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 ±1%
- Repeatability: ± 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: 3oz (w/o mounting bracket) maximum

Electrical

- Input resistance: 10KΩ, ±10%
- Power rating, watts: 2 at 70ºF derated to 0 at 250ºC
- Recommended maximum input voltage: 30V (ac/dc)
- Output signal change over full stroke range: 94% ±4% of input voltage

Environmental

- Enclosure: IP 50
- Operating temperature: 0ºF to 160ºF (-18ºC to 71ºC)
- Vibration: up to 10 G’s to 2,000 Hz maximum

Output Signal:
Transducer, Cable Extension

Installation Information:

Outline Drawing (w/o bracket):

Electrical Connection:

Mounting Options:

Dimensions: Inches (Millimetres)
## Transducer, Cable Extension

### Part Number Table

<table>
<thead>
<tr>
<th>Description</th>
<th>Full Stroke Range (Inch)</th>
<th>Accuracy (% of f.s.)</th>
<th>Potentiometer Cycle Life</th>
<th>Cable Tension (±25%)</th>
<th>Maximum Cable Acceleration</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transducer, Cable Extension, 4.75in</td>
<td>4.75</td>
<td>1</td>
<td>2.5 M cycles</td>
<td></td>
<td>7 oz</td>
<td>SP1-4</td>
</tr>
<tr>
<td>Transducer, Cable Extension, 12.5in</td>
<td>12.5</td>
<td>0.25</td>
<td>500K cycles</td>
<td></td>
<td>7 oz</td>
<td>SP1-12</td>
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<tr>
<td>Transducer, Cable Extension, 25in</td>
<td>25</td>
<td>0.25</td>
<td>250K cycles</td>
<td></td>
<td>30 G</td>
<td>SP1-25</td>
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<tr>
<td>Transducer, Cable Extension, 50in</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SP1-50</td>
</tr>
</tbody>
</table>

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