

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Compression, Beam Model: PB n<sub>max</sub>: 4000, Single Cell, Class III Capacity: See table below

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## **Standard Features and Options**

- Specific load cell capacities and  $v_{min}$  values covered by this certificate are listed in the table below. •
- Nominal output: 0.9 mV/V
- Stainless Steel material •
- 4-wire design •
- Minimum Dead Load: 0 kg

Model	Capacity (kg)	v <sub>min</sub> Class III (kg)
РВ	3.75	0.0003
	7.50	0.0005
	15.00	0.0010
	37.50	0.0025
	75.00	0.0050
	150.00	0.0100
	375.00	0.0313

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 Chair, NCWM, Inc.

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Hal Prince Chair, NTEP Committee Issued: February 21, 2022

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Flintec UK Ltd. Load Cell / PB

**<u>Application</u>**: The load cells may be used in Class III scales for single cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the  $v_{min}$  value, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions ( $n_{max}$ ) and with greater  $v_{min}$  values than those listed on the certificate. However, the load cells must be marked with the appropriate  $n_{max}$  and  $v_{min}$  for which the load cell may be used.

**Identification:** A pressure sensitive identification label located on the cell, states manufacturer name, model, serial number. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

<u>Test Conditions</u>: A Model PB, 3.75 kg, 37.5 kg and 375 kg capacity load cells were tested by the NMi Certin B.V. at the Netherlands facility. Testing was conducted in accordance with the OIML-CS for OIML R60 Certificate System, signed by the NCWM as a utilizing participant of load cell test data. Testing was conducted using deadweights as the reference standard. The load cells were tested over a temperature range of  $-10 \,^{\circ}$ C to  $40 \,^{\circ}$ C with tests run at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test to determine sensitivity of the load cell design to changes in barometric pressure was conducted. The data was analyzed for single load cell applications. OIML R60 selection criteria was used to determine which load cell capacities was tested.

## Evaluated By: S.J Koeman, M.M.J. Meijer (NMi)

**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.

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

Information Reviewed By: D. Flocken (NCWM)

## Example(s) of Device:

