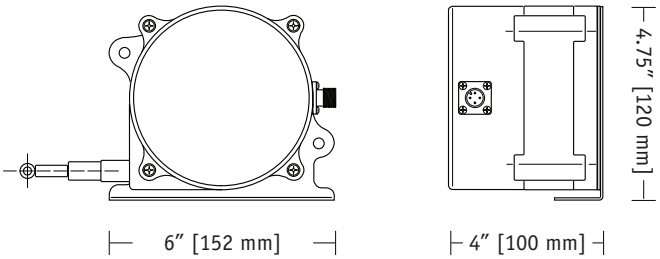
SR1A

Industrial • Voltage Divider Output

Precision Potentiometric (Voltage Divider) Output
0–62, 0–125 and 0-175 inch Range Options
Designed for Outdoor & IP67 environments
In Stock for Quick Delivery!

175-inch model shown



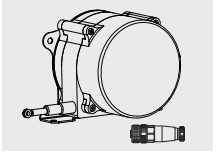
SR1A is a rugged, low-cost, high performance string pot built for wet environments and outdoor applications. Originally designed for off-road construction equipment, the SR1A is the perfect low-cost solution for OEM and stocking distributors.

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.

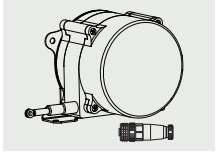
SPECIFICATIONS

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.
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)
Environmental Suitability	NEMA 6, IP67
Operating Temperature	-40˚ to 185˚ F (-40˚ to 85˚ C)
Weight	2.5 lbs. (1.3 Kg)

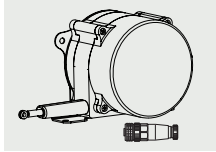
ORDERING INFORMATION



Order No.
SR1A-62
62-inch stroke range, voltage divider output, 4-pin M12 mating plug & mounting bracket included.



Order No.
SR1A-125
125-inch stroke range, voltage divider output, 4-pin M12 mating plug & mounting bracket included.



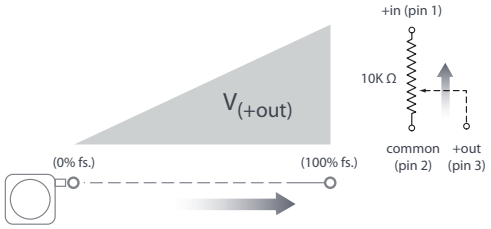
Order No.
SR1A-175
175-inch stroke range, voltage divider output, 4-pin M12 mating plug & mounting bracket included.

Part No.
9036810-0040

4-pin M12 x 13 ft (4 m)
22 AWG (.34mm²)

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

Output Signal:



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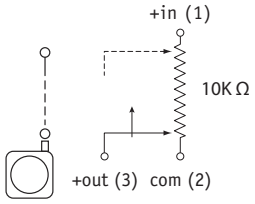
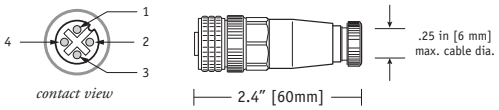
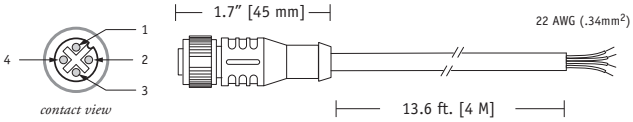
Electrical Connection

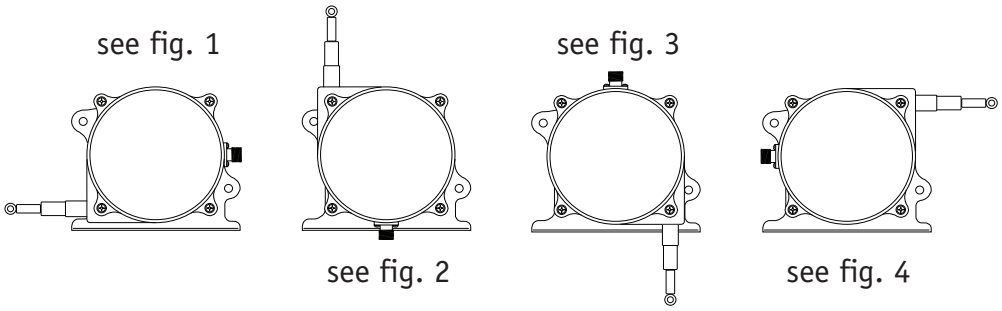
output signal	connector pin	colorcode (cordset)
+in	1	brown
common	2	white
+out	3	blue
n/c	4	black







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.

