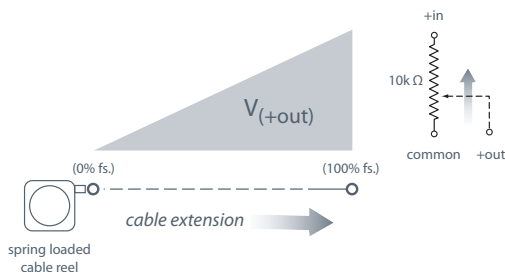


With its ultra compact design the SM1 is the perfect solution when tight space is an issue. At just a little over an inch across, this miniature stringpot offers full stroke measurement ranges from 2.4 to 25 inches. A precision plastic hybrid 10K-ohm potentiometer delivers a precise voltage divider output signal that is linearly proportional to the travel of the spring-loaded measuring cable.

Constructed with a rugged polycarbonate enclosure and free-release tolerant, the SM1 is the perfect solution for the OEM and single piece user alike.

### Output Signal:



# SM1

**Linear Position to 25 inches (635 mm)**

**Fits In Tight Spaces • Handy Mounting Bracket**

**Polycarbonate Enclosure • Free Release Tolerant**

**In Stock for Quick Delivery!**

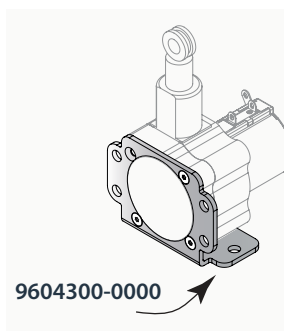
### SPECIFICATIONS

<b>Available Stroke Ranges</b>	2.375, 7.5, 12.5, 25 inches
<b>Output Signal</b>	voltage divider (potentiometric)
<b>Accuracy</b>	.25% to 1% FS. (see ordering info)
<b>Repeatability</b>	.05% FS.
<b>Resolution</b>	essentially infinite
<b>Measuring Cable</b>	.014-inch dia. nylon-coated stainless steel
<b>Maximum Acceleration</b>	15 g (retraction)
<b>Measuring Cable Tension</b>	5.1 oz. (1.4 N) ±30%
<b>Sensor</b>	plastic-hybrid precision potentiometer
<b>Input Resistance</b>	10K ohms, ±10%
<b>Power Rating, Watts</b>	2.0 at 70°F derated to 0 at 250°
<b>Max Input Voltage</b>	30 V (recommended)
<b>Sensitivity</b>	940 ± 40 mV/V FS
<b>Cycle Life</b>	see ordering information
<b>Electrical Connection</b>	solder terminals, directly to potentiometer
<b>Enclosure</b>	glass-filled polycarbonate
<b>Environmental</b>	IP 50
<b>Operating Temperature</b>	0° to 160° F (-18° to 70° C)
<b>Weight (not including bracket)</b>	3 oz (90 g)

### ORDERING INFORMATION

Order No.	full stroke range	accuracy (% of f.s.)	cycle life
<b>SM1-2</b>	2.375 in (60 mm)	1.00%	2.5M cycles
<b>SM1-7</b>	7.5 in (191 mm)	0.25%	500K cycles
<b>SM1-12</b>	12.5 in (318 mm)	0.25%	500K cycles
<b>SM1-25</b>	25 in (635 mm)	0.25%	250K cycles

### Optional Universal Mounting Bracket

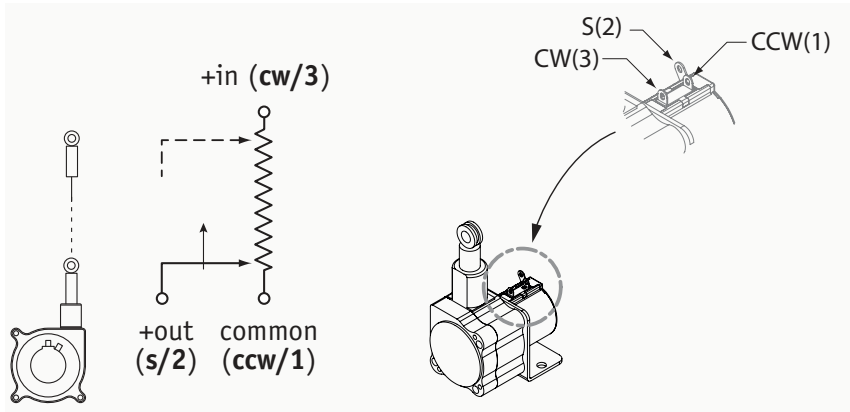


Available as an optional accessory, this universal-style mounting bracket replaces the standard bracket to give added mounting flexibility.

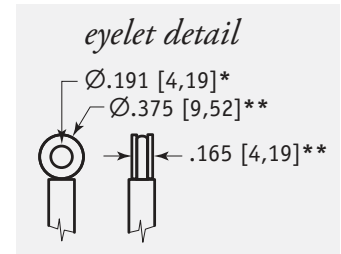
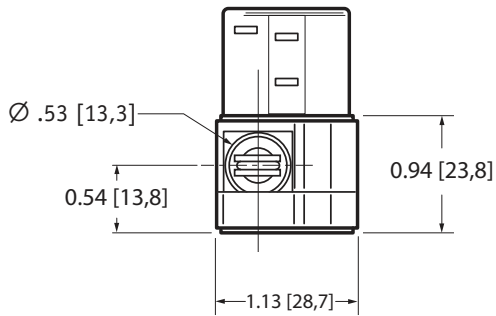
It's easy to install and the mounting kit comes with the bracket and all of the screws needed to attach it to the sensor.

See fig. 3 below for further details.

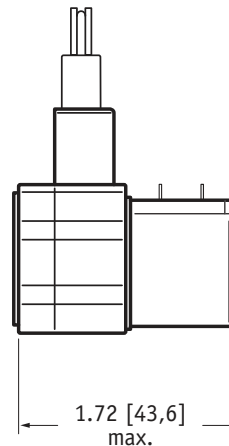
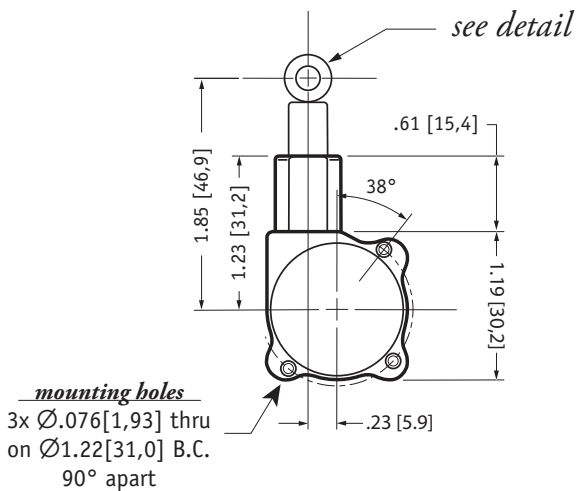
**Electrical Connection:**



