National Conference on Weights and Measures
15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

Certificate Number: 95-069

National Type Evaluation Program
Certificate of Conformance for Weighing and Measuring Devices

For:
Load Cell
Shear Beam, Compression
Model Family: RL35082-NX-YY
n_{max} Multiple Cells, Class III: 5000
Class III L: 10 000
Capacity: 1000 to 10 000 lb
Accuracy Class: III/III L

Submitted by:
Rice Lake Weighing Systems
230 West Coleman Street
Rice Lake, WI 54868
Tel: (715) 234-9171
Fax: (715) 234-6967
Contact: Mark Erickson

Standard Features and Options

*The specific load cell capacities, v_{min}, and minimum dead loads are listed on page 2 and are identified by the model designation RL35082-NX-YYK, where N represents Class III, X represents the number of divisions (in thousands), and YYK represents the capacity (in thousands of pounds). In load cells with a Class III L accuracy, the model is designated with a T rather than N.

All load cells are made of stainless steel.

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 (NTEP) 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.

Effective Date: May 22, 1995

Louis E. Straub
Chairman, NCWM, Inc.

G. Weston Diggs
Chairman, National Type Evaluation Program Committee

Issue date: November 7, 1995

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

Rice Lake Weighing Systems
Shear Beam Compression Load Cell
Model: RL35082-NX-YYK

Application: The load cells may be used in 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 load cells with fewer scale 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	Capacity (lb)	v_{min} (lb)		Minimum Dead Load
		Multiple Cell III	Multiple Cell III L	
RL35082-NX-1K	1 000	0.07	0.04	20
RL35082-NX-1.5K	1 500	0.10	0.06	30
RL35082-NX-2K	2 000	0.14	0.08	40
RL35082-NX-2.5K	2 500	0.18	0.10	50
RL35082-NX-3K	3 000	0.21	0.12	60
RL35082-NX-4K	4 000	0.28	0.16	80
RL35082-NX-5K	5 000	0.35	0.20	100
RL35082-NX-6K	6 000	0.42	0.24	120
RL35082-NX-7.5K	7 500	0.54	0.30	150
RL35082-NX-10K	10 000	0.70	0.40	200

Test Conditions: Two 4000-lb capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for both single and multiple load cell applications. The cells were tested over a temperature range of -10 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.

Type Evaluation Criteria Used: NIST Handbook 44, 1995 Edition

Tested By: NIST Force Group, NIST Office of Weights and Measures

Information Reviewed By: Lynn Sebring (NIST)