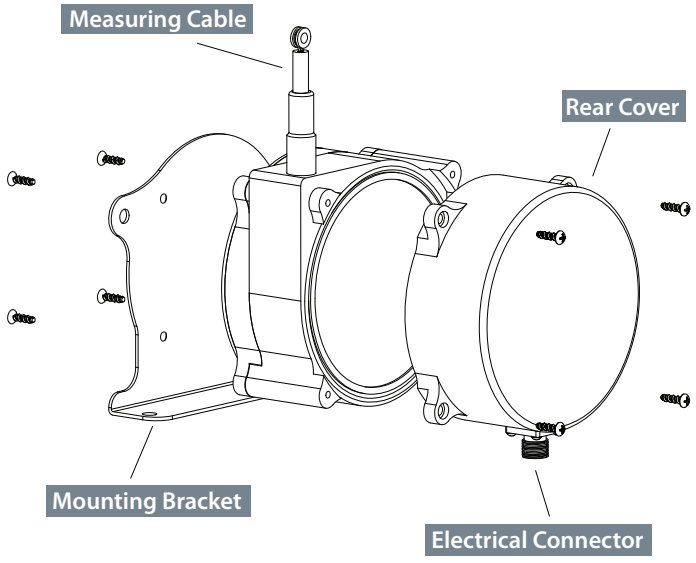
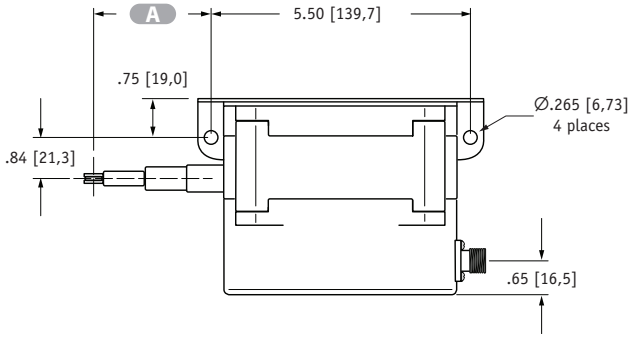
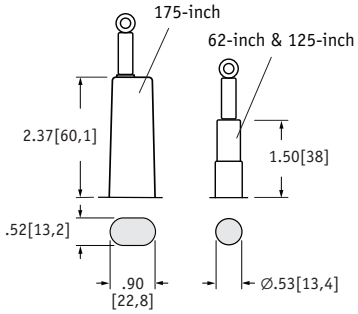


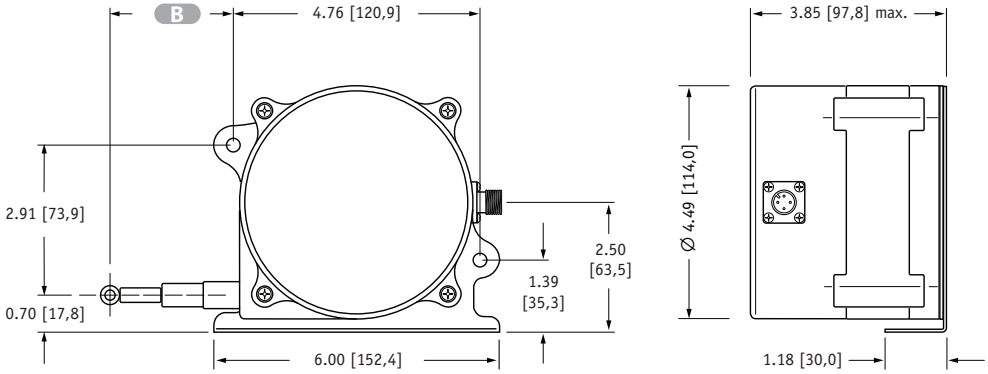
Fig. 1 - Outline Drawing (as shipped)



