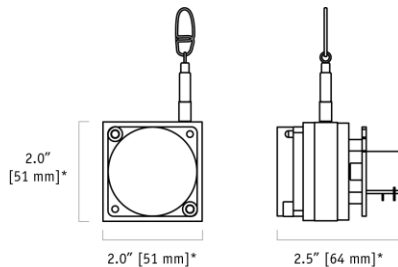




Shown with
Instrumentation
cable option

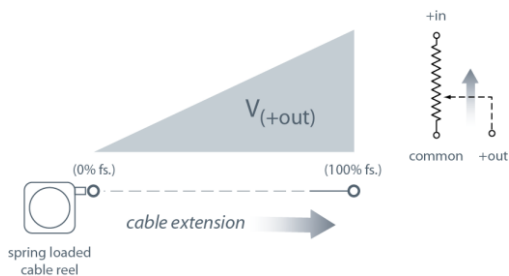


*note: 2~40" range shown for illustration, see outline drawing for other ranges.

PTX101은 저렴하고 사용하기 쉬운 소형 케이블 연장 변환기입니다. 2~100인치의 전체 측정 범위에서 사용할 수 있습니다. PTX101은 이동하는 스테인리스강 연장 케이블의 선형 움직임에 비례하는 전압 피드백 신호를 제공합니다.

트랜스듀서 본체를 고정된 표면에 장착하고 연장 케이블을 움직이는 물체에 부착하기만 하면 됩니다. PTX101은 공간과 비용이 제한된 애플리케이션에 권장됩니다.

Output Signal



PTX101

Cable Actuated Sensor Instrument Grade • Voltage Divider

Absolute Linear Position to 100 inches (2540 mm)

Compact Design • OEM Applications

Anodized Aluminum Enclosure

IP50 / NEMA 1 • Automation & Testing Applications

General

| | |
|---------------------------------|---|
| Full Stroke Range | 0-2 to 0-100 inches |
| Output Signal Accuracy | voltage divider (potentiometer) |
| Repeatability Resolution | see ordering information |
| Measuring Cable | ± 0.02% full stroke |
| Enclosure Material | essentially infinite |
| Sensor | .019-inch dia. nylon-coated stainless steel |
| Potentiometer Cycle | rope anodized aluminum |
| Life Maximum | plastic-hybrid precision potentiometer |
| Retraction Acceleration | see ordering information |
| Weight (maximum) | see ordering information |
| | 2 lbs. max. |