**Fig. 1 - Outline Drawing (w/o mounting bracket):**

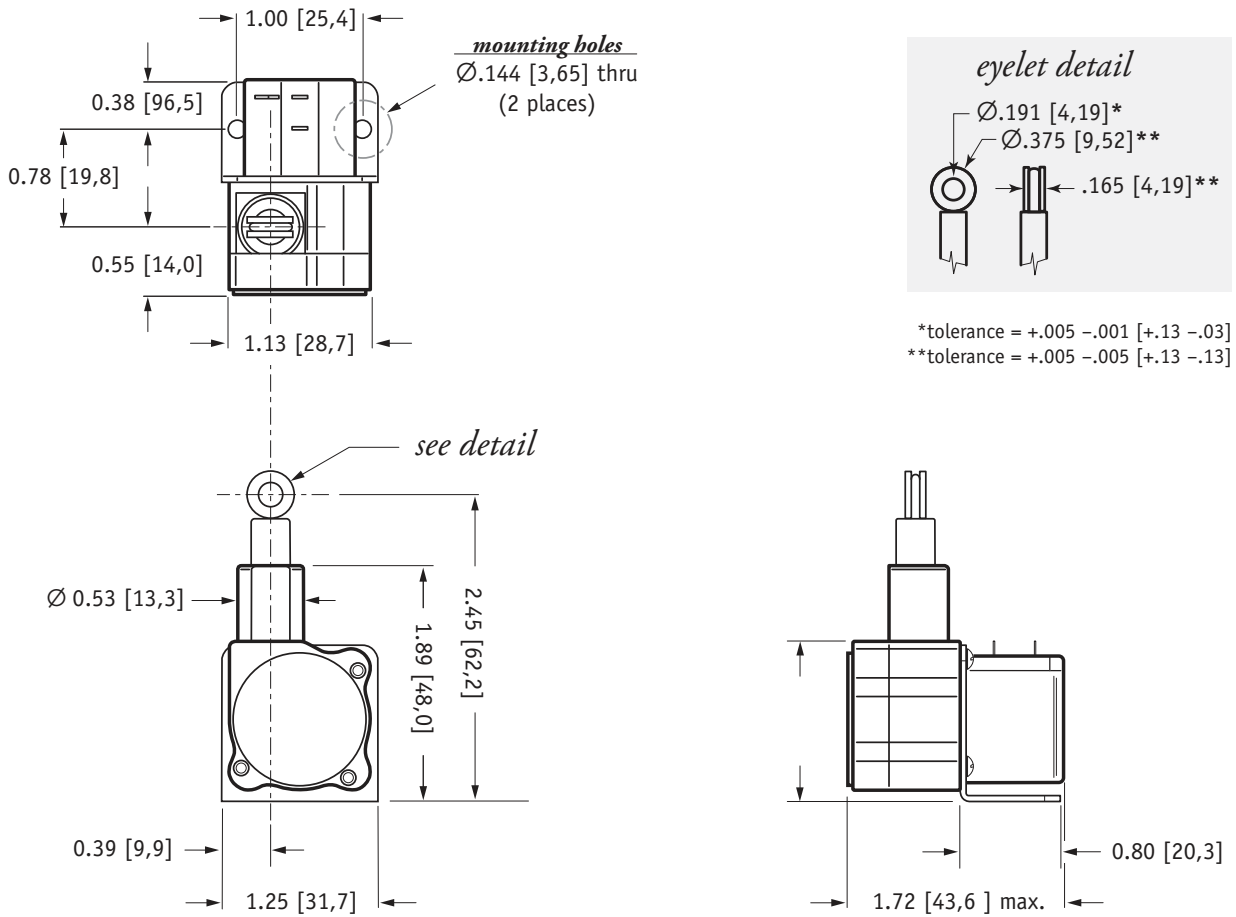


\*tolerance = +.005 -.001 [+.13 -.03]  
 \*\*tolerance = +.005 -.005 [+.13 -.13]

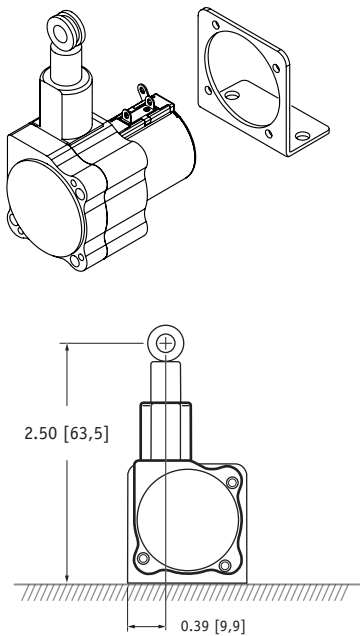


INCHES [MM]

