

Compact String Pot

Ranges: Up to 50 inches
Precision Potentiometric Output
Water Resistant • Low Cost • Fast Delivery

SP2

40-inch Electrical Cable
 Sealed strain relief

Water and Chemical Resistant Design
 Polycarbonate enclosure with sealed electrical connections

Handy Mounting Bracket
 Mounts easily and quickly in several directions

CE **Tolerant of Cable Misalignment**
 Long cable life, even when installation isn't perfect



Specification Summary:

GENERAL

Full Stroke Range Options 0-4.75, 0-12.5, 0-25, 0-50 inches
 Output Signal voltage divider (potentiometer)
 Accuracy ± 0.25 to $\pm 1.00\%$ *see ordering information*
 Repeatability $\pm 0.05\%$ full stroke
 Resolution essentially infinite
 Measuring Cable 0.019-in. dia. nylon-coated stainless steel
 Enclosure Material polycarbonate
 Mounting Bracket Material stainless steel
 Sensor plastic-hybrid precision potentiometer
 Weight 3 oz. (w/o mounting bracket) max.

ELECTRICAL

Input Resistance 10K ohms, $\pm 10\%$
 Power Rating, Watts 2.0 at 70°F derated to 0 at 250°
 Recommended Maximum Input Voltage 30 V (AC/DC)
 Output Signal Change Over Full Stroke Range 94% $\pm 4\%$ of input voltage

ENVIRONMENTAL

Operating Temperature 0° to 160°F (-18° to 71°C)
 Vibration up to 10 G's to 2000 Hz maximum

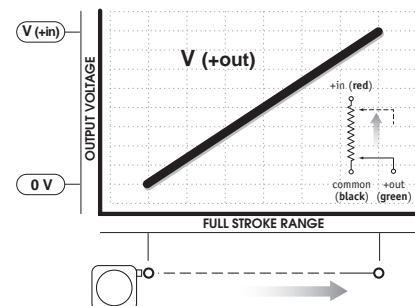
Ordering Information:

| Item Number: | SP2-4 | SP2-12 | SP2-25 | SP2-50 |
|-------------------------------|-------------|-------------|-------------|-------------|
| full stroke range: | 4.75 in. | 12.5 in. | 25 in. | 50 in. |
| accuracy (% of f.s.): | 1.00% | 0.25% | 0.25% | 0.25% |
| potentiometer cycle life: | 2.5M cycles | 500K cycles | 500K cycles | 250K cycles |
| cable tension ($\pm 25\%$): | 7 oz. | 7 oz. | 7 oz. | 7 oz. |
| max. cable acceleration: | 15 G | 15 G | 15 G | 15 G |

The SP2 String Pot from Celesco is a compact, economical and water resistant device that utilizes a flexible cable, a spring-loaded spool and a potentiometer to detect and measure linear position.

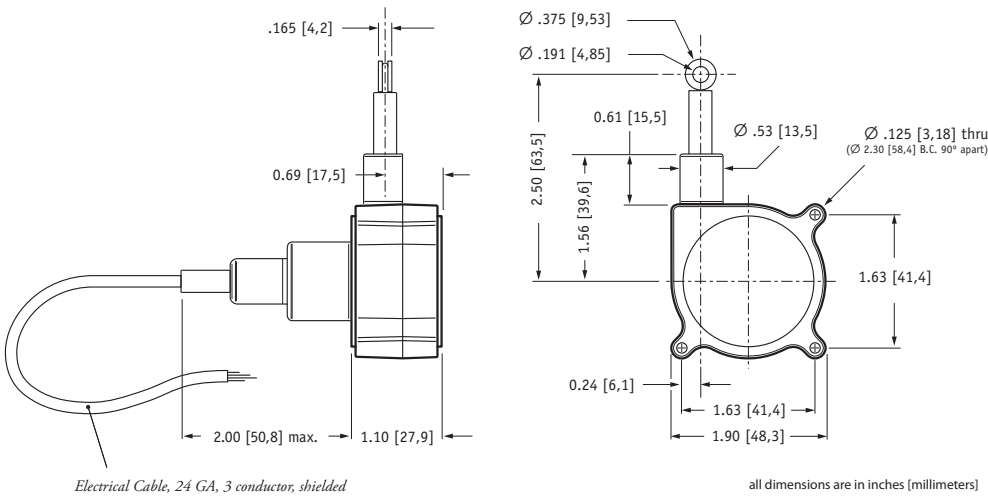
The SP2 is identical to the SP1 except for an added 40-inch electrical cable with a watertight rubber strain relief. The SP2 has been compactly designed for tight spaces and high cycle applications and generously allows for measuring cable misalignment. With 4 different ranges and a handy mounting bracket, the SP2 is a perfect solution for many applications from light industrial to OEM.

