# SR1A

# **Industrial Low Cost String Pot**

Precision Potentiometric (Voltage Divider) Output 0–62, 0–125 and 0-175 inch Range Options Designed for Outdoor / Wet environments





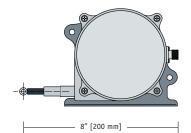
SR1A is a rugged, low-cost, high performance string pot built for wet environments and outdoor applications. Originally designed for off-road construction equipment, the SR1A is the perfect low-cost solution for OEM and stocking distributors.

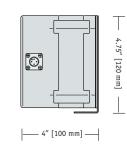
Available in 62-inch, 125-inch and 175-inch stroke ranges, the SR1A is constructed of a rugged polycarbonate enclosure designed to withstand impact from harsh environments and rugged conditions. Each sensor ships with a handy mounting bracket to make just about any installation very simple. Every SR1A ships with a field installable mating connector and optional cordsets are available.

### **COMPLETE SPECIFICATIONS**

Sensor	plastic-hybrid precision potentiometer	
Input Resistance	10K ohms	
Maximum Input Voltage	30 volts AC/DC	
Resolution	essentially infinite	
Repeatability	± 0.1% FS.	
Measuring Cable	.034-inch dia. nylon-coated stainless	
Maximum Velocity	80 inches (2 meters) per second	
Maximum Acceleration	10 G (retraction)	
Measuring Cable Tension	23 oz. (6,4 N) ±30%	
Cycle Life	250,000 (potentiometer)	
Enclosure	polycarbonate	
Electrical Connection	M12 Connector (mating plug included)	
Weight	2.5 lbs. (1.3 Kg)	

Measurement Range, SR1A-62	0–62 in. (0–1575 mm)	
Measurement Range, SR1A-125	0–125 in. (0–3175 mm)	
Measurement Range, SR1A-175	0-175 in. (0-4445 mm)	
Accuracy	± 0.5% FS.	
Environmental Suitability	NEMA 6, IP67	
Operating Temperature	-40° to 185° F (-40° to 85° C)	





# **Ordering Information**







SR1A-62

Part No. **SR1A-125** 

Part No. **SR1A-175** 

62-inch stroke range, M12 field-installable connector, IP67 environments, mounting bracket included 125-inch stroke range, M12 field-installable connector, IP67 environments, mounting bracket included 175-inch stroke range, M12 field-installable connector, IP67 environments, mounting bracket included

OPTIONAL CORDSET

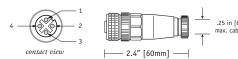
for short-run connections, a convenient optional 13-ft. cordset with a 4-pin M12 connector is available.

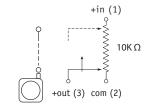


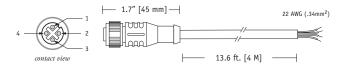
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## **Electrical Connection**

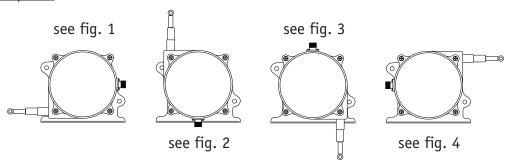
output signal	connector pin	colorcode (cordset)
+in	1	brown
common	2	white
+out	3	blue
n/c	4	black







## Cable Exit Direction Options



## Changing the Cable Exit

#### **Changing Measuring Cable Exit**

To change the direction of the measuring cable, remove the 4 mounting bracket screws and rotate bracket to one of four available positions. See figures 1 - 4 on the following pages for mounting dimensions.

## **Changing Electrical Connector Direction**

To change the position of the electrical connector, remove the 4 rear cover screws and carefully separate rear cover from the sensor body.

Rotate the rear cover to desired position being careful to not tangle the wiring harness that runs to the connector.

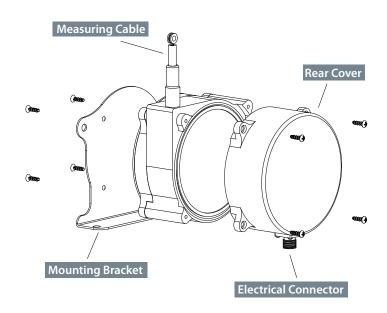


Fig. 1 - Outline Drawing (as shipped)

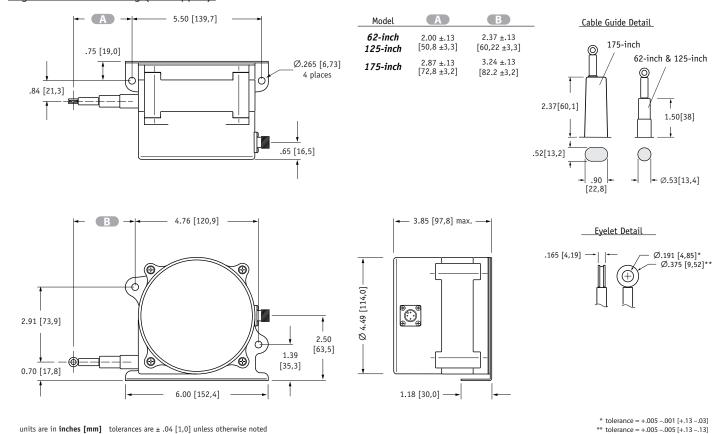
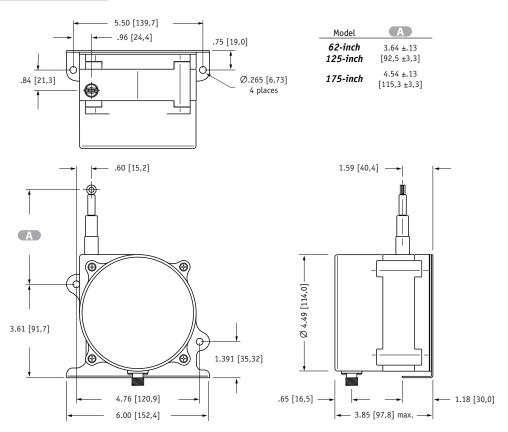


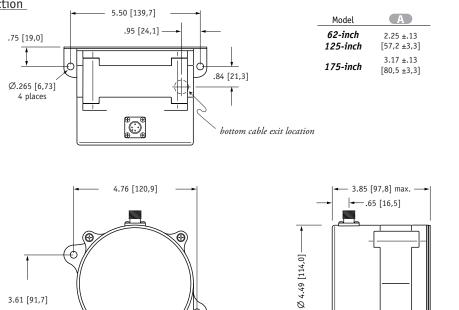
Fig. 2 - "Up" Cable Exit Direction



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1.18 [30,0]





1.39 [35,3]

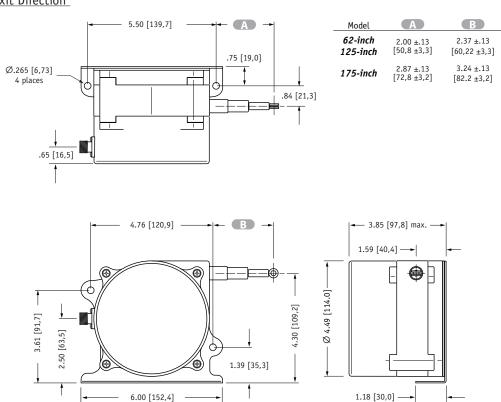
.58 [14,7]

(€)

Fig. 4 - "Rear" Cable Exit Direction

3.61 [91,7]

A



units are in inches [mm] tolerances are  $\pm$  .04 [1,0] unless otherwise noted

1.59 [40,4] -