

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

**For:**

Load Cell  
Double-Ended Beam  
Model: RL75040 Series \*  
 $n_{\max}$ : Multiple Cells: 10 000  
Capacity: 20 000 lb to 200 000 lb

Accuracy Class: III L

**Submitted by:**

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**Standard Features and Options**

- \* The specific load cell capacities,  $v_{\min}$  values, and minimum dead loads covered by this Certificate are listed in the table on Page 2.

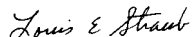
The RL75040 Series model designation is RL75040-XKY, where the character X represents the load cell capacity, the K character denotes 1000 lb (e.g., 20 K is equivalent to 20 000 lb), and the Y character represents the manufacturer's designation of a dimensional feature where the SE character denotes "small envelope" and where the LE character denotes "large envelope."

Material: Alloy Steel E4340  
4-wire design  
Nominal output: 3 mV/V

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: February 22, 2000



Louis E. Straub  
Chairman, NCWM, Inc.



G. Weston Diggs  
Chairman, National Type Evaluation Program Committee

Issued Date: March 16, 2000

Note: The National Conference on Weights and Measures does not "approve", "recommend", or "endorse" any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

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**  
**Double-Ended Beam Load Cell**  
**Model: RL75040**

**Application:** The load cells may be used in Class 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	Capacity (lb)	$v_{\min}$ (lb)	Minimum Dead Load (lb)
RL75040-20K	20 000	1.333	1000
RL75040-25K	25 000	1.666	1250
RL75040-30K	30 000	2.000	1500
RL75040-40K	40 000	2.666	2000
RL75040-50KSE	50 000SE	3.333	2500
RL75040-50KLE	50 000LE	3.333	2500
RL75040-60K	60 000	4.000	3000
RL75040-75K	75 000	5.000	3750
RL75040-100K	100 000	6.666	5000
RL75040-125K	125 000	8.333	6250
RL75040-150K	150 000	10.000	7500
RL75040-200K	200 000	13.333	10 000

**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.

**Test Conditions:** This Certificate is issued based on the following tests and upon information provided by the manufacturer. Two 50 000-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.

The results of the evaluations indicate that the device complies with applicable requirements of NIST Handbook 44.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2000 Edition

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

**Information Reviewed By:** L. Sebring (NIST) and G. Newrock (NIST)