



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell
Shear Beam, Compression
Models: RLSSB Series, RLSB250T Series and RLSB250
 n_{max} Multiple Cells, Class III: 5 000
 n_{max} Multiple Cells, Class III: 10 000
Capacity: 1 000 to 10 000 lb
Accuracy Class: III / III L

Submitted By:

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Standard Features and Options

*The specific load cell capacities, v_{min} values, and minimum dead loads are listed on page 2 and are identified by the model designation RLSSB followed by an alphanumeric suffix, where the suffix represents the load cell capacity, except for that the RLSB250 represents the 2.5K load cell.

*RLSB250T, T=Threaded Load Hole

Nominal Output:

- 2 mV/V
- 4-wire design

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.

Tim Tyson
Chairman, NCWM, Inc.

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Rice Lake Weighing Systems

Load Cell / RLSSB Series, RLSB250T Series and RLSB250

Application: The load cells may be used for both Class III and III L scales for multiple 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 Number Without Threaded Hold	Model Number With Threaded Hold	Capacity (lb)	v_{\min} (lb)		Minimum Dead Load
			Multiple Cell III	Multiple Cell III L	
RLSSB-1K	RLSB250T-1K	1 000	0.07	0.04	20
RLSSB-1.5K	RLSB250T-1.5K	1 500	0.10	0.06	30
RLSSB-2K	RLSB250T-2K	2 000	0.14	0.08	40
RLSB250-2.5K	RLSB250T-2.5K	2 500	0.18	0.10	50
RLSSB-3K	RLSB250T-3K	3 000	0.21	0.12	60
RLSSB-4K	RLSB250T-4K	4 000	0.28	0.16	80
RLSSB-5K	RLSB250T-5K	5 000	0.35	0.20	100
RLSSB-6K	RLSB250T-6K	6 000	0.42	0.24	120
RLSSB-7.5K	RLSB250T-7.5K	7 500	0.54	0.30	150
RLSSB-10K	RLSB250T-10K	10 000	0.70	0.40	200

Test Conditions: This Certificate supersedes Certificate of Conformance No. 96-053 and is issued to add models with a threaded load hole. No additional testing was deemed necessary. Previous test conditions are listed below for reference.

Certificate of Conformance 96-053: Two 4000-lb capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for multiple load cell applications. The cells were tested over a temperature range of -10 °C to 40 °C. 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, NIST Office of Weights and Measures 96-053

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) 96-053; J. Truex (NCWM) 96-053A1

Example of Device:

