

Compact String Pot

Precision Potentiometric Output

multicomp PRO



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

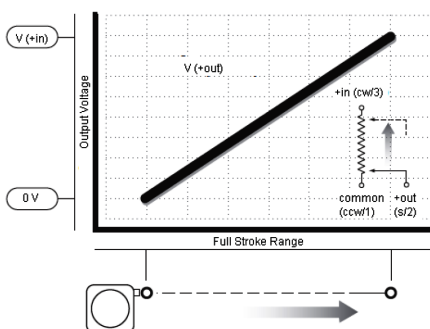
Electrical

Input Resistance	: 10 K Ω , $\pm 10\%$
Power rating, watts	: 2 at 70°F derated to 0 at 250°C
Recommended Max. 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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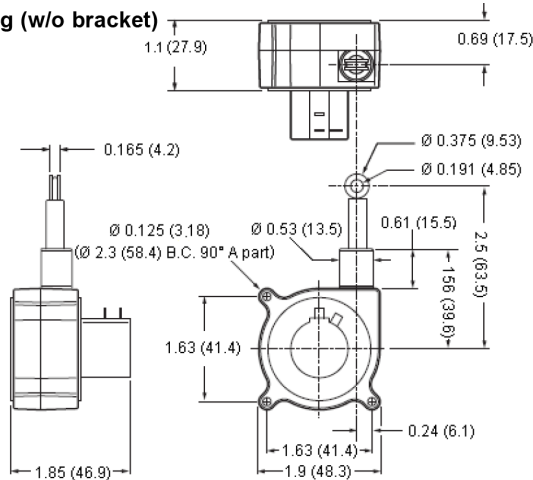
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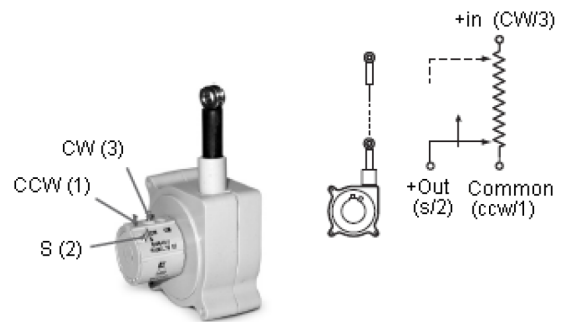
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Installation Information

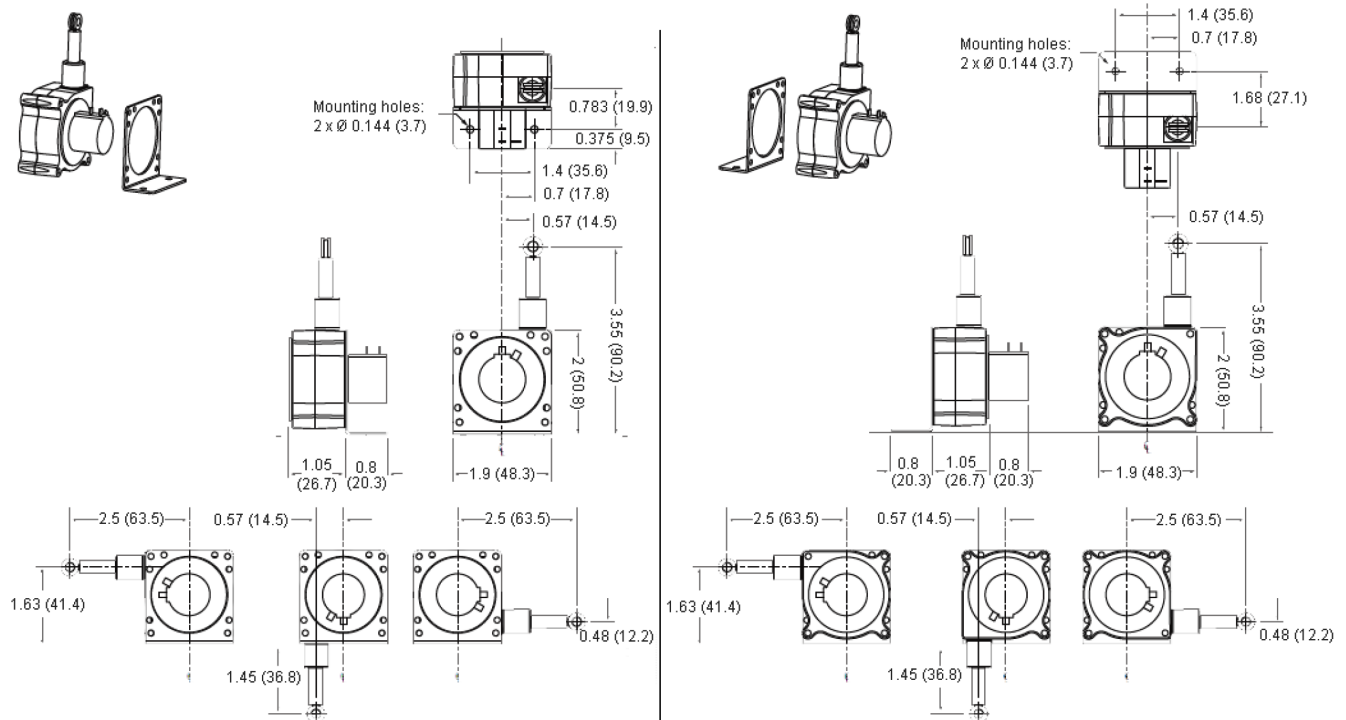
Outline Drawing (w/o bracket)



Electrical Connection



Mounting Options



Dimensions : Inches (Millimetres)

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Specification Table

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

Part Number Table

Description	Part Number
Transducer, Cable Extension, 4.75in	SP1-4
Transducer, Cable Extension, 12.5in	SP1-12

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