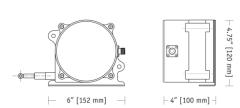




175-inch model shown



The SR1E is rugged, low-cost, high performance string pot built to withstand wet environments and outdoor applications. Designed for construction equipment and factory use, the SR1E is the perfect low-cost solution for OEM and stocking distributors.

At the heart of this sensor is a robust incremental encoder that delivers a linear resolution of 101 pulses per inch. The SR1E ships with an industry standard push-pull encoder driver that can be powered by 5-30 VDC. (Other resolutions and complimentary channels are available, please consult factory). Each sensor ships with a 4-pin, field installable, M12 connector and an additional 13 ft. (4 m) cordset is also available. Just like the rest of our SR1 series, the SR1E is in stock for quick delivery.

# SR1E

# Cable Actuated Sensor Industrial • Incremental Encoder

Linear Position up to 175 inches (3 meters) 0-125, 0-175 inch Full Stroke Range Options Designed for Outdoor & IP67 environments

# Specifications

In Stock for Quick Delivery!

Full Stroke Range, SR1E-125125 inches (3175 mm)Full Stroke Range, SR1E-175175 inches (4445 mm)Output Signalincremental encoderResolution101 ±2 pulses per inch

Accuracy  $\pm .1\%$  FS. Repeatability  $\pm .05\%$  FS. Input Voltage 5-30 VDC

Input Current100 mA max., no loadSensorincremental encoder

Output Driver Type push-pull (note: Vin = Vout)
Output Driver Current 20 mA max., source/sink

Maximum Velocity 80 inches (2 meters) per second

Maximum Acceleration10 g (retraction)Measuring Cable Tension23 oz. (6,4 N) ±30%

**Enclosure** polycarbonate

 Measuring Cable
 .034-inch dia. nylon-coated stainless

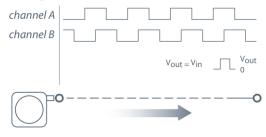
 Electrical Connection
 M12 Connector (mating plug included)

Environmental Suitability NEMA 6, IP67

Operating Temperature -4° to 185° F (-20° to 85° C)

**Weight** 2.5 lbs. (1.3 Kg)

# **Output Signal**

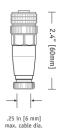


Consult factory for alternate resolution and differential output signals.

## **Electrical Connection**

#### **Field Installable Connector**





#### **Cord Set Connections**

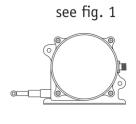


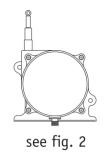
pin	conductor	signal
1	brown	530 VDC
2	white	common
3	blue	channel A
4	black	channel B

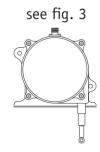
cable specifications

length: 13 ft. (4m)
wire size: 22 AWG (.34mm<sup>2</sup>)
cable material: PVC
cable color: gray

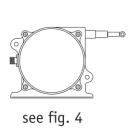
# Cable Exit Direction Options







22 AWG (.34mm<sup>2</sup>)



# 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.

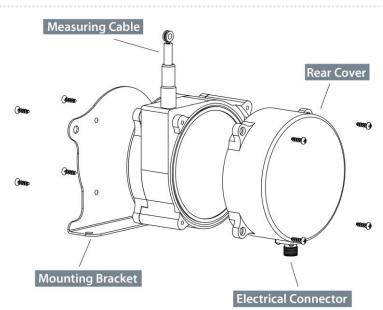


Fig. 1 - Outline Drawing (as shipped)

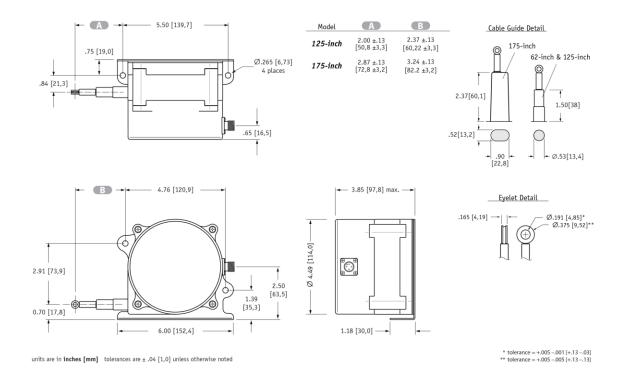
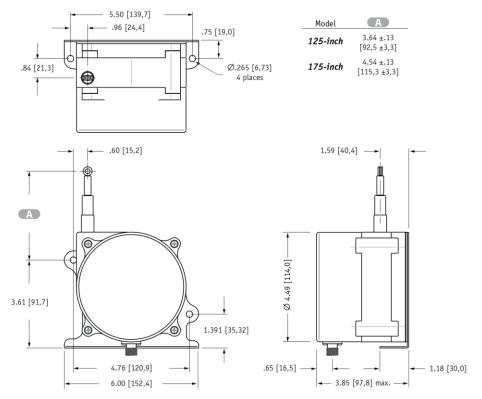


Fig. 2 - "Up" Cable Exit Direction



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Fig. 3 - "Down" Cable Exit Direction

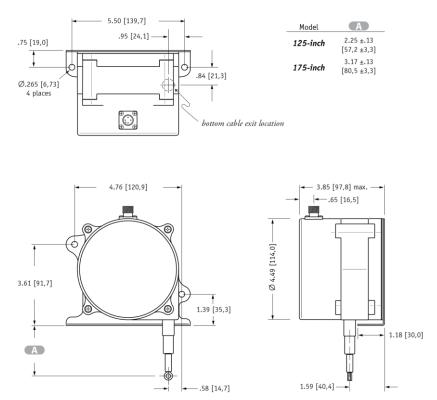
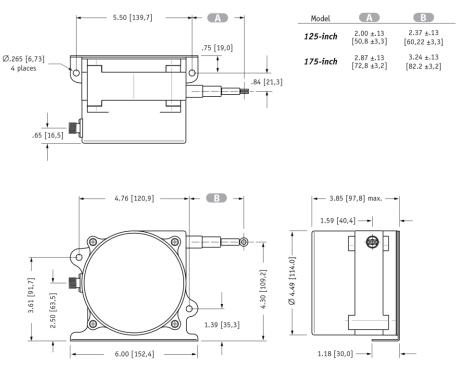


Fig. 4 - "Rear" Cable Exit Direction



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

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### **Ordering Information**



Order No.

SR1E-125

125-inch stroke range, incremental encoder output, 4-pin M12 mating plug & mounting bracket included.



Order No.

SR1E-175

175-inch stroke range, incremental encoder output, 4-pin M12 mating plug & mounting bracket included.



Order No.

9036810-0040

for short-run connections, optional 13-ft cordset with 4-pin M12 mating pluq.



19 Waterman Ave.Toronto,Ont. M4B1Y2 Tel:416-445-5500 Fax: 416-445-1170 Toll Free: 1-800-465-1600

Email: sales@intertechnology.com Website: www.intertechnology.com

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SR1E 12/01/2015