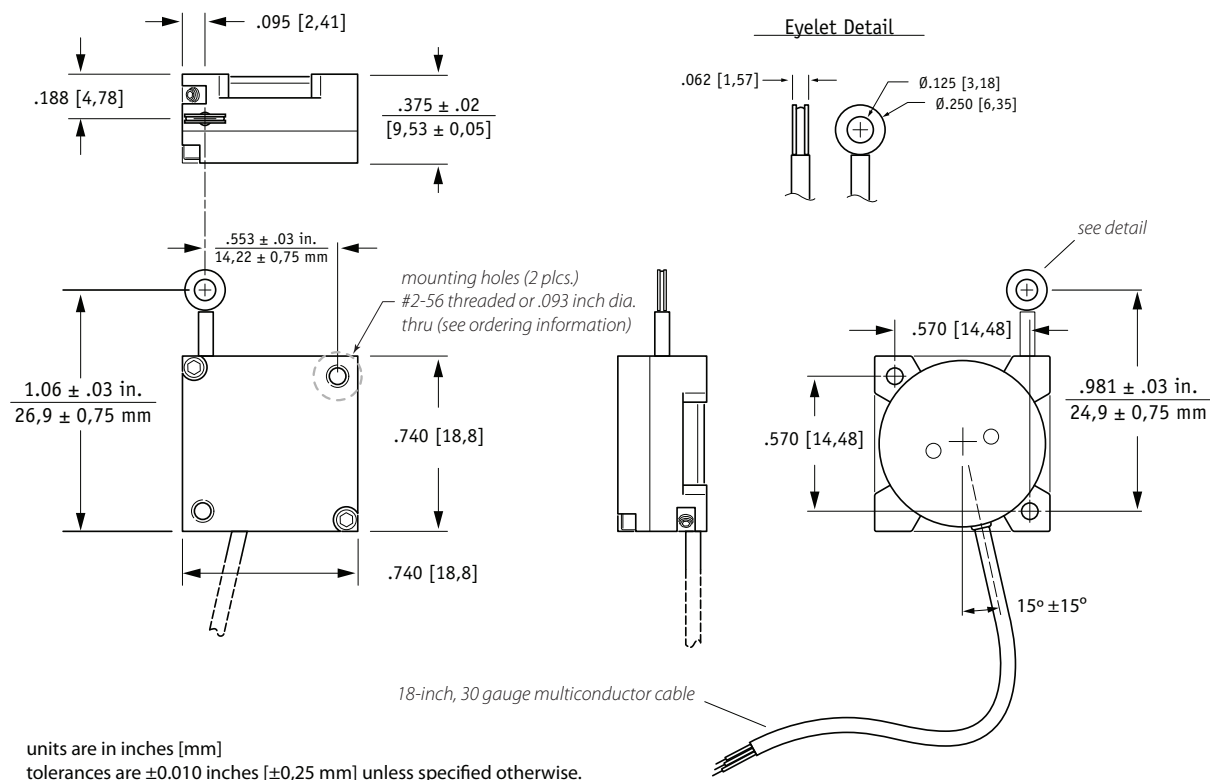
### Output Signal



### Electrical Connection



## Outline Drawing:



## Ordering Information

### Model Number:

**M150 - 4 -      -      - 5K - C1**  
order code:                      **A**                      **B**

Sample Model Number:

**M150 - 4 - H1 - E - 5K - C1**

**A** mounting hole style: .093 inch dia. thru  
**B** measuring cable termination: eyelet

### Mounting Hole Style:

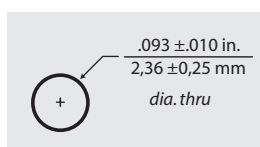
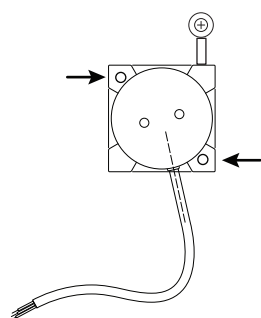
**A** order code:

**H1**

.093 thru

**H2\***

threaded



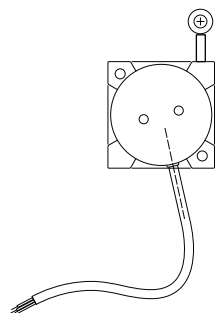
\*-includes: 4) #2-56 x 3/8" pan head mounting screws with washers

## Measuring Cable Termination:

③ *order code:*

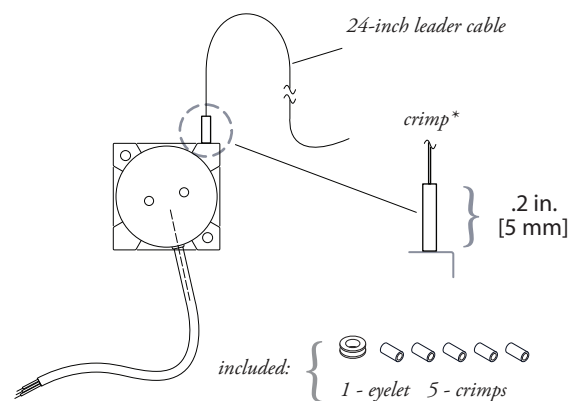
**E**

Eyelet



**L**

Leader Cable



\*note: crimped stop prevents leader cable from retracting into sensor body

**Sensorik  
Messtechnik**

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**nbn**

**E L E K T R Ö N I K**  
Handelsgesellschaft m.b.H.

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