NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Bending Beam
Model: PCB / PCBC
n_{max}, Class III, Single: 5000
Capacity: 50kg and 100kg to 1000kg

Accuracy Class: III

***Submitted By: Contact Info. Updated October 2025**
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Standard Features and Options

See Page 2 for specific load cell parameters.

- Wire Design: PCB: 4 wire / PCBC: 6 wire
- Material: Stainless Steel
- Sealing: Metal
- Excitation Voltage: 5 to 15 volts (AC/DC)
- Nominal Output: 2 mV/V

Temperature Range: -10 ºC to 40 ºC (14 ºF to 104 ºF)

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: July 20, 2007

Flintec, Inc.

Load Cell / PCB/PCBC

Application: 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} values, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions (n_{max}) and with larger 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.

Load Cell Parameters

Model	Capacity (kg)	Accuracy Class	n_{max}	v_{min} (g)	Minimum Dead Load (kg)
PCB*/PCBC*	50	III	5000	5.0	0
PCB/PCBC	100	III	5000	4.0	0
PCB*/PCBC*	250	III	5000	10.0	0
PCB/PCBC	500	III	5000	20.0	0
PCB/PCBC	1000	III	5000	40.0	0

* Load Cell Tested

Identification: A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information must be on an accompanying document including the serial number of the load cell.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 01-045 and is issued to increase the n_{max} of the load cell and add a capacity. The emphasis of this evaluation was on design, performance and marking of the load cell. One PCB-50kg, one PCBC-50kg, one PCB-250kg, and one PCBC-250kg capacity hermetically sealed load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for single load cell applications. The cells were tested over a temperature range of -10 ºC to 40 ºC. Three tests were run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure.

Certificate of Conformance Number 01-045: The emphasis of this evaluation was on design, performance and marking of the load cell. One 250kg capacity hermetically sealed load cell was tested at NIST using dead weights as the reference standard. The data were analyzed for single load cell applications. The cells were tested over a temperature range of -10 ºC to 40 ºC. Three tests were run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure.

Evaluated By: NIST Force Group

Test Evaluation Criteria Used: NIST Handbook 44, 2007 Edition, NCWM Publication 14, 2007 Edition

Conclusion: The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

Information Reviewed By: S. Patoray, L. Bernetich (NCWM) 01-045, 01-045A1

Example of PCB/PCBC: