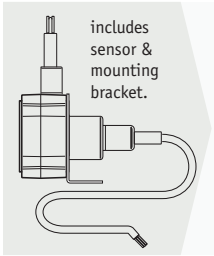
SP2

Compact String Pot • Voltage Divider Output

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



Part No.	full stroke range	accuracy (% of f.s.)	cycle life
SP2-4	4.75 in (120 mm)	1.00%	2.5M cycles
SP2-12	12.5 in (317 mm)	0.25%	500K cycles
SP2-25	25 in (635 mm)	0.25%	500K cycles
SP2-50	50 in (1270 mm)	0.25%	250K cycles

COMPLETE SPECIFICATIONS

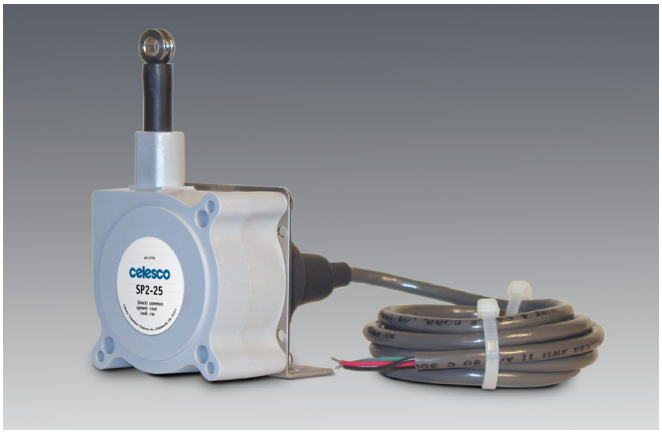
Full Stroke Range Options	0-4.75, 0-12.5, 0-25, 0-50 inches
Output Signal	voltage divider (potentiometer)
Accuracy	±0.25 to ±1.00% (see part no. above)
Repeatability	± 0.05% full stroke
Resolution	essentially infinite
Measuring Cable	0.019-in. dia. nylon-coated stainless steel
Measuring Cable Tension	7 oz. (1,9 N) ±25%
Maximum Cable Acceleration	15 g
Enclosure Material	polycarbonate
Sensor	plastic-hybrid precision potentiometer
Weight	5 oz. (w/o mounting bracket) max.

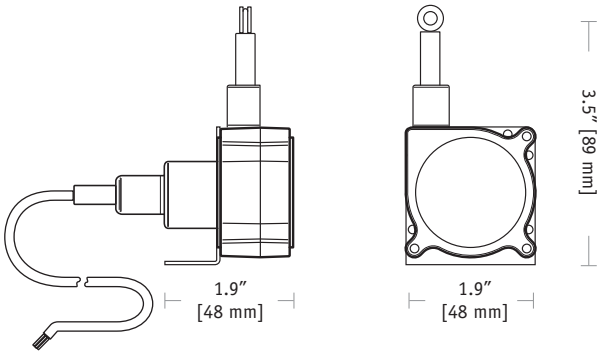
ELECTRICAL

Input Resistance	10K ohms, ±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% ±4% of input voltage
Electrical Connection	40-inch long, 24 guage shielded electical cable

ENVIRONMENTAL

Enclosure	IP 50
Operating Temperature	0° to 160°F (-18° to 71°C)
Vibration	up to 10 g to 2000 Hz maximum

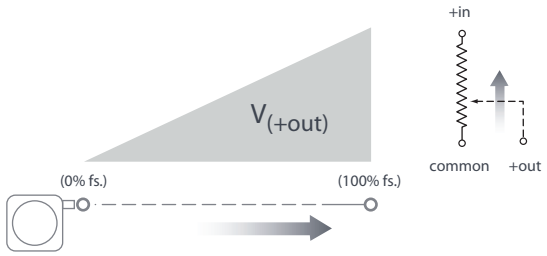




The SP2 String Pot from Celesco is a compact, economical and water resistant device that utilizes a flexible cable, a spring-loaded spool and a potentiometer to detect and measure linear position.

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.

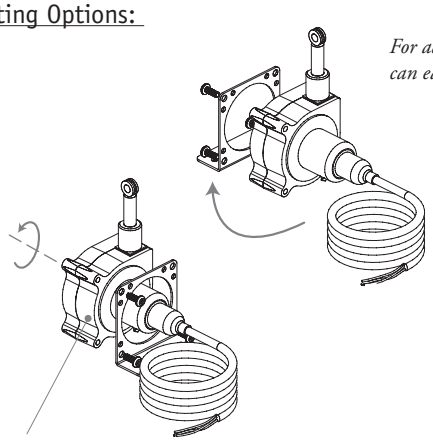
Output Signal:



20630 Plummer Street • Chatsworth, CA 91311
tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

celesco

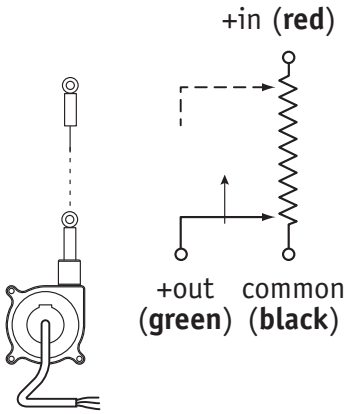
Mounting Options:

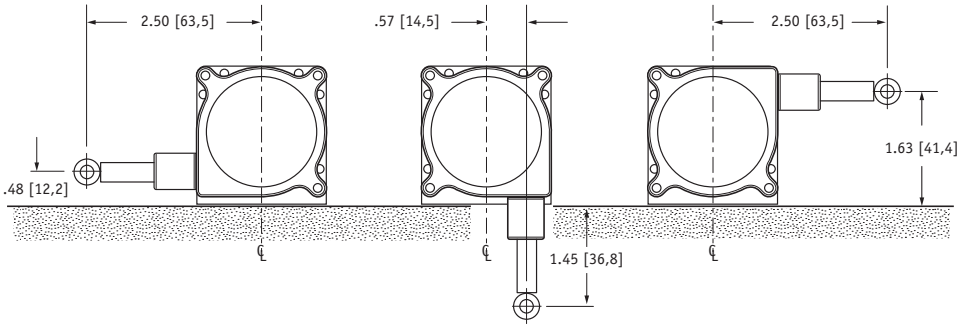


For added flexibilty, mounting bracket can easily be switched to the opposite side.

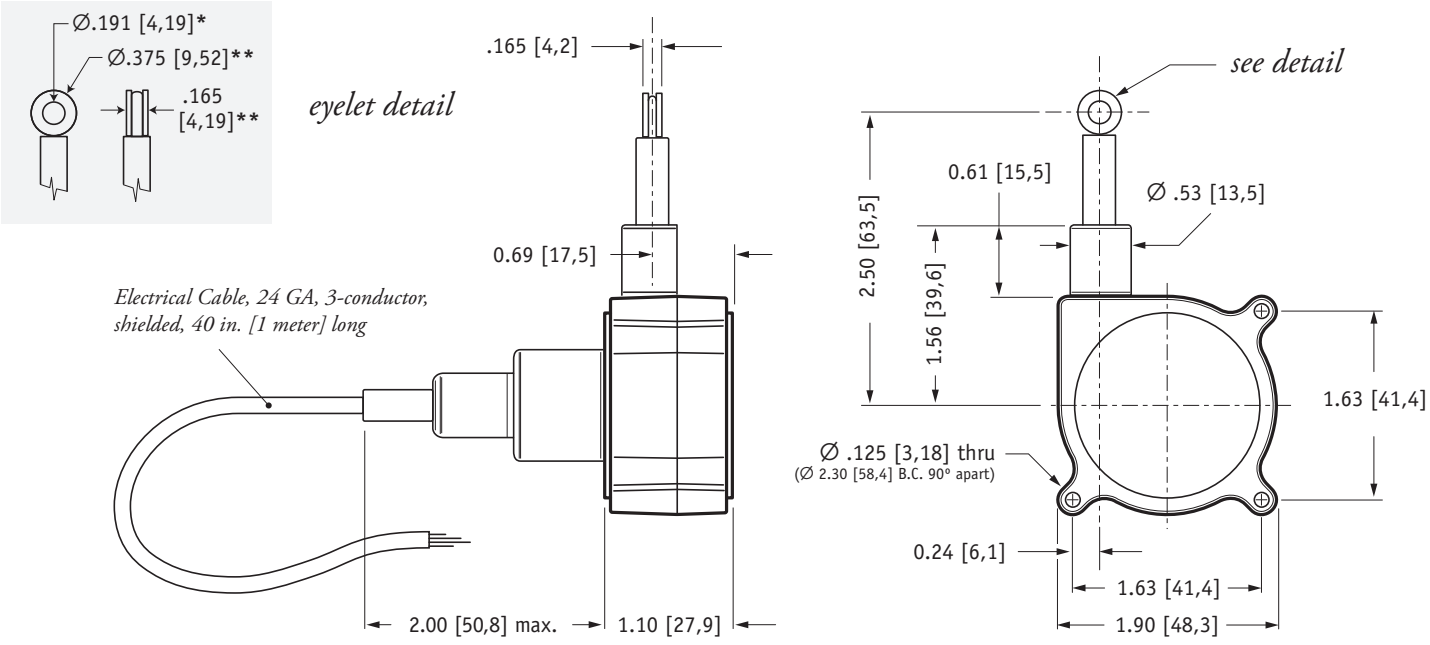
To change measuring cable direction simply remove the 3 bracket attaching screws and rotate sensor body to desired direction.

