

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 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**

**Available Stroke Ranges Output Signal** Accuracy Repeatability Resolution **Measuring Cable Maximum Acceleration Measuring Cable Tension** Sensor **Input Resistance Power Rating, Watts** Max Input Voltage Sensitivity Cycle Life **Electrical Connection** Enclosure **Environmental Operating Temperature** Weight (not including bracket) 2.375, 7.5, 12.5, 25 inches voltage divider (potentiometric) .25% to 1% FS. (see ordering info) .05% FS. essentially infinite .014-inch dia. nylon-coated stainless steel 15 g (retraction) 5.1 oz. (1,4 N) ±30% plastic-hybrid precision potentiometer 10K ohms, ±10% 2.0 at 70°F derated to 0 at 250° 30 V (recommended) 940 ± 40 mV/V FS see ordering information solder terminals, directly to potentiometer glass-filled polycarbonate IP 50 0° to 160° F (-18° to 70° C) 3 oz (90 g)

### ORDERING INFORMATION

	Order No.	full stroke range	accuracy (% of f.s.)	cycle life
includes sensor, & standard mounting bracket.	SM1-2	2.375 in (60 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

# **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):



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







eyelet detail  $\sqrt[]{0.191} [4,19]^{*} \\ \sqrt[]{0.375} [9,52]^{**} \\ \sqrt[]{0} \ - \sqrt[]{165} [4,19]^{**}$ 

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



INCHES [MM]

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