

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

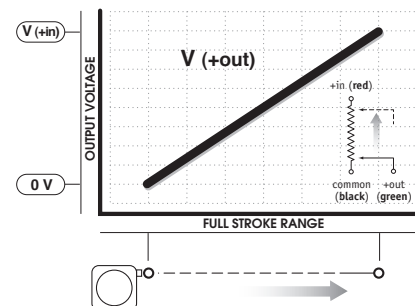
Ordering Information:

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:	30 G	30 G	30 G	30 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.

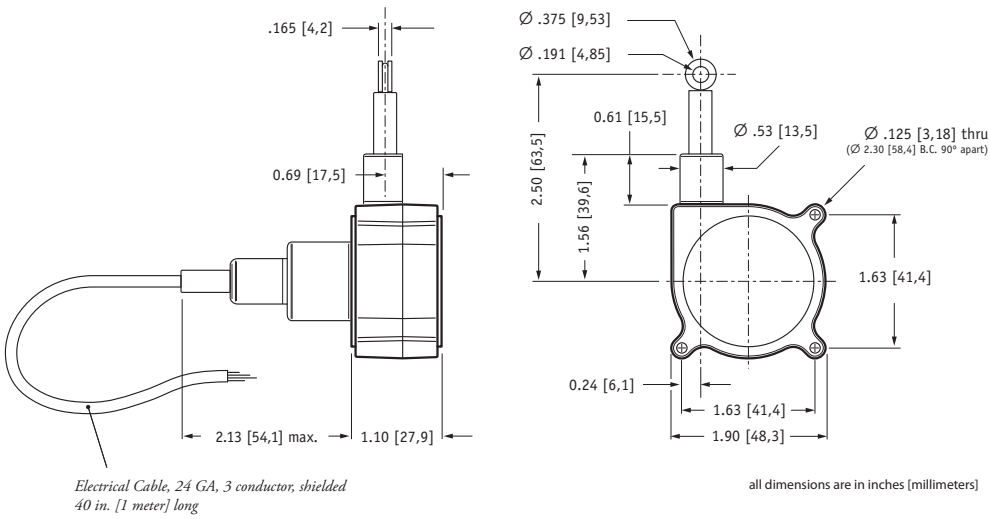
The SP2 is identical to the SP1 except for an added 40-inch electrical cable with a watertight rubber strain relief. The SP2 has been compactly designed for tight spaces and high cycle applications and generously allows for measuring cable misalignment. With 4 different ranges and a handy mounting bracket,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

Output Signal



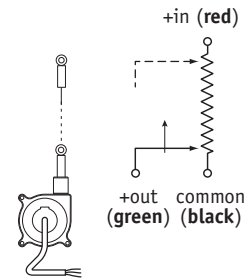
Installation Information:

Outline Drawing (w/o bracket):

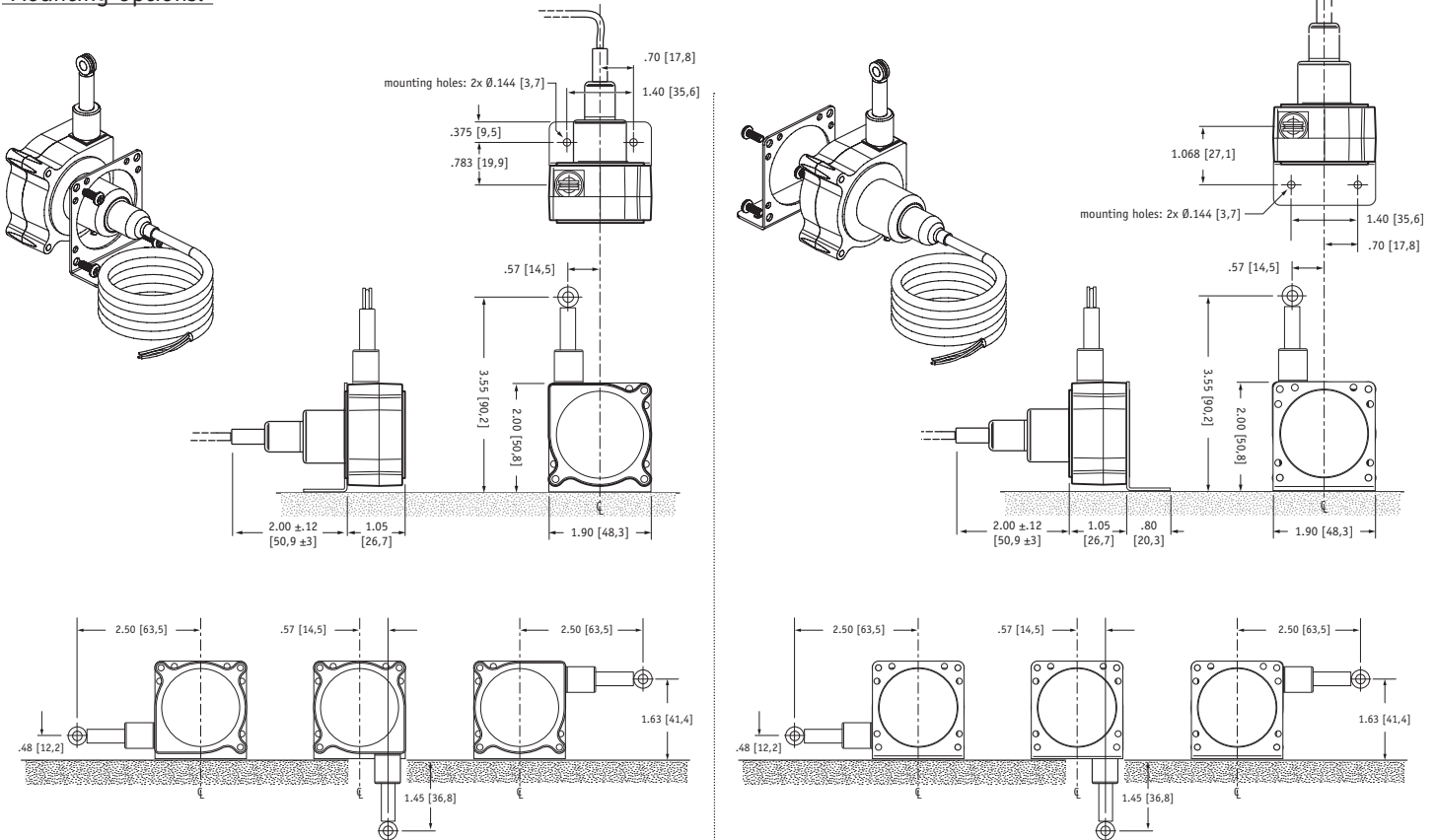


Electrical Cable, 24 GA, 3 conductor, shielded
40 in. [1 meter] long

Electrical Connection:



Mounting Options:



version: 5.0 last updated: June 10, 2008