

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

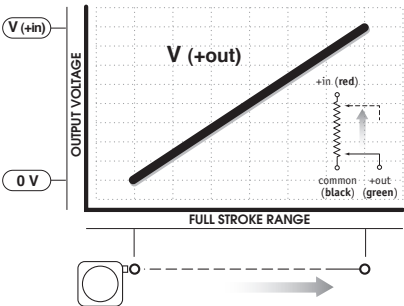
The SP2 String Pot from Cellesco is a compact, economical and water resistant device that utilizes a flexible cable, a spring-loaded spool and a potentiometer to detect and measure linear position.

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.

Ordering Information:

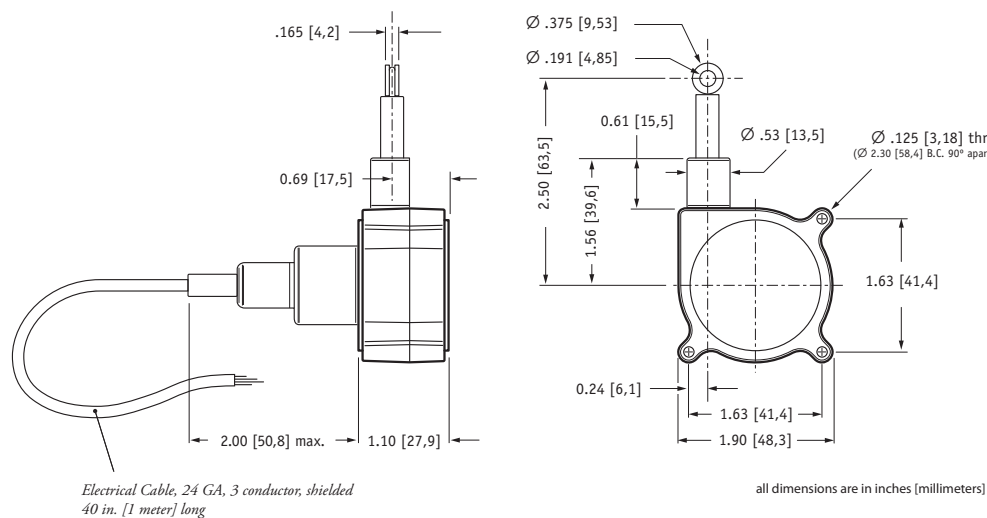
Item Number:	SP2-4	SP2-12	SP2-25	SP2-50
full stroke range:	4.75 in.	12.5 in.	25 in.	50 in.
accuracy (% of f.s.):	1.00%	0.25%	0.25%	0.25%
potentiometer cycle life:	2.5M cycles	500K cycles	500K cycles	250K cycles
cable tension ($\pm 25\%$):	7 oz.	7 oz.	7 oz.	7 oz.
max. cable acceleration:	30 G	30 G	30 G	30 G

Output Signal

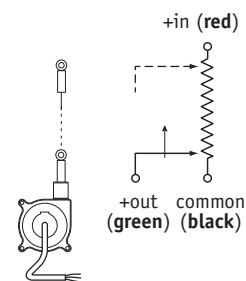


Installation Information:

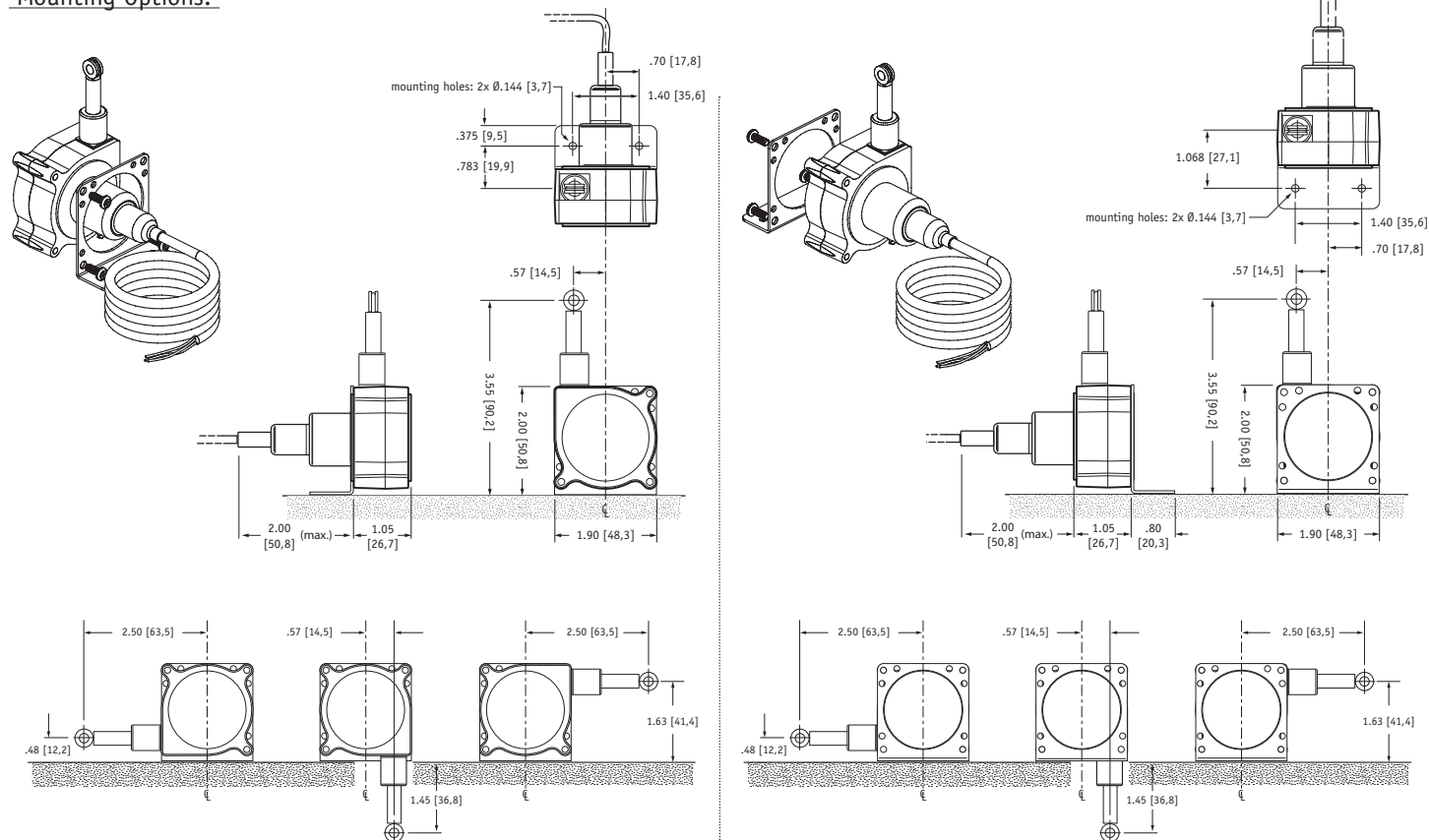
Outline Drawing (w/o bracket):



Electrical Connection:



Mounting Options:



version: 5.1 last updated: November 26, 2008