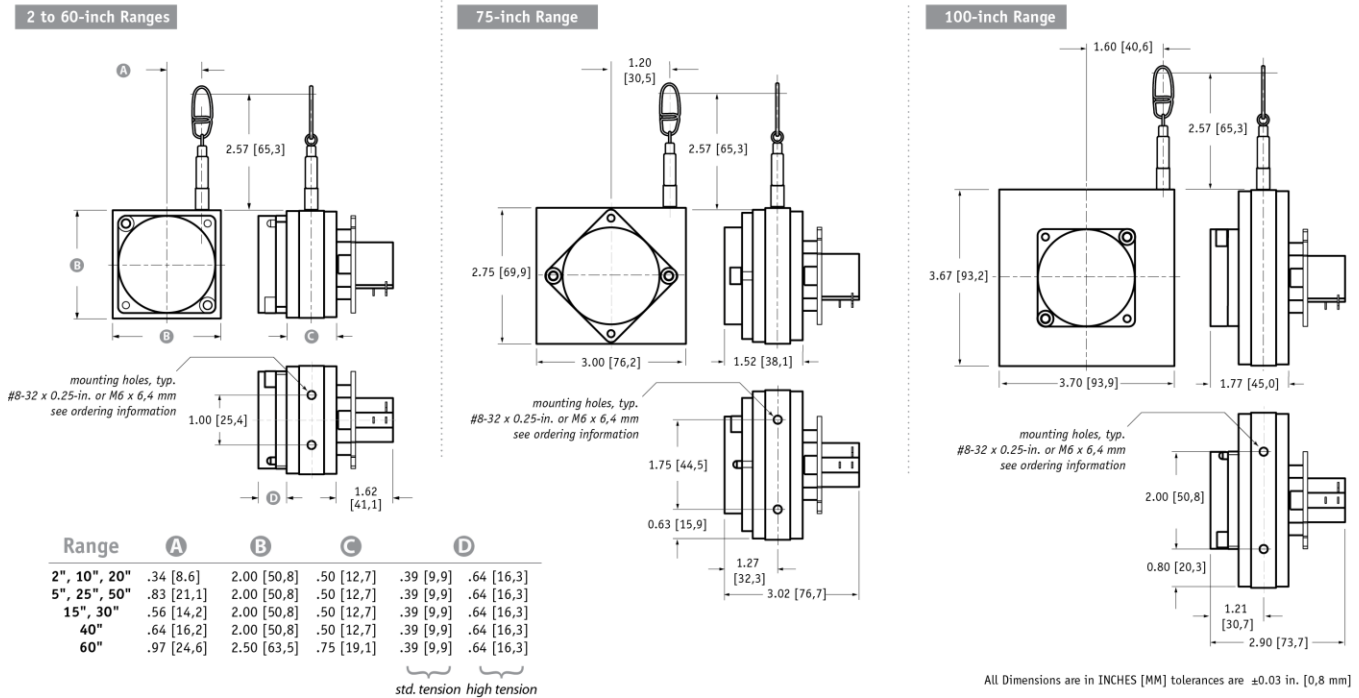
Electrical

| | |
|--|------------------------------|
| Input Resistance | 500, 1K, 5K, 10K or bridge |
| Maximum Input Voltage | see ordering information see |
| Power Rating | ordering information |
| Output Signal Change Over Full Stroke Range | 94% ±4% of input voltage |

Environmental

| | |
|---|-------------------------------|
| Enclosure | IP50, NEMA 1 |
| Temperature Coefficient of Sensing Element | 88 PPM/°F |
| Humidity | 100% RH @ 90°F (32° C) |
| Operating Temperature | -40° to 200°F (-40° to 90°C) |
| Vibration | up to 10 g to 2000 Hz maximum |

Outline Drawing



Ordering Information

Model Number:

PTX101 - - **1** - **1** - **0**

order code:

Sample Model Number:

PTX101 - 0025 - 111 - 1110

R range: 25 inches
A measuring cable tension: standard - 5 oz.
C mounting holes: 8-32 x .25 in. threaded
D sensing circuit: 500 ohms
E electrical connection: solder terminals

Full Stroke Range:

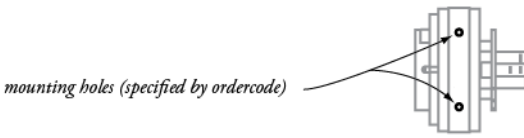
| R order code: | 0002 | 0005 | 0010 | 0015 | 0020 | 0025 | 0030 | 0040 | 0050 | 0060 | 0075 | 0100 |
|----------------------------|-----------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| full stroke range, min: | 2 in. | 5 in. | 10 in. | 15 in. | 20 in. | 25 in. | 30 in. | 40 in. | 50 in. | 60 in. | 75 in. | 100 in. |
| accuracy (% of f.s.): | 0.25% | 0.25% | 0.15% | 0.15% | 0.10% | 0.15% | 0.10% | 0.10% | 0.10% | 0.10% | 0.10% | 0.10% |
| potentiometer cycle life*: | 2.5 x 10 ⁶ | 2.5 x 10 ⁶ | 5 x 10 ⁵ | 5 x 10 ⁵ | 5 x 10 ⁵ | 5 x 10 ⁵ | 5 x 10 ⁵ | 2.5 x 10 ⁵ | 2.5 x 10 ⁵ | 2.5 x 10 ⁵ | 2.5 x 10 ⁵ | 2.5 x 10 ⁵ |

*—1 cycle is defined as the travel of the measuring cable from full retraction to full extension and back to full retraction