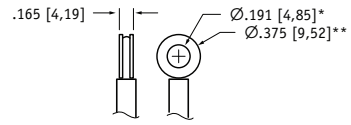
Model	A	B
62-inch	2.00 ±.13 [50,8 ±3,3]	2.37 ±.13 [60,22 ±3,3]
125-inch		
175-inch	2.87 ±.13 [72,8 ±3,2]	3.24 ±.13 [82.2 ±3,2]

Cable Guide Detail





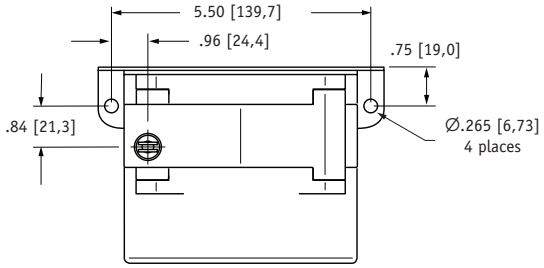
Eyelet Detail



units are in **inches [mm]** tolerances are ± .04 [1,0] unless otherwise noted

* tolerance = +.005 –.001 [+.13 –.03]
** tolerance = +.005 –.005 [+.13 –.13]

Fig. 2 - "Up" Cable Exit Direction



Model	A
62-inch	3.64 ±.13 [92,5 ±3,3]
125-inch	
175-inch	4.54 ±.13 [115,3 ±3,3]

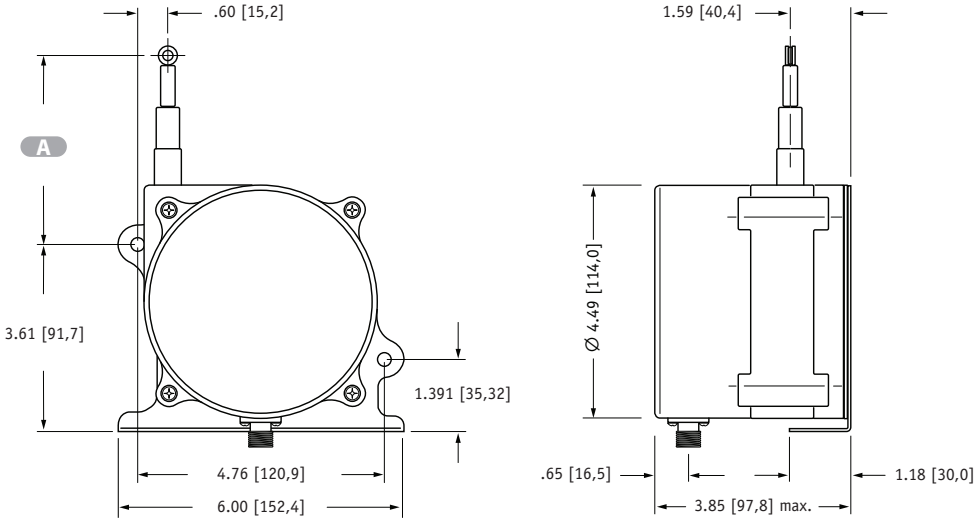
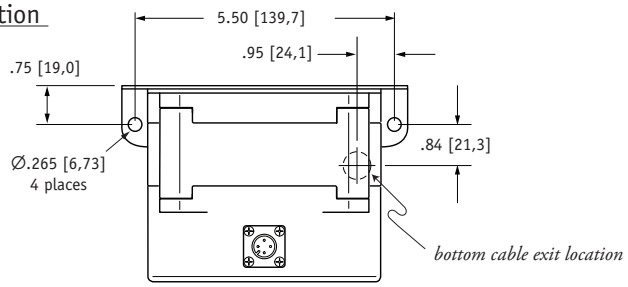


