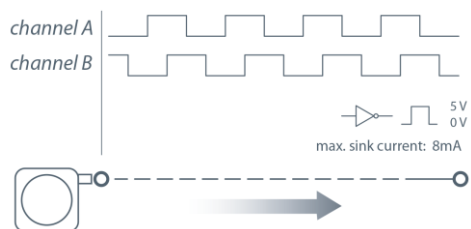


The Celesco SE1 is the digital encoder version of our compact String Pot series. The SE1 is an economical and durable device that utilizes a flexible cable, a spring-loaded spool and an incremental optical encoder to detect and measure linear position.

The SE1 is designed for tight spaces, high-cycle applications and generously allows cable misalignment. With a handy mounting bracket included, and 2 basic measurement ranges, the SE1 is a perfect solution for many applications, from light industrial to OEM.

### Output Signal



## SE1 Compact String Pot • Incremental

- Linear Position to 50 inches (1270 mm)**
- Low-Cost, Long Life • Rugged Polycarbonate Enclosure**
- Free-Release Tolerant Measuring Cable**
- In Stock for Quick Delivery!**

### Specifications

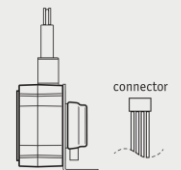
<b>Available Stroke Ranges</b>	0-25, 0-50 inches
<b>Output Signal</b>	incremental encoder (quadrature)
<b>Accuracy</b>	±0.050 inches
<b>Repeatability</b>	± 0.025 inches
<b>Resolution</b>	56.40 ±.32 pulses per inch
<b>Measuring Cable</b>	0.019-in. dia. nylon-coated stainless steel
<b>Measuring Cable Tension</b>	7 oz. (1.9 N) ±25%
<b>Maximum Cable Acceleration</b>	15 g
<b>Enclosure Material</b>	polycarbonate
<b>Sensor</b>	optical encoder
<b>Cycle Life</b>	1.1 million cycles
<b>Enclosure</b>	IP 50
<b>Operating Temperature</b>	14° to 185°F (-10° to 85°C)
<b>Vibration</b>	up to 10 g to 2000 Hz max.
<b>Weight</b>	5 oz. (w/o mounting bracket) max.

### Electrical

<b>Input Voltage</b>	5 VDC
<b>Input Current</b>	50 mA max.
<b>Output Driver</b>	TTL compatible
<b>Sink Current</b>	8 mA max.
<b>Electrical Connection</b>	mating plug with 12-inch leads, included
<b>Electrical Connector</b>	Molex 53048-0410
<b>Mating Plug</b>	Molex 51021-0400 (shell), 50079-8100 (pins)

### Ordering Information

Part No.	full stroke range	accuracy	cycle life
<b>SE1-25</b>	25 in (635 mm)	0.050 in.	1.1M cycles
<b>SE1-50</b>	50 in (1270 mm)	0.050 in.	1.1M cycles

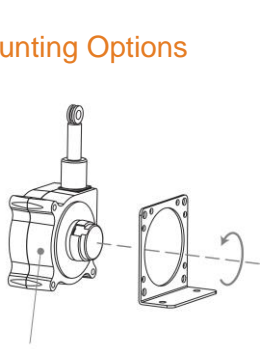


includes sensor, mounting bracket & conn. w/12-inch leads

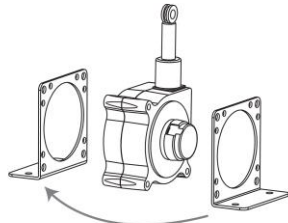
# SE1

## Compact String Pot • Incremental Encoder

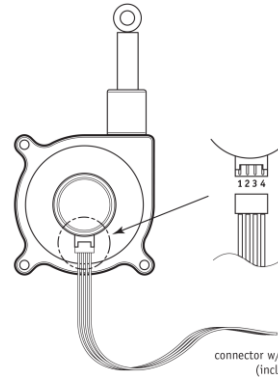
### Mounting Options



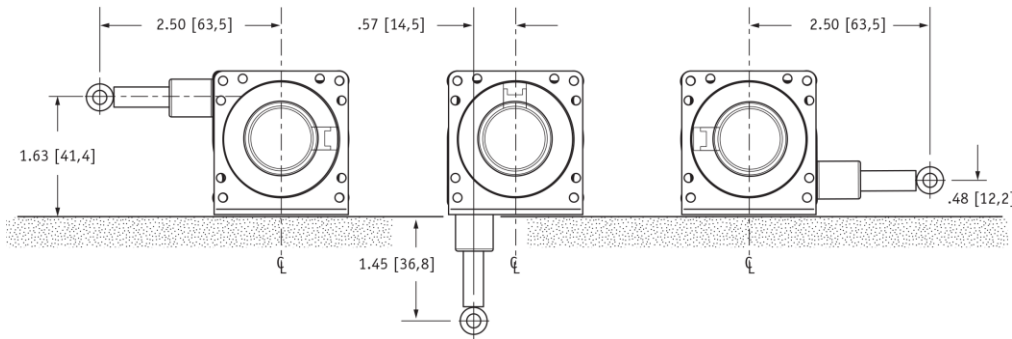
To change measuring cable direction simply remove the 3 bracket attaching screws and rotate sensor body to desired direction.



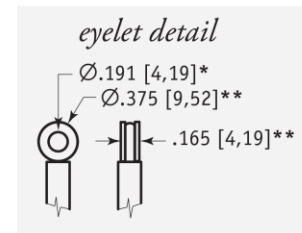
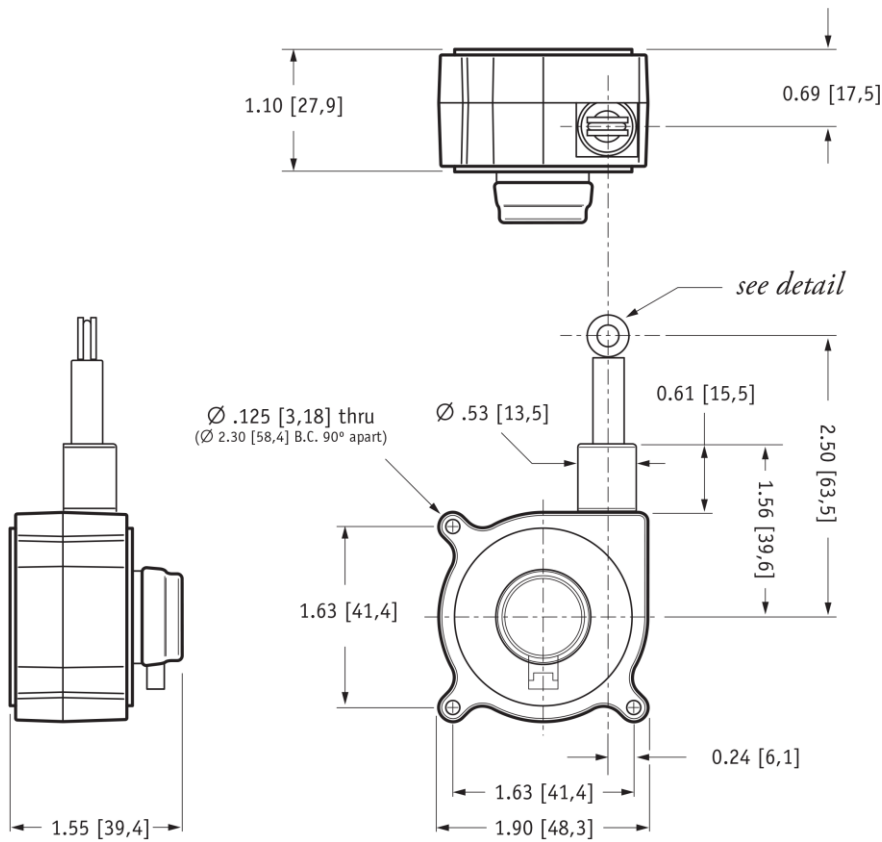
For added flexibility, mounting bracket can easily be switched to the opposite side.