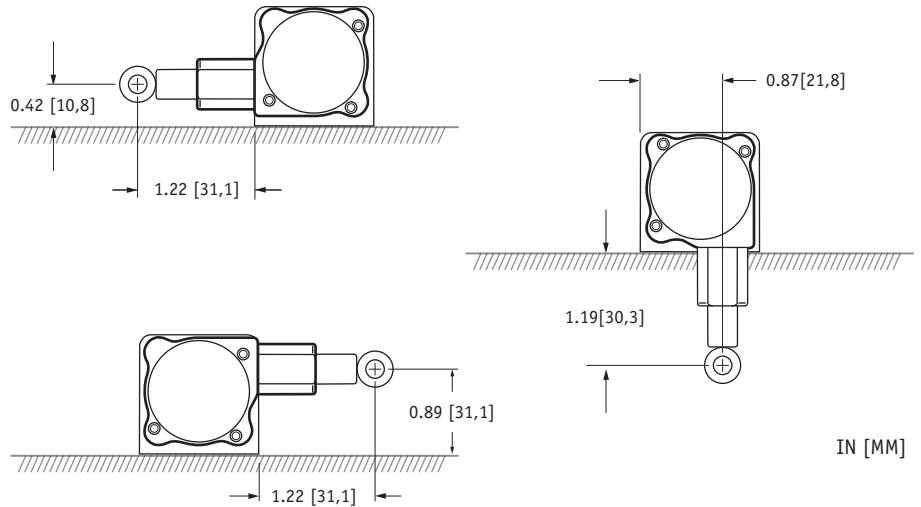
**Fig. 2 - Outline Drawing (w/standard bracket):**