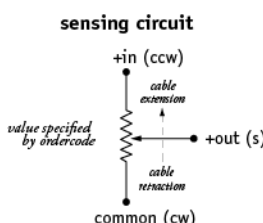
Measuring Cable Tension:

| A order code: | 1 | | H | |
|-----------------------|------------------|------------------|---------------|------------------|
| | standard tension | | high tension | |
| | tension, ±20% | max acceleration | tension, ±40% | max acceleration |
| 2, 10, 20 inch range: | 12 oz. | • 11 g | 65 oz. | • 53 g |
| 5, 25, 50 inch range: | 5 oz. | • 2 g | 26 oz. | • 11 g |
| 15, 30 inch range: | 8 oz. | • 3 g | 43 oz. | • 23 g |
| 40 inch range: | 6 oz. | • 4 g | 33 oz. | • 16 g |
| 60 inch range: | 13 oz. | • 4 g | 22 oz. | • 8 g |
| 75 inch range: | 10 oz. | • 3 g | 31 oz. | • 12 g |
| 100 inch range: | 13 oz. | • 5 g | 52 oz. | • 20 g |



Mounting Holes:

| | | |
|----------------------|---|----------------------------|
| ⓐ order code: | 1 | 2 |
| | #8-32 x 0.25-in. threaded holes | M6 x 6,4 mm threaded holes |
| |  | |

Sensing Circuit:

| | | | | | | | | | | | | | |
|----------------------|--|----------------------------------|-----------|-------------|--|-----------------------------|----------------------------------|-----------|------------------|------------------|-----------------|------------------|------------------|
| ① order code: | 1 | 2 | 3 | 4 | | | | | | | | | |
| | 500 ohm* | 1000 ohm* | 5000 ohm* | 10,000 ohm* | | | | | | | | | |
| |  | | | | | | | | | | | | |
| | max. input voltage and power rating | | | | | | | | | | | | |
| | <table><tr><td></td><td>2-inch, 5-inch range</td><td>10-inch to 100-inch range</td></tr><tr><td>500-ohms:</td><td>20 V AC/DC (1 W)</td><td>30 V AC/DC (2 W)</td></tr><tr><td>1K to 10K-ohms:</td><td>30 V AC/DC (1 W)</td><td>30 V AC/DC (2 W)</td></tr></table> | | | | | 2-inch, 5-inch range | 10-inch to 100-inch range | 500-ohms: | 20 V AC/DC (1 W) | 30 V AC/DC (2 W) | 1K to 10K-ohms: | 30 V AC/DC (1 W) | 30 V AC/DC (2 W) |
| | 2-inch, 5-inch range | 10-inch to 100-inch range | | | | | | | | | | | |
| 500-ohms: | 20 V AC/DC (1 W) | 30 V AC/DC (2 W) | | | | | | | | | | | |
| 1K to 10K-ohms: | 30 V AC/DC (1 W) | 30 V AC/DC (2 W) | | | | | | | | | | | |
| | *tolerance = ±10% | | | | | | | | | | | | |

Electrical Connection:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|---|---------------|-----|-----|----|--------|---|------|--|-------------------|-----------------|---------------|-----|-----|------|-------|----|--------|-------|---|-------|
| ⓑ <i>order code:</i> | 0 | 1 | | | | | | | | | | | | | | | | | | | | |
| | solder terminals | 10-ft. instrumentation cable shielded, 24 AWG | | | | | | | | | | | | | | | | | | | | |
| |  |  | | | | | | | | | | | | | | | | | | | | |
| | <table><tr><td>terminal</td><td>signal</td></tr><tr><td>CCW</td><td>+in</td></tr><tr><td>CW</td><td>common</td></tr><tr><td>S</td><td>+out</td></tr></table> | terminal | signal | CCW | +in | CW | common | S | +out | <table><tr><td>color code</td><td>terminal</td><td>signal</td></tr><tr><td>RED</td><td>CCW</td><td>+ in</td></tr><tr><td>BLACK</td><td>CW</td><td>common</td></tr><tr><td>GREEN</td><td>S</td><td>+ out</td></tr></table> | color code | terminal | signal | RED | CCW | + in | BLACK | CW | common | GREEN | S | + out |
| terminal | signal | | | | | | | | | | | | | | | | | | | | | |
| CCW | +in | | | | | | | | | | | | | | | | | | | | | |
| CW | common | | | | | | | | | | | | | | | | | | | | | |
| S | +out | | | | | | | | | | | | | | | | | | | | | |
| color code | terminal | signal | | | | | | | | | | | | | | | | | | | | |
| RED | CCW | + in | | | | | | | | | | | | | | | | | | | | |
| BLACK | CW | common | | | | | | | | | | | | | | | | | | | | |
| GREEN | S | + out | | | | | | | | | | | | | | | | | | | | |

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