Pin	Description
1	5 VDC power
2	A channel
3	Common
4	B channel



### Outline Drawing (w/o bracket)



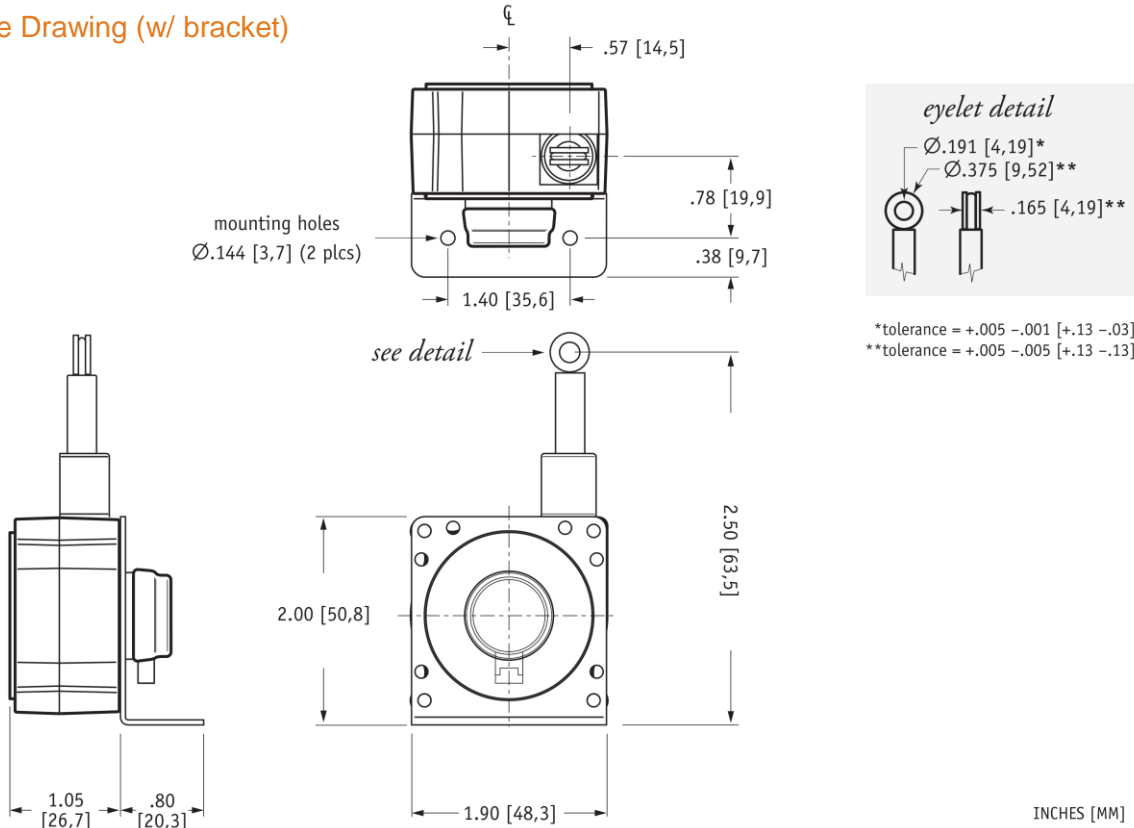
\*tolerance = +.005 -.001 [+0.13 -.03]  
 \*\*tolerance = +.005 -.005 [+0.13 -.13]

INCHES [MM]

# SE1

Compact String Pot • Incremental Encoder

## Outline Drawing (w/ bracket)



**INTERTECHNOLOGY**  
1-800-465-1600  
INC.

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

### [TE.com/sensorsolutions](http://TE.com/sensorsolutions)

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

SE1 12/01/2015