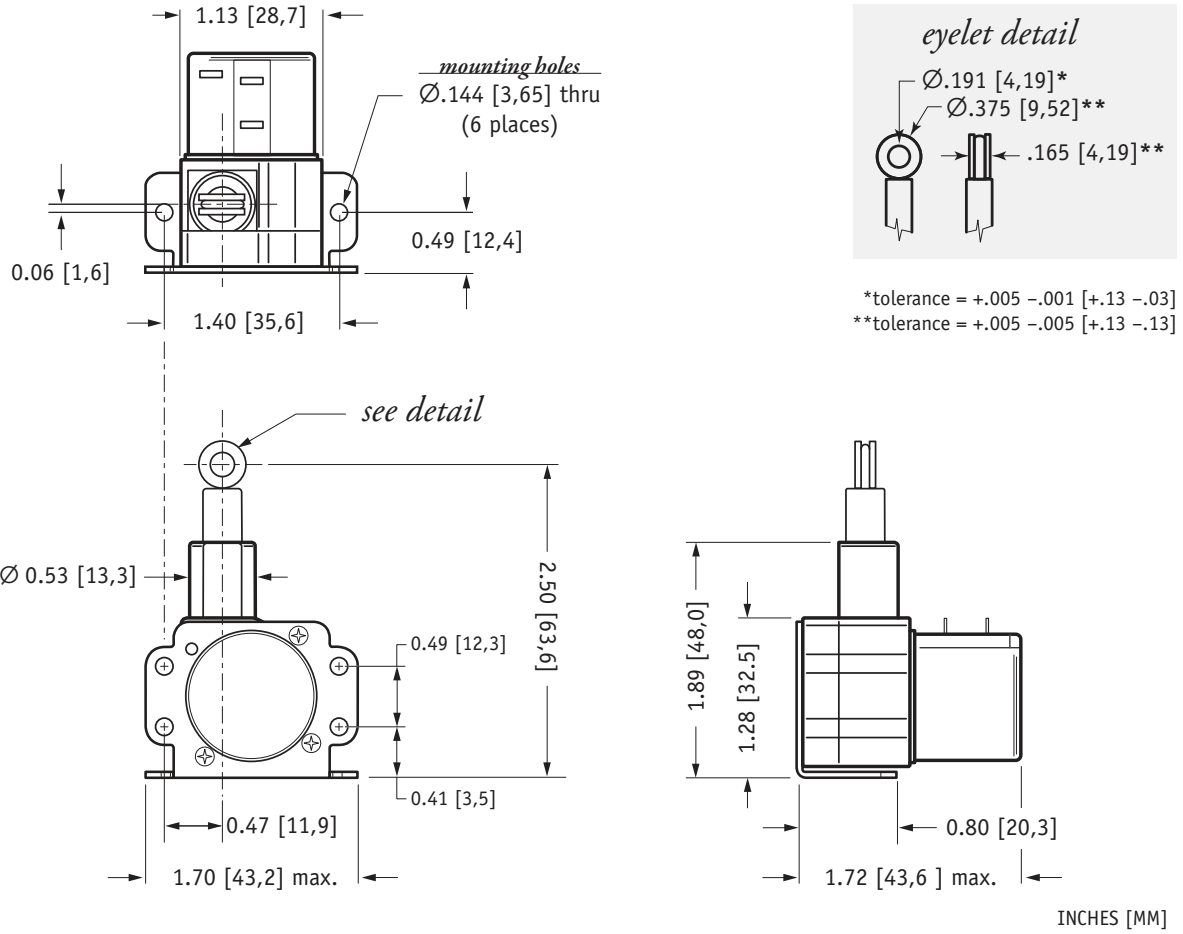
**Mounting Options:**



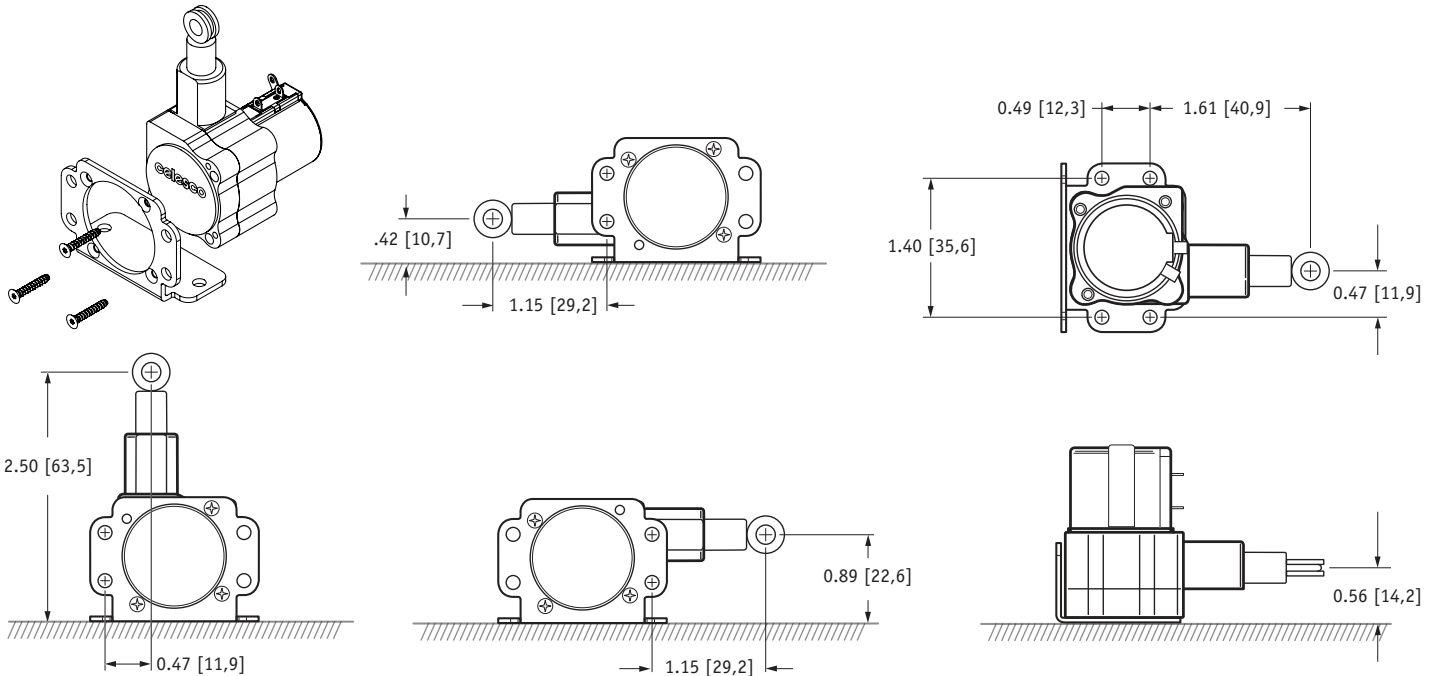
Mounting bracket can be removed and re-attached to front or back of sensor and rotated on 90° increments



**Fig 3 - Outline Drawing (w/optional Universal Mounting Bracket):**



**Mounting Options for Universal Mounting Bracket:**



## NORTH AMERICA

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