Output Signal

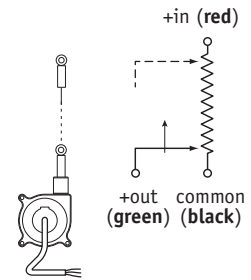


Installation Information:

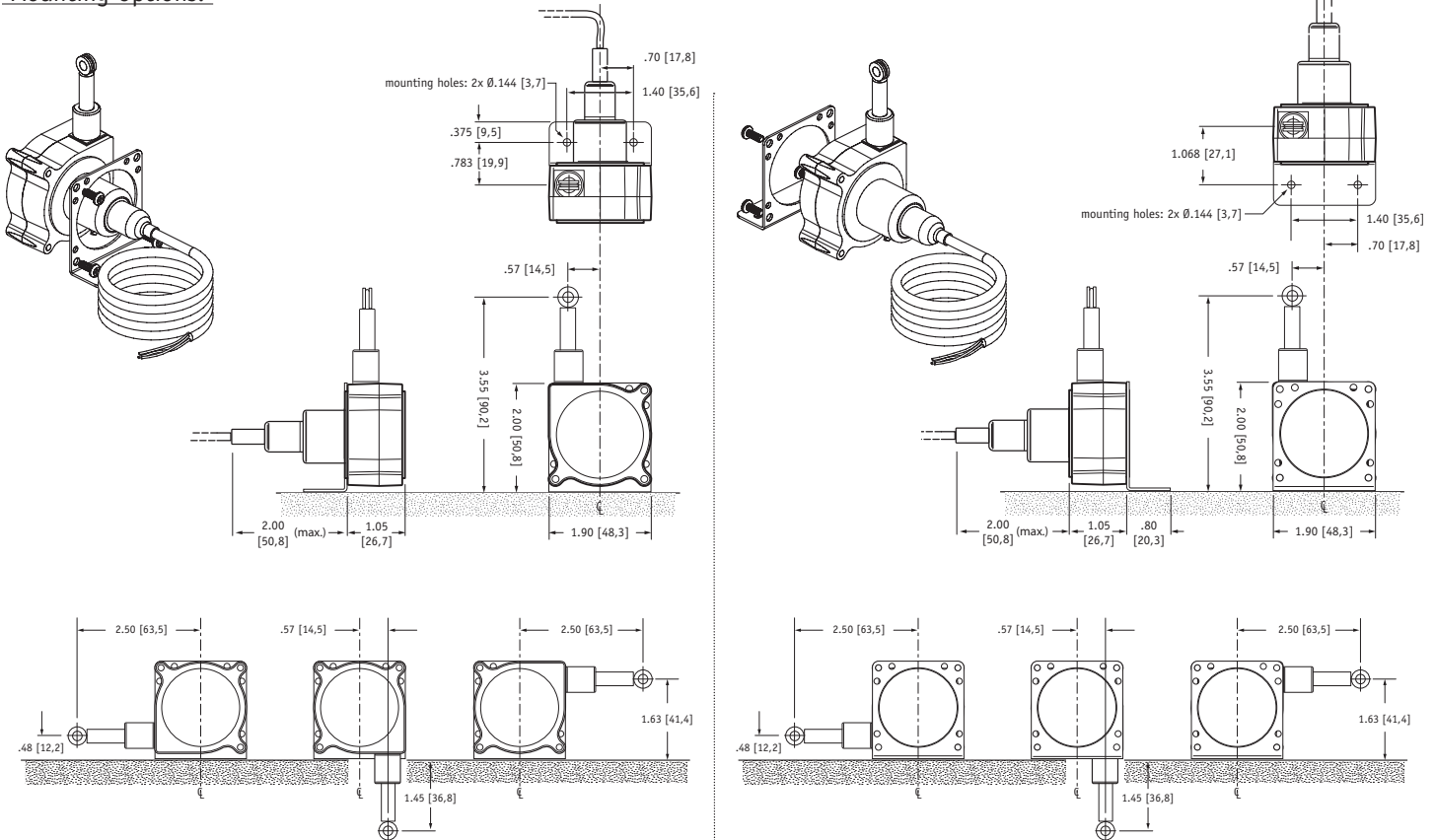
Outline Drawing (w/o bracket):



Electrical Connection:



Mounting Options:



version: 5.2 last updated: May 19, 2009