

The SK1 is the perfect off-the-shelf linear position sensor for applications ranging from mobile construction equipment to hydraulic lift tables and anything else in between. Available in both 250 and 400-inch stroke ranges, this model offers the ultimate ease-of-use, compact design and user flexibility. Need to mount it upside down? Simply rotate its stainless mounting bracket to where you want it. Need the electrical connector to point in a different direction? Just rotate the rear cover to point the connector to the desired direction.

The SK1 is manufactured with a precision high-cycle plastic hybrid potentiometer and an extremely durable spring-loaded stainless steel measuring cable to deliver an accurate reliable voltage divider position feedback signal over the entire stroke. This model is economically priced making it the perfect solution for both the single piece user and OEM customers alike.

# SK1

## Cable Actuated Sensor Voltage Divider Output Signal

Linear Position to 400 inches (10 m)

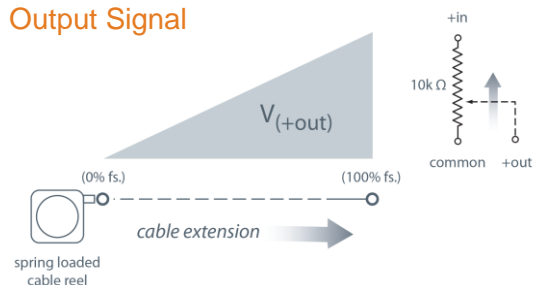
Compact Design • Simple To Install

User Adjustable Measuring Cable Orientation

### Specifications

<b>Stroke Range Options</b>	250 inches (6.4 m), 400 inches (10.2 m)
<b>Output Signal</b>	voltage divider (potentiometric)
<b>Accuracy</b>	.35% FS.
<b>Repeatability</b>	.05% FS.
<b>Resolution</b>	essentially infinite
<b>Measuring Cable</b>	.031-inch dia. bare stainless steel
<b>Maximum Cable Velocity</b>	60 inches per second
<b>Maximum Cable Acceleration</b>	5 g
<b>Measuring Cable Tension</b>	23 oz. (6.4 N) $\pm 40\%$
<b>Sensor</b>	plastic-hybrid precision potentiometer
<b>Input Resistance</b>	10K ohms, $\pm 10\%$
<b>Power Rating, Watts</b>	2.0 at 70°F
<b>Recommended Maximum Input Voltage</b>	30 V (AC/DC)
<b>Output Signal Change Over Full Stroke Range</b>	94% $\pm 4\%$ of $V(+in)$
<b>Cycle Life</b>	$\geq 250,000$
<b>Electrical Connection</b>	4-pin M12 connector, mating plug included
<b>Enclosure</b>	glass-filled polycarbonate
<b>Environmental</b>	IP67
<b>Operating Temperature</b>	-40° to 185° F (-40° to 85° C)

