



# PW4

## Pressure Chart Recorders

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## Product Applications

The PW4 Weather Resistant Pressure Recorder is housed in a VELOX PBT NEMA 4X case. This lightweight 4" recorder will provide protection against corrosion, windblown dust and rain, splashing water and hose directed water.

Place these portable pressure recorders anywhere a written record of pressure is needed. You don't even need to be present to monitor the results. Please keep in mind that Dickson pressure recorders are NOT suitable for monitoring ammonia, acids, salt water or other corrosive substances.

## Useful Features

- Compact 4" Chart
- NEMA 4x Water Resistant Enclosure
- Durable and compact
- Operates for up to one year on a single AA battery
- Easy to operate and install
- Battery holder inside door for easy battery changes
- On/Off switch for battery savings (except for FM models)

## Product Specifications

<b>Accuracy:</b>	±2% Full Scale
<b>Ambient Operating Range:</b>	-22 to +122°F, -30 to +50°C
<b>Average Response Time:</b>	1 second
<b>Chart Size:</b>	4" diameter (10.2cm)
<b>Connection:</b>	1/4" male NPT
<b>Mounting:</b>	Stem or keyhole slots for wall mounting
<b>Case:</b>	Velox PBT NEMA 4x case
<b>Power:</b>	1 "AA" alkaline battery, average 1 year battery life
<b>Dimensions:</b>	6.25" x 6.0" x 2.9" (15.9cm x 15.2cm x 7.4cm)
<b>Weight:</b>	1.8 lbs. (2.7 kgs)
<b>Includes:</b>	"AA" Battery, pen

**Note:** Please keep in mind that Dickson pressure recorders are not suitable for monitoring ammonia, acids or other corrosive substances. Only the PW461 and PW462 are suitable for salt water applications.

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## Getting Started

- This recorder comes with 1 AA battery installed.
- When installing recorders (1/4" male NPT pressure connection) always tighten the fitting instead of twisting the instrument case. Use a 5/8" wrench. We recommend wrapping the pressure fitting with pipe tape before installing to prevent leaks. Dickson does not recommend using pipe dope as it may clog the capillary.
- Place a new chart on recorder
- Set time by inserting a coin into chart hub and turning clockwise until the current hour is referenced to the time index clip. (Time index clip is directly to the right and below the pen tip).
- Remove protective pen cap.
- Turn the instrument on. The ON/OFF switch is located inside the door on the dial plate. (PR4-10 does not include on/off switch)

## Pen Replacement

Slide the used pen cartridge off and slide the new one on. Typical pen life is one year.

## Battery Replacement

The battery compartment is located inside the door, in the lower left section of the dial plate. The recorder uses a standard "AA" battery. Typical battery life is one year.

- Turn the battery cover counter clockwise with a coin to unscrew the it.
- Place the new battery in the holder with the positive end facing out toward the battery cover.
- Replace the cover and turn clockwise to tighten.

## Charts (for current pricing go to [www.dicksondata.com](http://www.dicksondata.com) or call 1-800-323-2448)

Pressure Range	7 Day Chart	24 Hour Chart
0 to 100 PSI	C012	C010
0 to 150 PSI	C035	C025
0 to 200 PSI	C040	C026
0 to 300 PSI	C036	C022
0 to 500 PSI	C056	C028
0 to 600 PSI	C043	

## Accessories (for current pricing go to [www.dicksondata.com](http://www.dicksondata.com) or call 1-800-323-2448)

Description	Order #
NIST Traceable Calibration 3-pt. (new unit)	N300
NIST Traceable Calibration 1-pt. (new unit)	N100
Accessory Kit (includes filter kit)	A791
Fire Hydrant Adapter Kit	A793
Filter Kit (includes snubber) (recommended)	R022
Steam Pressure Pigtail	A792
Pens (6 red)	P222

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## Calibration Services - New Units

- **N100 - NIST Traceable Calibration 1-Point:** Includes documentation to one Dickson pre-selected point on new units only.
- **N300 - NIST Traceable Calibration 3-Point:** Includes documentation of three Dickson pre-selected points (a high, medium, and low) on new units only.

