



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Bending Beam
Model: CB6 Series
 n_{max} Class III Single Cell: 4 000
Capacity: 20 kg to 200 kg
Accuracy Class: III

***Submitted By: Contact Info. Updated: October 2010**
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Standard Features and Options

Standard Features:

- Number of Wires: 4 Wires
- Material: Stainless Steel
- Nominal Excitation Voltage: 10 Vdc
- Nominal Output: 2.0 mV/V

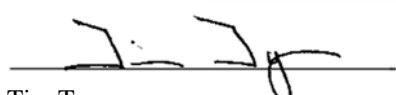
Model	Capacity (kg)	v_{min} Single Cell	Minimum Dead Load (kg)
CB6-20kg	20	0.005	0.00
CB6-35kg	35	0.008	0.00
CB6-50kg*	50	0.012	0.00
CB6-85kg	85	0.020	0.0
CB6-100kg	100	0.024	0.00
CB6-200kg	200	0.048	0.00

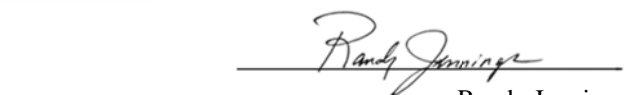
* Load cell submitted for evaluation.

Note: Models with a "T" suffix have a different color code and mounting hole dimensions.

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST 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.


Tim Tyson
Chairman, NCWM, Inc.


Randy Jennings
Chairman, National Type Evaluation Program Committee
Issued: October 27, 2010

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Cardinal Scale Manufacturing Co.

Load Cell / CB6 Series

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 use.

Identification: A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is 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 96-091A1 and is issued to add the "T" suffix to the model list. This suffix indicates a different cable color code and also changes to the mounting hole size and spacing. All other attributes remain the unchanged. This Certificate is issued without further testing. The original test conditions are listed below for reference.

Certificate of Conformance Number 96-091A1: This Certificate supersedes Certificate of Conformance Number 96-091 and is issued to add two additional capacities. Information supplied by the manufacturer was reviewed. No additional testing was required.

Certificate of Conformance Number 96-091: One 50-kg capacity load cell was tested at NIST using dead weights as the reference standard. The data were analyzed for single load cell applications. The cell was tested over a temperature range of -10 °C to 40 °C. Three tests were run on the 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, NIST Office of Weights and Measures

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 1996. NCWM, Publication 14: Weighing Devices, 1996.

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

Information Reviewed By: D. M. Ripley (NIST) 96-091; S. Patoray (NCWM) 96-091A1, 96-091A2; L. Bernetich (NCWM) 96-091A1, 96-091A2