# SM<sub>1</sub>

## 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

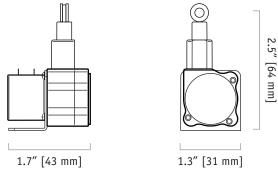
In Stock for Quick Delivery!

	Order No.	full stroke range	accuracy (% of f.s.)	cycle life
includes sensor, & standard mounting bracket.	SM1-2	2.5 in (64 mm)	1.00%	2.5M cycles
	SM1-7	7.5 in (191 mm)	0.25%	500K cycles
	SM1-12	12.5 in (318 mm)	0.25%	500K cycles
	SM1-25	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 Inp	out Voltage 30 V (AC/DC)		
Output Signal Change Over F	ull 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 bracke	t) 3 oz (90 g)		

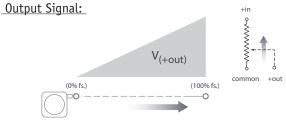




With it's ultra compact design the SM1 is the perfect solution when tight space is an issue. At just a little over an inch across, this miniature stringpot offers full stroke measurement ranges from 2½ to 25 inches. A precision plastic hybrid 10K-ohm potentiometer delivers a precise voltage divider output 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.

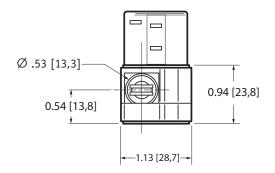


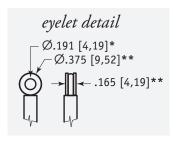


20630 Plummer Street • Chatsworth, CA 91311 tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

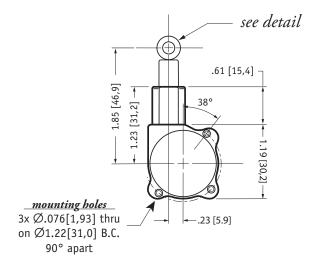


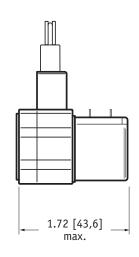
### Fig. 1 - Outline Drawing (w/o mounting bracket):





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





INCHES [MM]

### **Electrical Connection:**

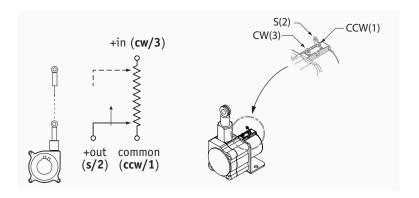
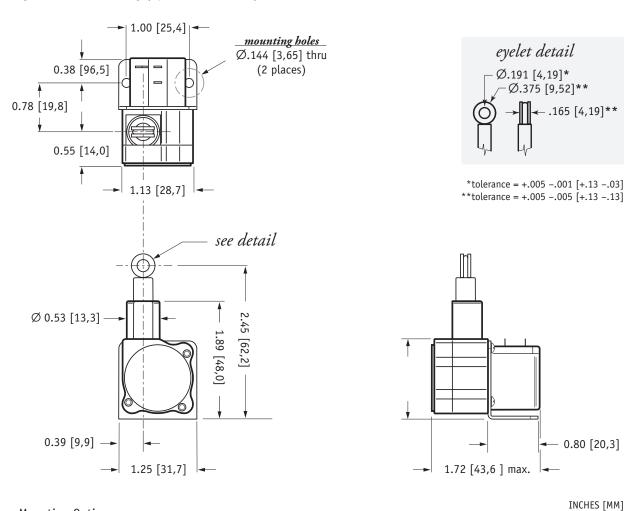


Fig. 2 - Outline Drawing (w/standard bracket):



#### Mounting Options:

tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

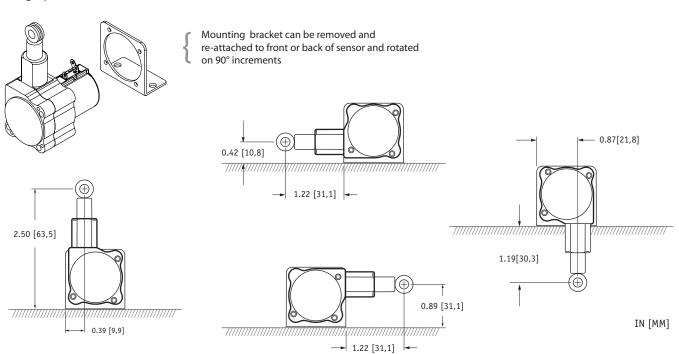
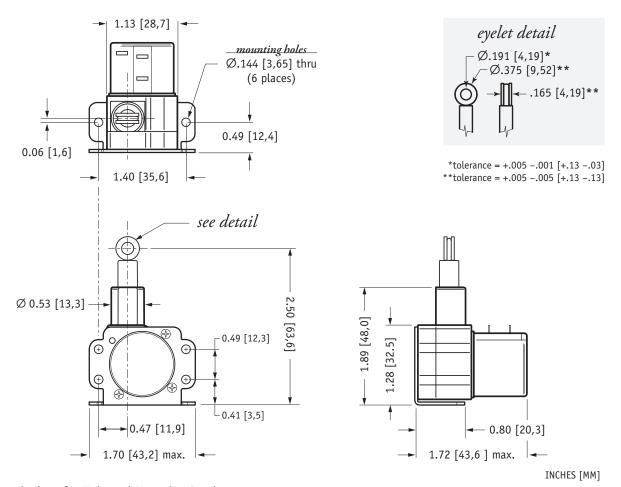
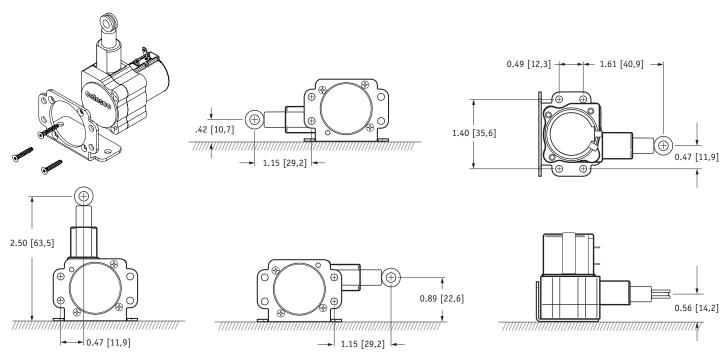


Fig 3 - Outline Drawing (w/optional Universal Mounting Bracket):



Mounting Options for Universal Mounting Bracket:



version: 5.0 last updated: February 27, 2013

tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799