

Compact String Pot

Precision Potentiometric Output



- Handy Mounting Bracket**
Mounts easily and quickly in several directions
- Designed for Cable Misalignment**
Long cable life, even when installation isn't perfect
- Polycarbonate Enclosure**
Withstands impacts and chemicals
- "Free-Release" Tolerant**
Greatly reduces damage due to mis-handling of cable

The SP1 String Pot is a compact, economical and durable device that utilizes a flexible cable, a spring-loaded spool, and a potentiometer to detect and measure linear position

The SP1 is designed for tight spaces, high-cycle applications and generously allows cable misalignment with 4 different measurement ranges and handy mounting brackets, the SP1 is a perfect solution for many applications, from light industrial to OEM

Specifications

General

Full stroke range options	: 0 - 4.75 and 0 - 12.5 inches
Output signal	: Voltage divider (potentiometer)
Accuracy	: ± 0.25 to $\pm 1.00\%$
Repeatability	: $\pm 0.05\%$ full stroke
Resolution	: Essentially infinite
Measuring cable	: 0.019-inch diameter nylon-coated stainless steel
Enclosure material	: Polycarbonate
Sensor	: Plastic-hybrid precision potentiometer
Weight	: 3 oz (w/o mounting bracket) maximum

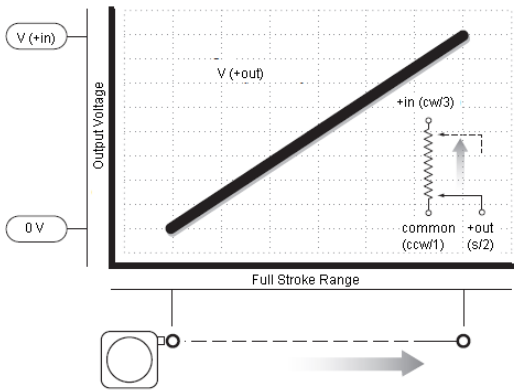
Electrical

Input resistance	: 10 K Ω , $\pm 10\%$
Power rating, watts	: 2 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

Enclosure	: IP 50
Operating temperature	: 0° to 160°F (-18° to 71°C)
Vibration	: up to 10 G's to 2,000 Hz maximum

Output Signal



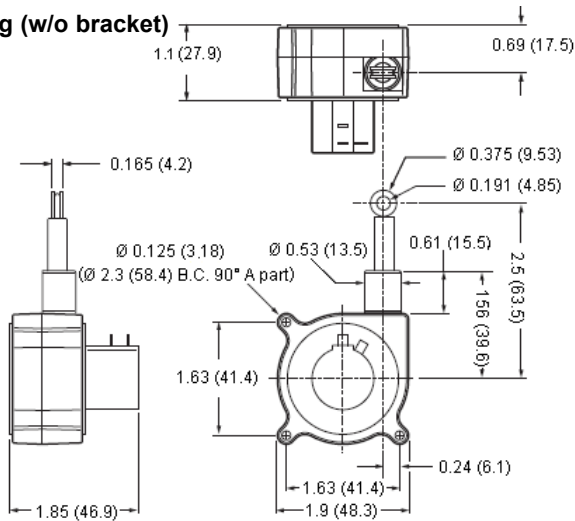
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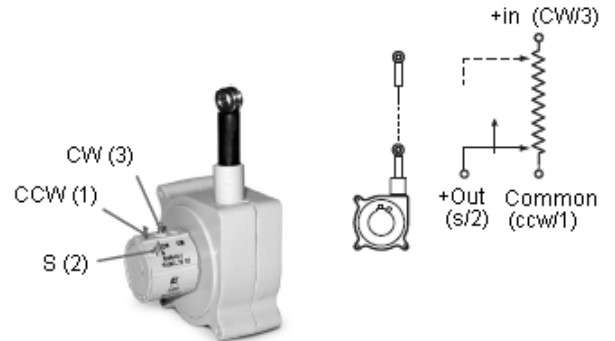


Installation Information

Outline Drawing (w/o bracket)