Fig. 3 - "Down" Cable Exit Direction



Model	A
62-inch	2.25 ±.13 [57,2 ±3,3]
125-inch	
175-inch	3.17 ±.13 [80,5 ±3,3]

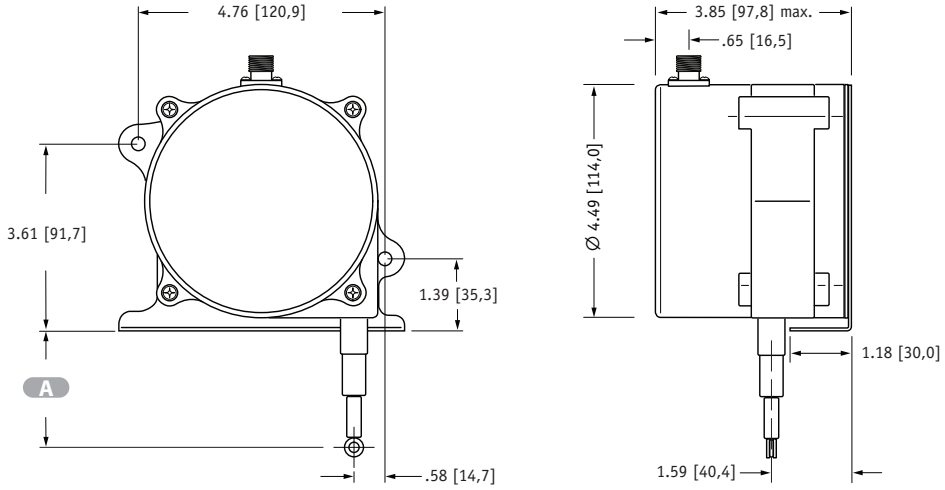
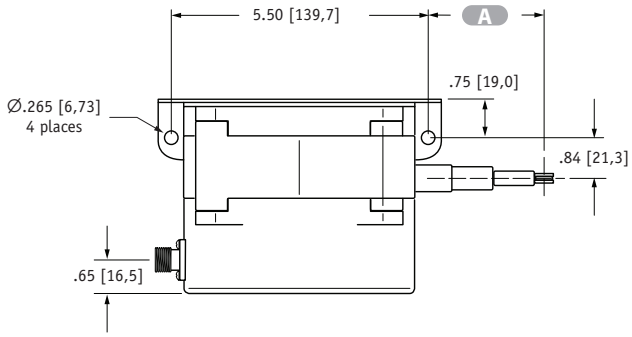
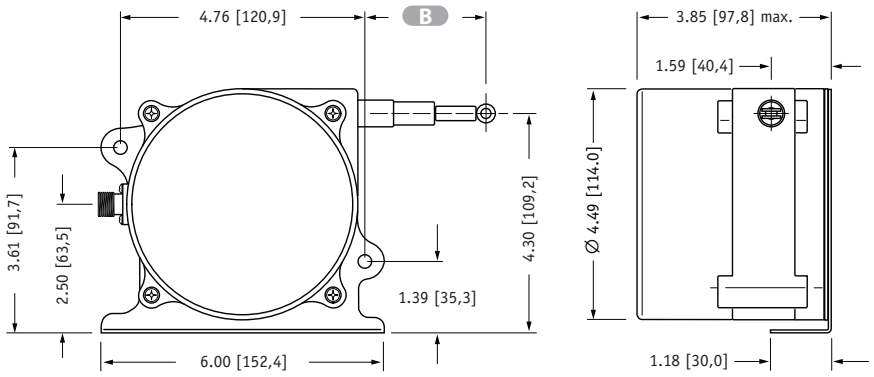


Fig. 4 - "Rear" Cable Exit Direction



Model	A	B
62-inch	2.00 ±.13 [50,8 ±3,3]	2.37 ±.13 [60,22 ±3,3]
125-inch		
175-inch	2.87 ±.13 [72,8 ±3,2]	3.24 ±.13 [82.2 ±3,2]



version: **3.0** last updated: **March 4, 2013**

units are in **inches [mm]** tolerances are ± .04 [1,0] unless otherwise noted