NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Double-ended Shear Beam
Model: RL70000SS-xxx*
n_{max}: Multiple Cell, Class III: 5000
e_{min}: Multiple Cell, Class III L: 10 000
Capacity: 10 000 lb to 100 000 lb
Accuracy Class: III / III L

Submitted By: (Contact Information Updated September 2020)
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Standard Features and Options

The specific models covered by this Certificate are listed on Page 2 and are identified by the model designation RL700000SS followed by suffix listed below:

* RL70000SS-xxx where: the xxx represents rated capacity in K (K=1000 lb)

The specific load cell capacities, v_{min} values, and minimum dead loads are listed on Page 2.

- Nominal Output: 3.0 mV/V
- 4-Wire Design
- Excitation Voltage: 10 VDC
- Material: Stainless Steel

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.

Hal Prince
Chairman, NCWM, Inc.

Craig VanBuren
Chair, NTEP Committee
Issued: September 21, 2020

Rice Lake Weighing Systems

Load Cell / RL70000SS

Application: The load cells may be used in 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.

Identification: A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

Load Cell Parameters:

Model	Capacity (lb)	Multiple		Minimum Dead Load (lb)
		5000 v_{min} Class III (lb)	10 000 v_{min} Class III L (lb)	
RL70000SS-010	10 000	1.000	0.325	1000
RL70000SS-015	15 000	1.500	0.488	1000
RL70000SS-020	20 000	2.000	0.650	1000
RL70000SS-025	25 000	2.500	0.813	1000
RL70000SS-030	30 000	3.000	0.975	1000
RL70000SS-040	40 000	4.000	1.300	1000
RL70000SS-050	50 000	5.000	1.625	1000
RL70000SS-060	60 000	6.000	1.950	1000
RL70000SS-075	75 000	7.500	2.438	1000
RL70000SS-090	90 000	9.000	2.925	1000
RL70000SS-100	100 000	10.000	3.250	1000

Test Conditions: This Certificate of Conformance Number supersedes Certificate of Conformance Number 12-050 and was issued to add Material: Stainless Steel to SFO box and update Company contact information. No additional testing was required.
Test Conditions are listed below for reference.

Certificate of Conformance Number 12-050: This certificate was issued based upon the following tests and information provided by the manufacturer. Two 40 000 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; M. Manheim (NCWM) 12-050A1

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2012 Edition. *NCWM Publication 14: Measuring Devices*, 2012 Edition.

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

Information Reviewed By: J. Truex (NCWM) 12-050; D. Flocken (NCWM) 12-050A1

Rice Lake Weighing Systems

Load Cell / RL70000SS

Example(s) of Device: