

# SM1

## Miniature String Pot • Voltage Divider Output

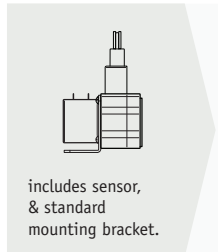
Linear Position to 25 inches (635 mm)

Fits In Tight Spaces • Handy Mounting Bracket

Polycarbonate Enclosure • Free Release Tolerant

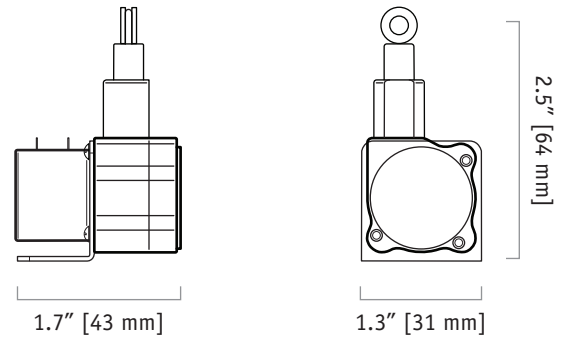
**In Stock for Quick Delivery!**

Order No.	full stroke range	accuracy (% of f.s.)	cycle life
<b>SM1-2</b>	2.5 in (64 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



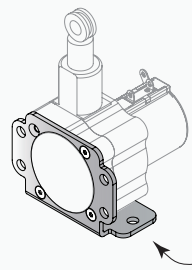
### SPECIFICATIONS

Available Stroke Ranges	2.5, 7.5, 12.5, 25 inches
Output Signal	voltage divider (potentiometric)
Accuracy	.25% to 1% FS. (see ordering info)
Repeatability	.05% FS.
Resolution	essentially infinite
Measuring Cable	.014-inch dia. nylon-coated stainless steel
Maximum Acceleration	15 g (retraction)
Measuring Cable Tension	5.1 oz. (1.4 N) ±30%
Sensor	plastic-hybrid precision potentiometer
Input Resistance	10K ohms, ±10%
Power Rating, Watts	2.0 at 70°F derated to 0 at 250°
Recommended Maximum Input Voltage	30 V (AC/DC)
Output Signal Change Over Full Stroke Range	94% ±4% of V(+in)
Cycle Life	see ordering information
Electrical Connection	solder terminals, directly to potentiometer
Enclosure	glass-filled polycarbonate
Environmental	IP 50
Operating Temperature	0° to 160° F (-18° to 70° C)
Weight (not including bracket)	3 oz (90 g)



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 2½ 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.



### Optional Universal Mounting Kit

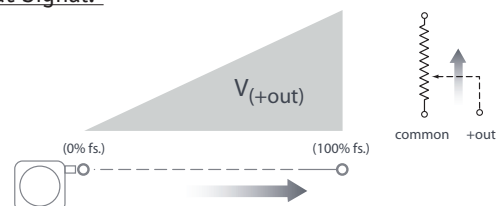
Available as an optional accessory, this universal-style mounting bracket replaces the standard bracket to give added mounting flexibility.

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 for further details.

Order No: #9604300-0000

### Output Signal:



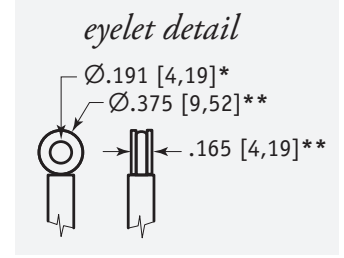
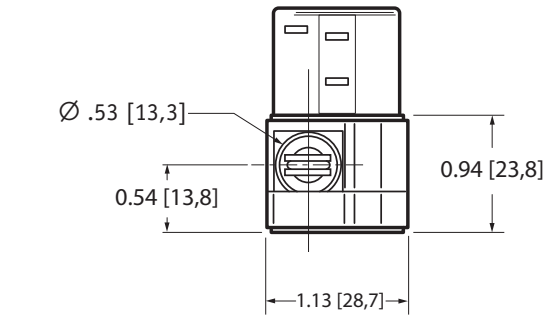
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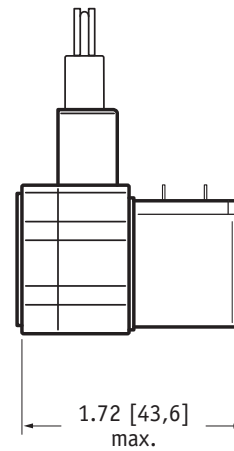
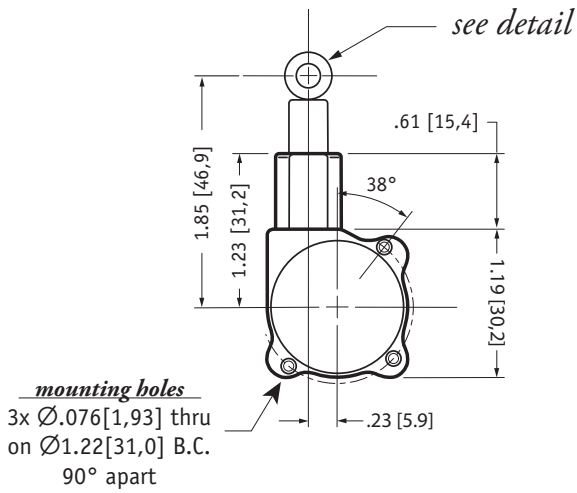
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Fig. 1 - Outline Drawing (w/o mounting bracket):



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



INCHES [MM]

Electrical Connection:

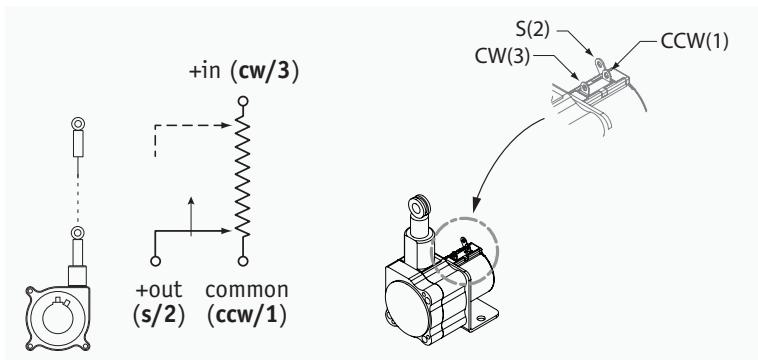
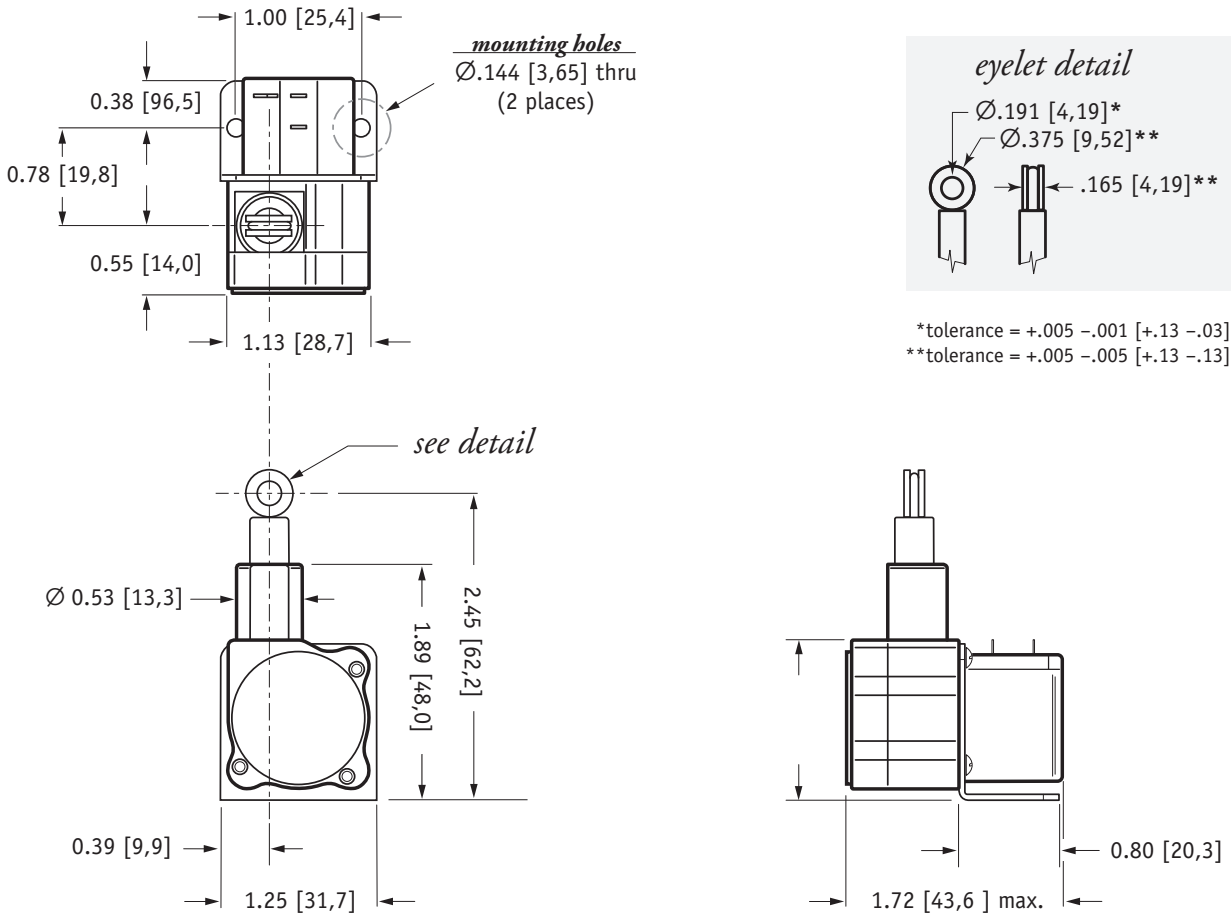


Fig. 2 - Outline Drawing (w/standard bracket):



Mounting Options:

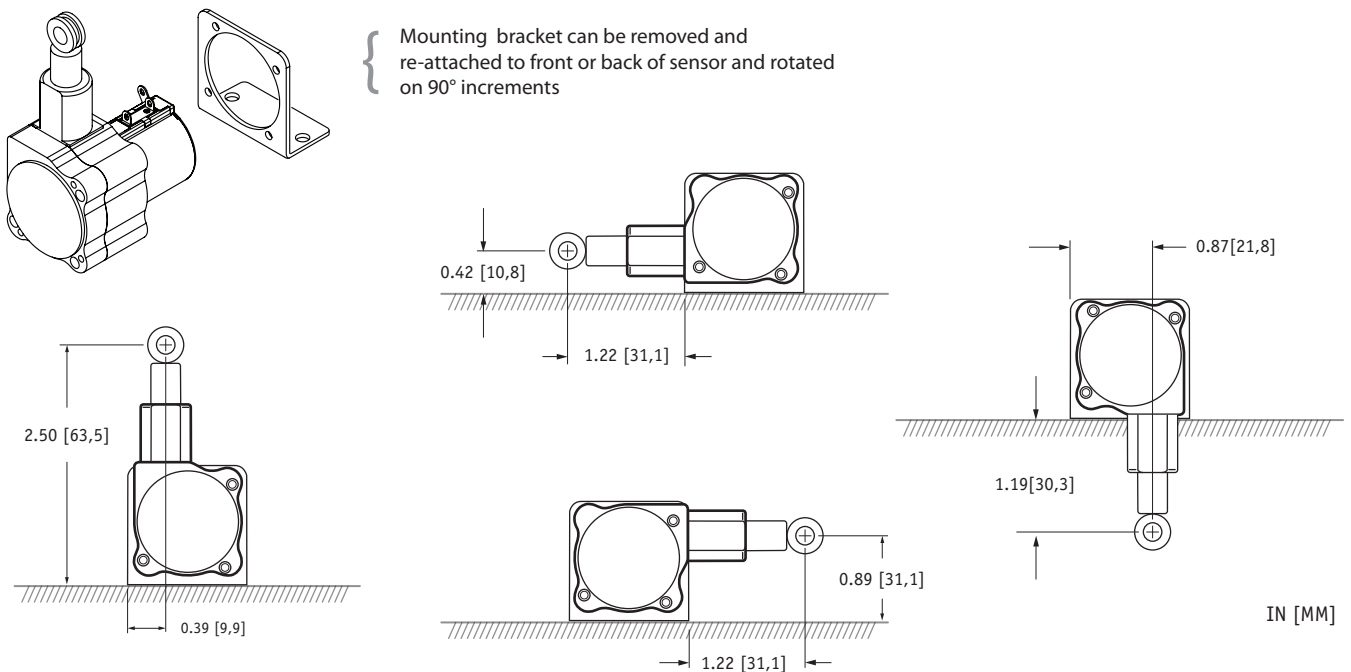
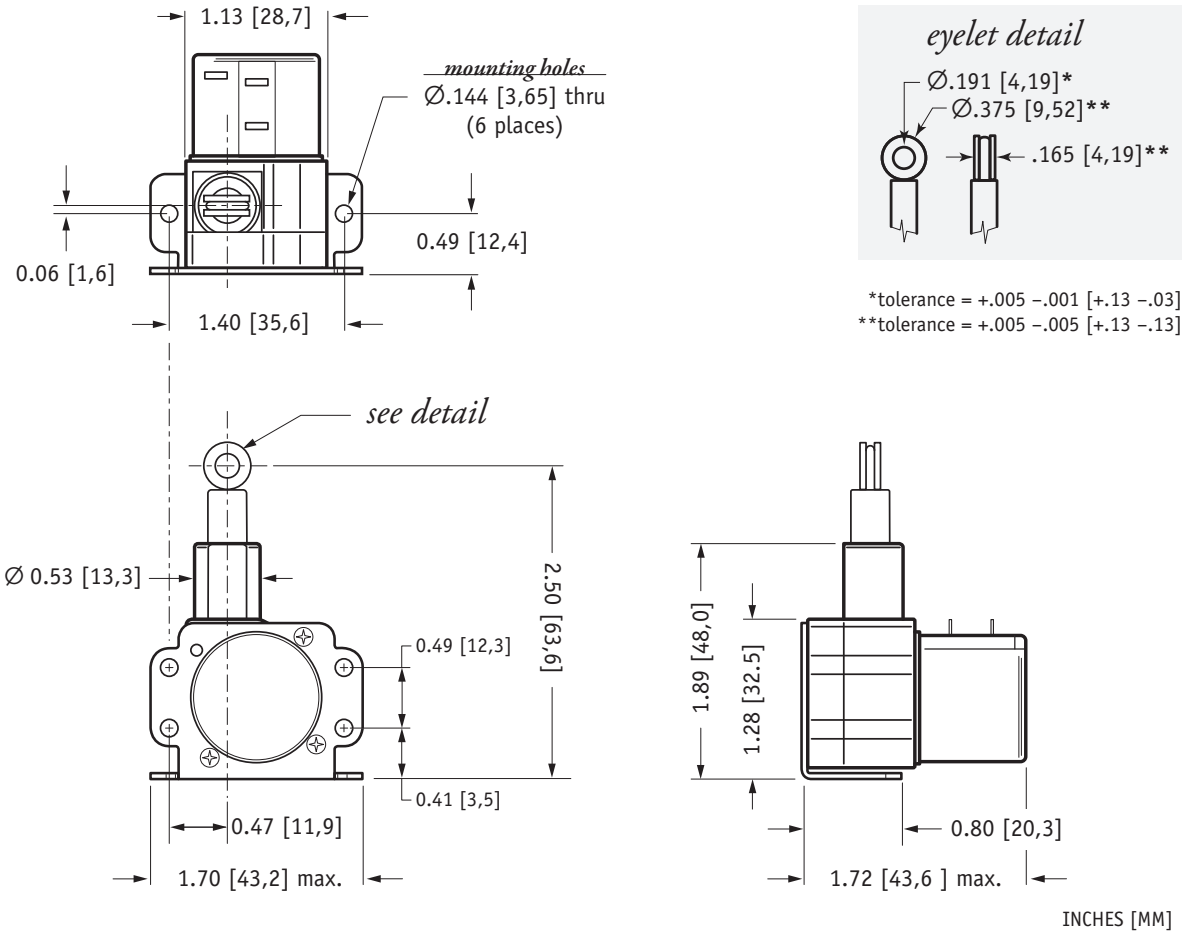
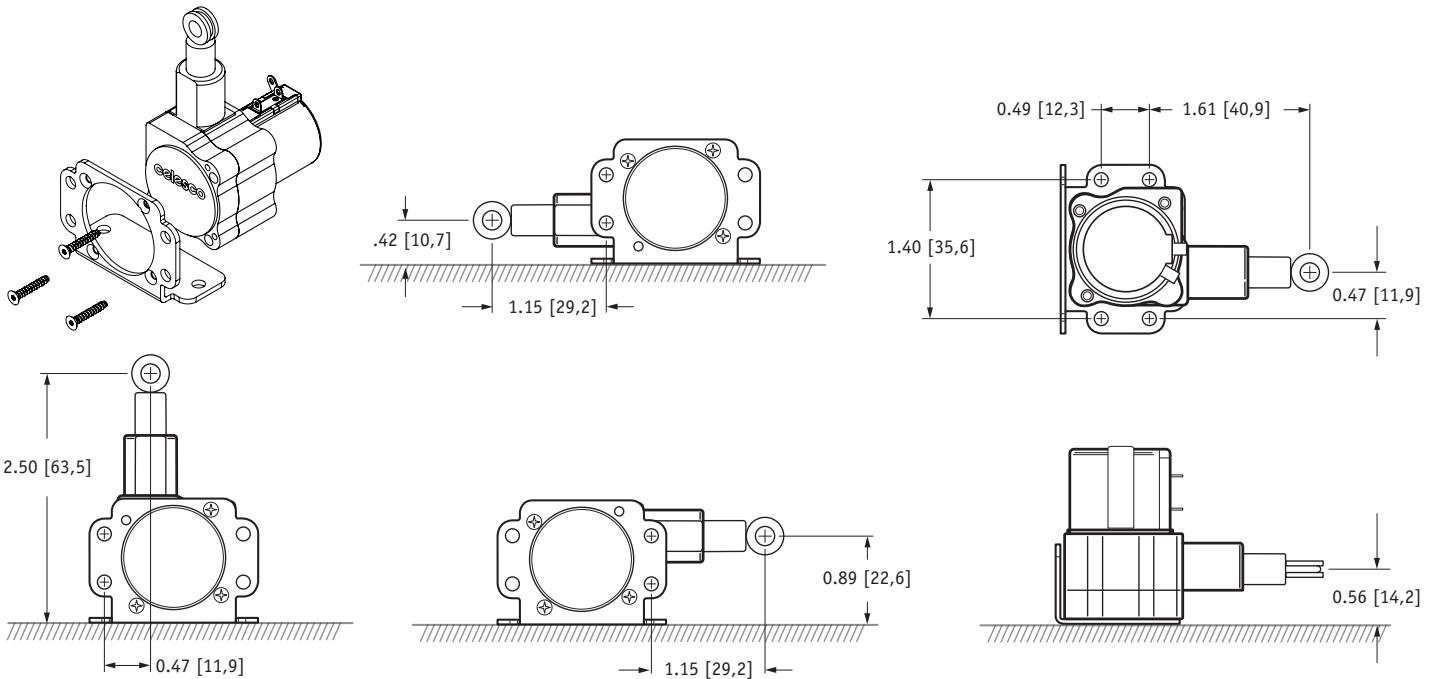


Fig 3 - Outline Drawing (w/optional Universal Mounting Bracket):



Mounting Options for Universal Mounting Bracket:



version: 5.0 last updated: February 27, 2013