



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Weighing/Load Receiving Element
Load Cell Electronic
Model: PBA226, PBA436-xyyy
 n_{max} : 5 000
 e_{min} : 0.001 lb (0.0005 kg)
Capacity: 5 lb to 1000 lb (2.5 kg to 500 kg)
Platform: 9 in x 9 in to 23.75 in x 31.5 in
(230 mm x 230 mm to 600 mm x 800 mm)
Accuracy Class: III

Submitted By:

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Standard Features and Options

Where xx = platter size
Where yyy = capacity

Construction:

- Stainless Steel Construction with Stainless Steel Platter

Load Cells Used:

- Mettler-Toledo Model 0785, 0795 (11 kg to 750 kg capacity) (Non-NTEP)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of *Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*. Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages. *Editorial changes, not affecting the type or metrological content, corrected this certificate.

Ivan Hankins
Chairman, NCWM, Inc.

Hal Prince
Chair, NTEP Committee
Issued: November 16, 2021

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**Mettler-Toledo, LLC**

Weighing/Load Receiving Element, PBA226, PBA436-xyyy

Application: For use in general purpose weighing applications when interfaced with a NTEP certified and compatible indicating element.

Identification: The required information is on an adhesive badge located under the scale platter.

Sealing: The weighing element does not have any adjustable components. Sealing of set-up and calibration parameters are done by the indicator, which is sealed according to the manufactures instructions for the particular indicator used.

Test Conditions: This Certificate supersedes Certificate of Conformance 09-073 and is issued to include new model naming PBA436, increase the capacity (1000 lb / 500 kg) and increase the platter dimensions of the series. The emphasis of the evaluation was on the device design, operation, marking requirements and compliance with influence factors. A model PBA436 (1000 lb x 0.2 lb / 500 kg x 0.1 kg) was interfaced with a Mettler Toledo model ICS689 indicator (Certificate of Conformance Number 10-086). Several increasing/decreasing load and shift tests were performed. The scale was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately 1/2 capacity was applied to the scale over 100 000 times. Tests were conducted periodically over this time. After the permanence tests were completed, the shift, discrimination and zone of uncertainty tests were repeated.

Certificate of Conformance 09-073: The emphasis of the evaluation was on device design, marking, operation and compliance with influence factor requirements. Three model PBA226 weighing elements were submitted for evaluation, 5 x 0.001 lb / 2.5 x 0.0005 kg (240 x 300 mm), 25 x 0.005 lb / 10 x 0.002 kg (305 x 305 mm), and 250 x 0.05 lb / 100 x 0.02 kg (460 x 460 mm). Each of the weighing elements was interfaced to a Mettler-Toledo IND780 indicator (Certificate of Conformance Number 06-017) for evaluation. Several increasing/decreasing load and shift tests were performed. The scales were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately 1/2 capacity was applied to each of the scales over 100 000 times. Tests were conducted periodically over this time. After the permanence tests were completed, the shift, discrimination and zone of uncertainty tests were repeated.

Evaluated By: W. West (NCWM/NTEP) 09-073; C. Boggs (OH) 09-073A1

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2020 Edition. *NCWM Publication 14: Weighing Devices*, 2021 Edition.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: J. Truex (NCWM) 09-073; D. Flocken (NCWM) 09-073A1

Example of Device:



Model PBA226, PBA436-xyyy