## The Importance and Benefits of Regular Calibrations

Once you begin to use your precision Dickson instrumentation, regular calibrations are necessary to ensure accurate readings.

The following Calibration Services are available:

- **N150 - NIST Traceable Calibration 1-Point:** Includes documentation to one Dickson pre-selected point after re-calibration.
- **N350 - NIST Traceable Calibration 3-Point:** Includes documentation of three Dickson pre-selected points (a high, medium, and low) after re-calibration.

### Why should I recalibrate my instrumentation?

Over time dirt, dust and normal handling can throw your precision instrumentation out of calibration. Regular calibrations ensure that you receive the most accurate readings possible.

### How often should I recalibrate my instrumentation?

Depending on the environment your instrument is used in and how often it is handled you will want to recalibrate your instrument every 6 to 12 months. Instruments in environments where there are extreme temperatures, wide temperature ranges, humidity or pressure variations, high condensation, dirt, dust and other debris will require calibration at least every 6 months. Instruments that are frequently moved or in locations with heavy machinery that cause vibrations should also be calibrated at least every 6 months.

### Why should I return my instrument to Dickson for calibration?

Dickson calibrates your instrument at the factory using proprietary production/calibration software that guarantees proper calibration.

### Our Capabilities

Dickson is the first manufacturer of humidity and temperature instrumentation to receive A2LA accreditation. We are also NIST Traceable; our procedures conform to MIS-STD-45662A, ANSI/NCSL 2540-1-1994, ISO/IEC Guide 25 and ISO10012. We are experts in the manufacture and calibration of humidity and temperature instruments.

**Fast Service:** Our turnaround time is 3 days or less so you receive not only expert service but fast service as well.

**Easy:** We make it easy for you! No phone calls for Return Authorization Numbers are required. We remind you when your instrument is due for calibration. You simply send in the completed Calibration

Order Form with your unit for calibration with freight prepaid to Dickson.

## Calibration

Periodically check accuracy with a test gauge. If pen adjustment is required, use the adjusting screw located inside the door on the upper left corner of the dial plate. Check two points on the scale when adjusting the pen to make sure recorder calibration is maintained.

**Note:** When no signal (no pressure) is being applied to the recorder, the pen may not rest exactly on the zero chart line. It is possible for the allowable 2% of scale error to occur at zero, while upscale readings are increasingly more accurate.

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## Troubleshooting

For troubleshooting information, click [here](#) for the technical support page.

## Warranty

Dickson warrants that the products it sells will be free from defects in material and workmanship under normal use and service for a period of twelve months after delivery. In the event of a claim under this warranty, the product or part must be returned to the factory for repair or replacement (shipping pre-paid) with a Return Authorization Number (see Return Information above). It will be repaired at Dickson's option without charge. This warranty DOES NOT cover routine calibration, pen, chart and battery replacement. The foregoing warranty and remedy are exclusive and in lieu of all other warranties either expressed or implied. Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products. Dickson makes no warranty for products not manufactured by it or for any products modified by buyer, or subject to misuse or neglect.

## Factory Service & Returns

Contact the factory (630-543-3747) for a Return Authorization (RA) Number before returning any instrument. The model number, serial number and a purchase order number will be requested before an RA number is issued.

- Carefully repack the instrument, label the outside of the box with the RA# and return the instrument (freight pre-paid) to Dickson.
- All instruments that do not have the RA# clearly marked on the outside of the box will be refused. When returning instruments for credit, please include all accessories in shipment.
- Calibration/Freight charges are non-refundable.

NOTE: Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products.

## Customer Satisfaction

Dickson takes pride in providing you, the customer, with the highest quality instrumentation. We welcome the opportunity to help you in any way possible. Whether it be a question or a new idea in documentation, the Dickson Company would like to hear your response. Please call our Customer Service Department at 1-800-323-2448 or (630) 543-3747 (in Illinois).

## Software Return Policy

IMPORTANT-Read your Software License Agreement carefully before installing software. Dickson will accept returns for replacement of defective disks and CDs only.

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