With dimensions of .73 x .73 x .375, the UniMeasure ZX-PA Series is the world’s smallest stringpot. With a total measurement range of 1.5” (38 mm), a wide operating temperature range and long cycle life, the ZX-PA-1.5 is perfect for applications where space is at an absolute premium and maximum performance is required.

A co-molded maximum life potentiometer is mounted into the anodized aluminum housing of the unit. The mounting holes in the housing allow mounting with two #2 or two 2 mm screws. Alternatively the unit may be mounted with two 4-40 screws that thread directly into the housing. The wire rope of the unit may be ordered with an eye fitting termination or with a length of leader wire rope, a clip, and several crimp fittings to hold the clip in place.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>GENERAL</th>
<th>ELECTRICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Range</td>
<td>1.5 inch (38 mm)</td>
</tr>
<tr>
<td>Sensing Device</td>
<td>Precision Co-Molded Potentiometer</td>
</tr>
<tr>
<td>Resolution</td>
<td>Essentially Infinite</td>
</tr>
<tr>
<td>Linearity</td>
<td>±1.0% Full Scale</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.03% Full Scale</td>
</tr>
<tr>
<td>Construction</td>
<td>Anodized Aluminum Housing</td>
</tr>
<tr>
<td>Wire Rope Terminations</td>
<td>Ø0.018” (0.46 mm) Nylon Jacketed Stainless Steel</td>
</tr>
<tr>
<td>Wire Rope Tension</td>
<td>4 oz (1.1 N)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.42 oz (12 gm)</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>3 conductor cable, 18” (457mm) length</td>
</tr>
<tr>
<td>Dynamic Response</td>
<td>25 Hz over full range extension</td>
</tr>
<tr>
<td>Life</td>
<td>10,000,000 full stroke cycles</td>
</tr>
<tr>
<td>OPERATIONAL</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55° C to 100° C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-65° C to 100° C</td>
</tr>
<tr>
<td>Vibration</td>
<td>15 G’s 0.1 ms max.</td>
</tr>
<tr>
<td>Shock</td>
<td>50 G’s 0.1 ms max.</td>
</tr>
<tr>
<td>Ingress Protection</td>
<td>IP-40 (NEMA 1)</td>
</tr>
</tbody>
</table>

**CIRCUIT DIAGRAM**

**FOOTNOTES TO SPECIFICATIONS**

1. For nominal output in application, multiply value shown by actual excitation voltage.

### MODEL NUMBER CONFIGURATION

**ZX-PA-1.5-**

**WIRE ROPE CONFIGURATION**

A. Eye Fitting, See FIG A

B. 24” (600 mm) Leader Wire Rope with Fittings, See FIG B

**ELECTRICAL**

- Nominal Output: 630 mV/in @ 1VDC Input Voltage\(^1\)
- 24.8 mV/mm @ 1VDC Input Voltage\(^2\)
- Input Impedance: 24,800 Ω ±10%
- Output Impedance: 0 to 5000 Ω
- Excitation Voltage: 30 VDC Max.

**CIRCUIT DIAGRAM**

**MODEL NUMBER CONFIGURATION**

**ZX-PA-1.5-A**

**WIRE ROPE CONFIGURATION**

A. Eye Fitting, See FIG A

B. 24” (600 mm) Leader Wire Rope with Fittings, See FIG B

**LEADER WIRE WITH FITTINGS**

- CRIMP BALL
- LEADER WIRE ROPE 24” (600)
- Ø0.093 [2.4]
- CRIMP FERRULES (3 EA)
- ELECTRICAL CABLE
- CLIP (1 EA)

Dimensions in brackets are millimeters.
**DIMENSIONAL INFORMATION**

**ZX-PA Series**

- Ø0.018 WIRE ROPE
- Ø0.016 [4.78]
- 0.005 [2.44]
- Ø0.080 [2.03]
- Ø0.093 [2.36] THRU (2X) THRD 4-40 OPP END
- Ø0.031 [0.79] THRU [2X]
- 0.080 [2.03]
- 0.080 [2.03]
- 0.650 [16.51]
- 0.730 [18.54]
- 0.080 [2.03]
- ELECTRICAL CABLE 18" [457]
- ELECTRICAL CABLE EXIT

Dimensions in brackets are in millimeters.