

# Cable-Extension Position Transducer

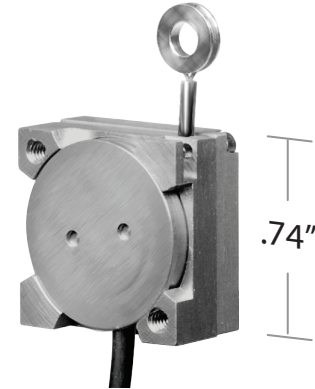
## World's Smallest Stringpot

Range: 0-1.5 inches

High-Cycle • Space-Critical Applications



# M150



### Specification Summary:

#### 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%
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

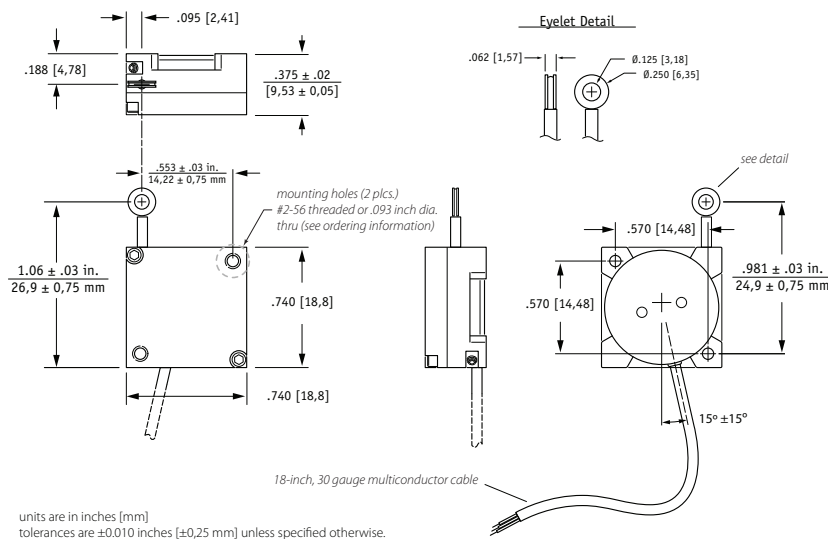
#### ENVIRONMENTAL

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's at 30 to 2000 Hz max.

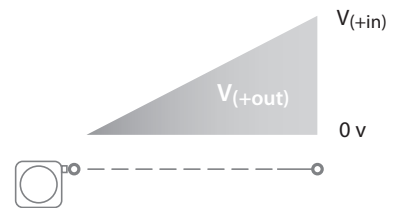
Introducing the world's smallest stringpot. The M150 is smaller than a thumbprint and occupies a tiny space of only .74 x .74 x .38 inches. With a full stroke measurement range of 1.5 inches, the M150 has been designed for many aerospace and automotive space-critical test applications such as throttle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

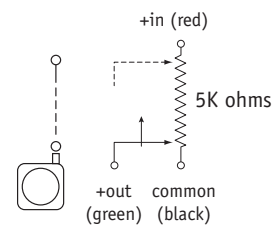
### Outline Drawing



### Output Signal



### Electrical Connection



Precision Sales Inc  
38 Bishop Hollow Rd  
Newtown Square PA 19073 USA

610-359-1002  
eparts@precisionsales.com  
www.precisionsales.com

**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:**

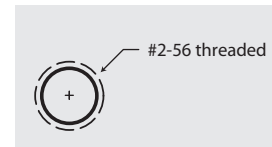
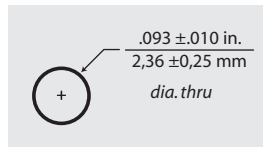
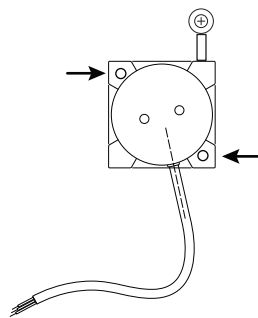
**A** *order code:*

**H1**

.093 thru

**H2\***

threaded



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

**Measuring Cable Termination:**

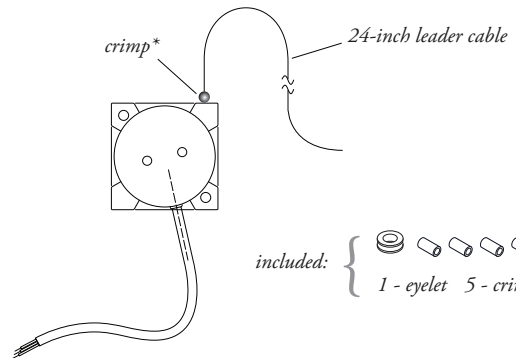
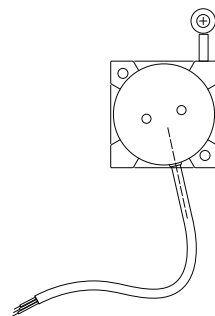
**B** *order code:*

**E**

Eyelet

**L**

Leader Cable



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