Transducer, Cable Extension

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**

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### 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>
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<td></td>
<td>SP1-4</td>
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<tr>
<td>Transducer, Cable Extension, 12.5in</td>
<td>12.5</td>
<td>0.25</td>
<td>500K cycles</td>
<td>7 oz</td>
<td>30 G</td>
<td>SP1-12</td>
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<td>SP1-25</td>
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<tr>
<td>Transducer, Cable Extension, 50in</td>
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<td></td>
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<td></td>
<td>SP1-50</td>
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</tbody>
</table>

Dimensions: Inches (Millimetres)