

**DAKOTA ULTRASONIC
PZX-7 & PZX-7DL
PRECISION ULTRASONIC THICKNESS GAUGES**



DAKOTA ULTRASONIC PZX-7 & PZX-7DL

Precision Ultrasonic Thickness Gauges

2019 update of PX-7 & PX-7DL gauges

Made in USA

5-year warranty

Measuring:

- Delay Line Transducer: 0.0060" - 1.000" / 0.150 - 25.40 mm
- Contact Transducer: 0.040" to 36.0" / 915.0 mm
- Echo-Echo mode provides high precision and through coating measurements on thin materials
- Pulse-Echo mode for thicker and attenuative materials

The **PZX-7 & 7DL** gauges are precision ultrasonic thickness gauges designed for high-resolution measurements on thin metal and plastic parts. They are typically used in the manufacturing environment to measure aircraft parts, automotive sheet metal and other materials having parallel surfaces. They are packaged in a sturdy extruded aluminum housing which is sealed for environmental protection assuring high reliability even in corrosive environments.

The **PZX-7 & 7DL** when used with a single element delay line probe in the Echo-Echo (E-E) mode has measuring range in steel from 0.0060 to 1.0000 inch, (0.15 to 25.40 mm). Automatic switching to Interface to 1st Echo mode on thicker materials.

Measuring plastics is accomplished by changing the delay line tip to Graphite and switching to the Plastic Mode (PLAS).

FEATURES:

- Transducer Types: Single delay line & contact styles. Selectable diameters for contact style.
- High Speed Scan: Displays the lowest reading found during a scan. Scan speed at 100Hz.
- Differential Mode: Displays the +/- difference from a nominal value entered.
- Alarm Mode: High & low alarm limits with audible and visual indicators.
- VX Velocity: Measures in terms of velocity for nodularity testing.

MEASURING MODES:

- Pulse-Echo (P-E): 0.040 to 36.0 in (1.0 to 914.4 mm).
- Echo-Echo (E-E): Delay line – 0.006 to 1.00 in (0.152 to 25.4 mm). Contact – 0.040 to 6.0 in (1.0 to 152.4 mm)
- Interface-Echo (I-E): Delay line – 0.060 to 1.0 in (1.524 to 25.4 mm).
- Plastics (PLAS): Graphite Delay line – 0.005 to 0.250 in (0.127 to 6.35 mm).
- Ranges dependent on transducer type, material type, transducer frequency and diameters.
- Units: English & Metric (Low & High resolution).
- Resolution: 0.001 or 0.0001 in (0.01 or 0.001 mm).
- Velocity Range: 0.0120 to .7300 in/ μ s (305 to 18,542 m/sec).
- PRF: 200Hz Display Update Rate: 10Hz
- Gain: Automatic or manual control.
- Time Dependent Gain (TDG): Implemented in all measure modes

SPECIFICATIONS:

<p>PHYSICAL Weight: 11 ounces (with batteries). Size: 2.5 W x 5.17 H x 1.24 D inches (63.5 W x 131.3 H x 31.5 D mm). Operating Temperature: -22° to 167°F (-30° to 75°C). Case: Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).</p> <p>KEYPAD Sealed membrane that is resistant to both water and petroleum products. 9 tactile-feedback keys.</p> <p>TRANSDUCER Single-element (delay line & contact) 5 to 20 MHz frequency range. Locking quick disconnect LEMO 00 connector. 4-foot cable. Custom transducers available for special applications.</p> <p>CERTIFICATION Factory calibration traceable to NIST & MIL-STD-45662A.</p> <p>WARRANTY 5 years limited</p>	<p>POWER SOURCE Two 1.5V alkaline, 1.2V NiCad, or 1.5V lithium AA cells. Typically operates for 35 hours on alkaline and 18 hours on NiCad. Low battery indicator on display. Auto shutoff after 5 minutes of inactivity. Line power USB-C connected to PC or power adapter.</p> <p>DISPLAY Multi-function 7 segment 4.5-digit liquid crystal display with 0.500 in digit height. Two 0.125 in 14 segment fields for labels and values, and one 7 segment field for labels and values. Additional icons to indicate features and modes. Backlight is selectable On/Off/Auto, and selectable brightness (Lo, Med, Hi) options. Bar graph indicates stability of reading.</p> <p>SOFTWARE Comes complete with USB download cable (PZX-7 DL). No software required, comma separated file type (.csv).</p>
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STANDARD KIT:

All Kits include: Instrument, Standard 15 MHz 1/4" Delay Line Transducer (2 Delay Tips - 3/8" & 1/2" L) & Cable, Couplant, Manual, Certificate of Calibration, AA Batteries and Plastic Carrying Case.