Electrical Connection:





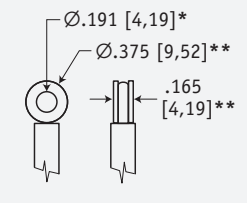
Outline Drawing (w/o bracket):



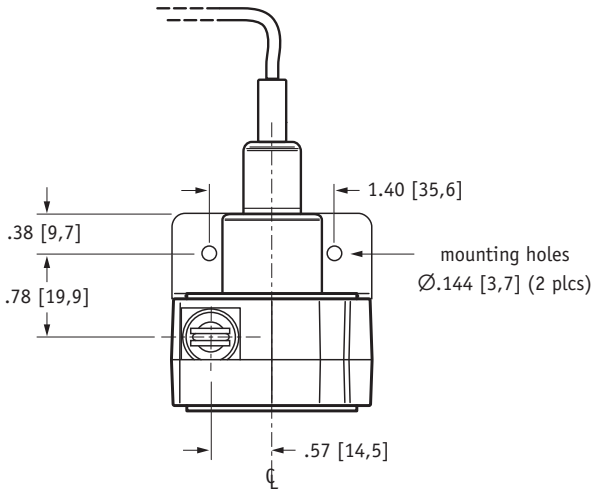
DIMENSIONS ARE IN INCHES [MM]
tolerances are 0.04 IN. [1,0 MM] unless otherwise noted.

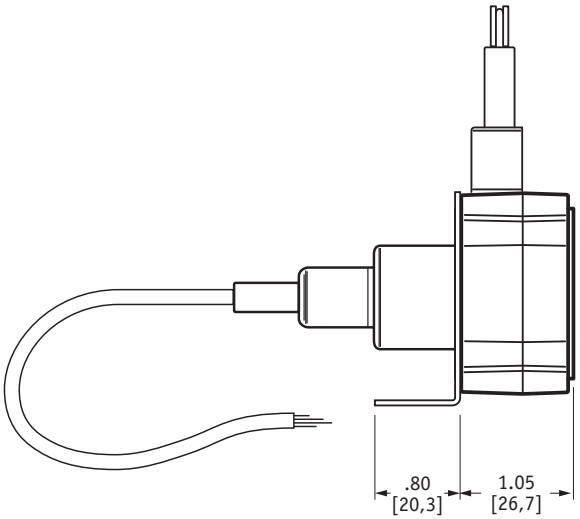
* tolerance = +.005 –.001 [+0,1 –0,0]
** tolerance = +.005 –.005 [+0,1 –0,1]

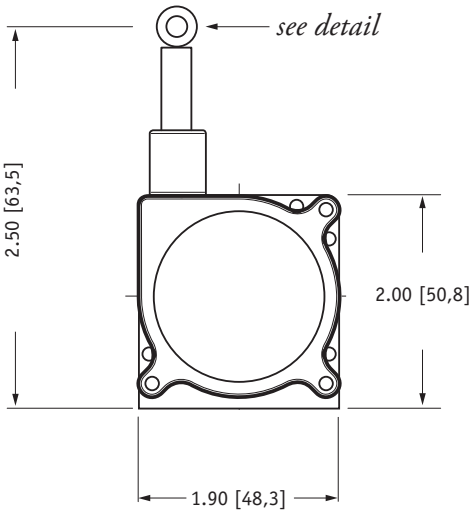
Outline Drawing (with bracket):



eyelet detail







DIMENSIONS ARE IN INCHES [MM]
tolerances are 0.04 IN. [1,0 MM] unless otherwise noted.

* tolerance = +.005 –.001 [+0,1 –0,0]
** tolerance = +.005 –.005 [+0,1 –0,1]