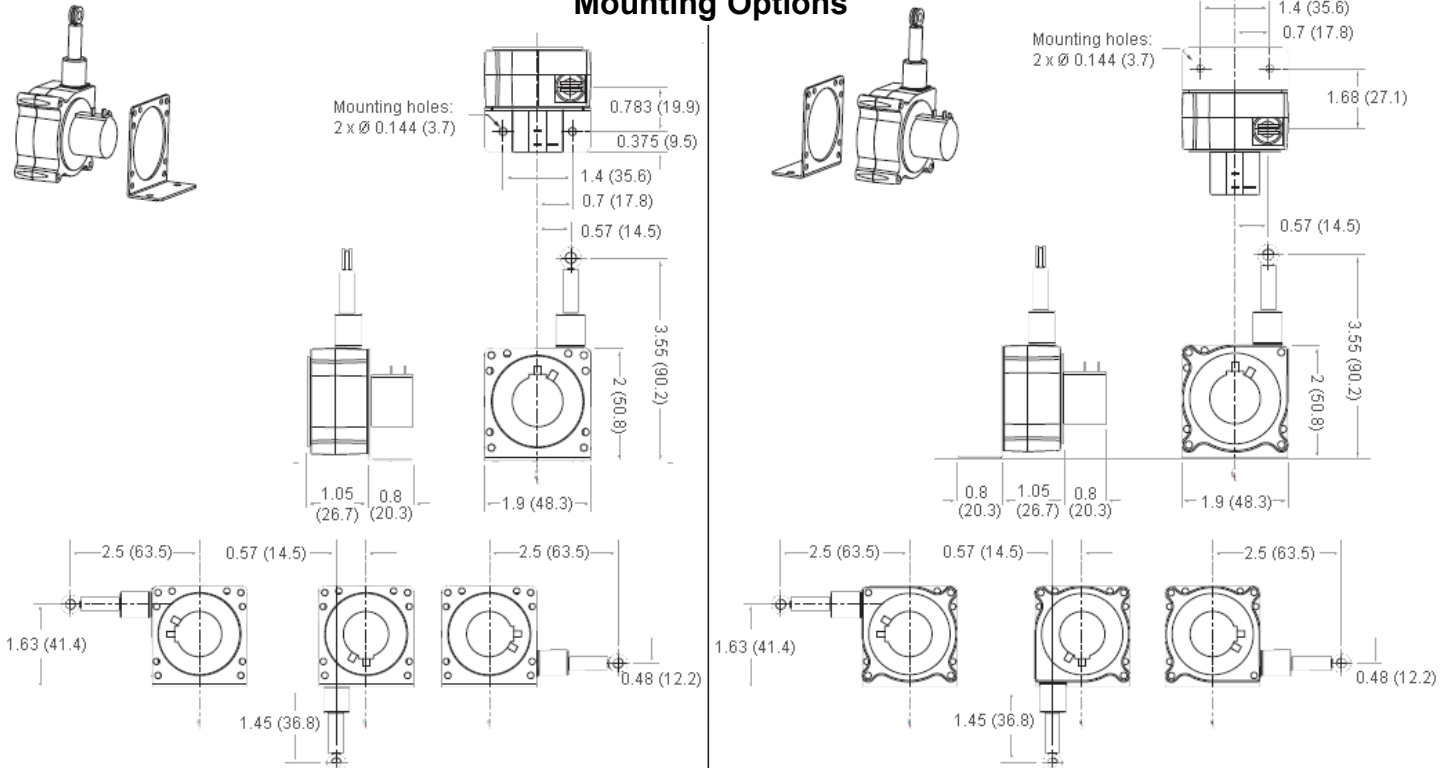


Electrical Connection



Dimensions : Inches (Millimetres)

Mounting Options



Dimensions : Inches (Millimetres)

Specification Table

Description	Full Stroke Range	Accuracy (% of f.s.)	Potentiometer Cycle Life	Cable Tension ($\pm 25\%$)	Maximum Cable Acceleration	Part Number
Transducer, Cable Extension, 4.75in	4.75 Inches	1	2.5 M cycles	7 oz	30 G	SP1-4
Transducer, Cable Extension, 12.5in	12.5 Inches	0.25	500 K cycles	7 oz	30 G	SP1-12

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