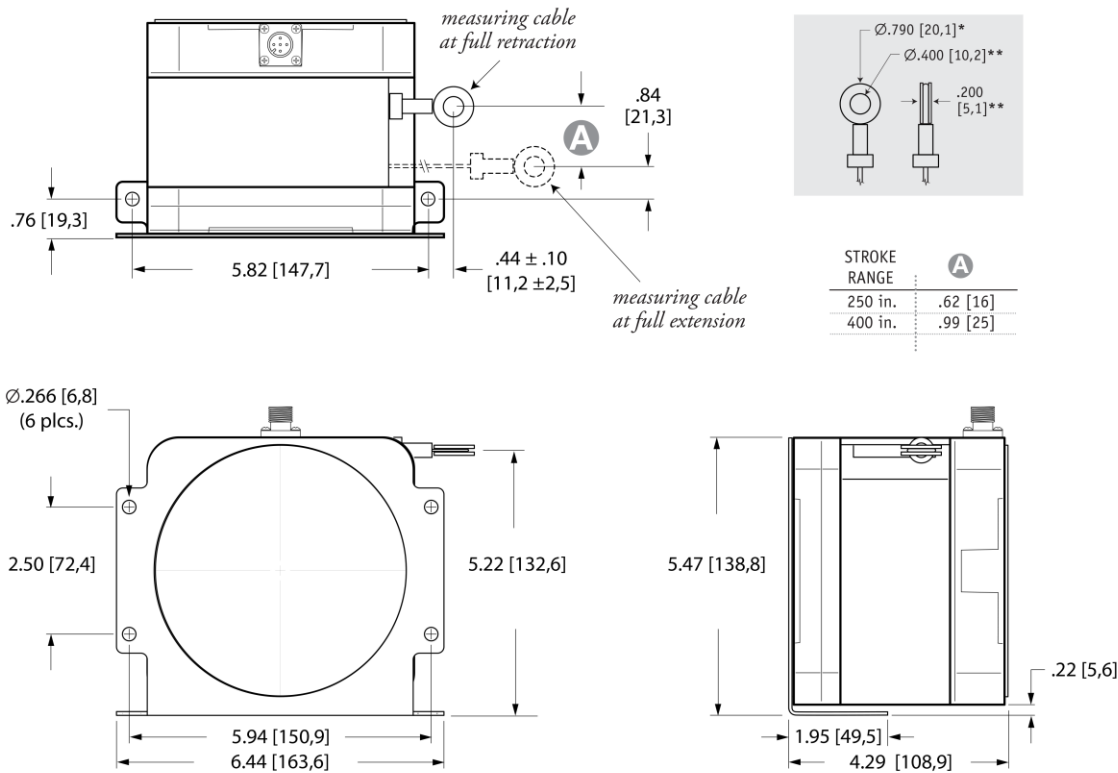
### Output Signal



# SK1

## Voltage Divider Output Signal

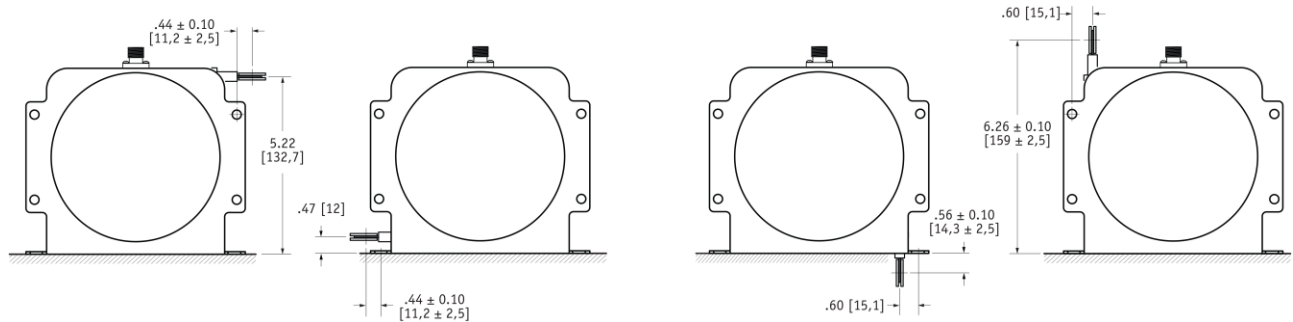
### Outline Drawing



DIMENSIONS ARE IN INCHES [MM]  
tolerances are 0.04 IN. [1,0 MM] unless otherwise noted.

\* tolerance = +.005 -.001 [+0,1 -0,0]  
\*\* tolerance = +.005 -.005 [+0,1 -0,1]

### Mounting Options

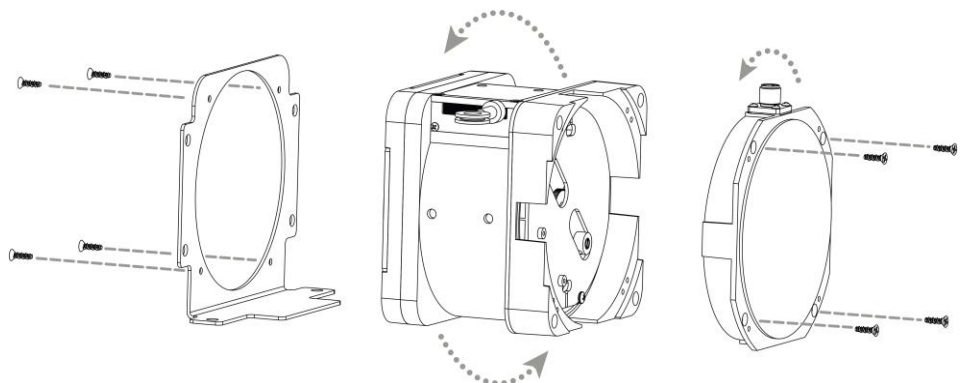


#### To change cable exit direction:

simply remove the 4 bracket mounting screws and rotate sensor body to desired direction.

#### To change electrical connector orientation:

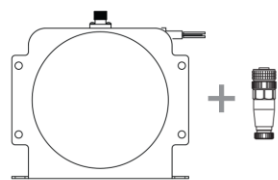
remove the 4 rear screws and carefully remove the rear cover and rotate cover.



# SK1

## Voltage Divider Output Signal

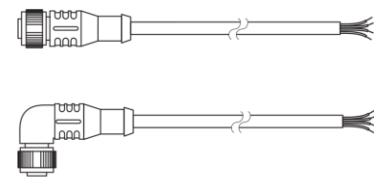
### Ordering Information



Part Number	full stroke range	accuracy	max. acceleration	measuring cable tension (± 40%)
SK1-250-3	250 in (6.4 m)	.35%	5 g	23 oz. (6,4 N)
SK1-400-3	400 in (10.2 m)	.35%	5 g	23 oz. (6,4N)

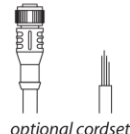
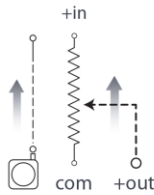
includes mounting bracket & mating connector.

### Optional Cordsets



Part Number	length	wire size	connector
9036810-0040	13 ft (4 m)	22 AWG (.34mm <sup>2</sup> )	straight 4-pin M12
9036810-0041	13 ft (4 m)	22 AWG (.34mm <sup>2</sup> )	90° 4-pin M12

### Electrical Connection



signals	pin	pin - color
+in	1	1 - brown
common	2	2 - white
+out	3	3 - blue
n/c	4	4 - black

### field installable connector

