

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Double-ended Shear Beam Model: KL-58 n<sub>max</sub>: 10 000, Class III L / Multiple Cell Capacity: 10 000 lb to 200 000 lb Accuracy Class: III L

#### Submitted By:

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### **Standard Features and Options**

- Nominal Output: 3 mV/V
- 4-wire Design
- Material: Alloy Steel
- Load Cell Parameters: \*capacity evaluated

Capacity	Multiple Cell Class III L	Minimum Dead Load
(lb)	v <sub>min</sub> (lb)	(lb)
10 000	0.50	0
20 000	1.00	0
25 000	1.25	0
40 000	2.00	0
50 000*	2.50	0
60 000	3.00	0
75 000	3.75	0
100 000	5.00	0
125 000	6.25	0
200 000	10.0	0

## 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.

Stephen Benjamin Chairman, NCWM, Inc.

Kurt Floren

Chairman, National Type Evaluation Program Committee Issued: April 29, 2013

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# Keli Sensing Technology (Ningbo) Co., Ltd.

Load Cell / KL-58

<u>Application</u>: The load cells may be used in Class IIIL multiple cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. 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.

<u>**Test Conditions:**</u> 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. 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. NCWM Publication 14 selection criteria were used to determine cells tested.

Evaluated By: K. Chesnutwood (NIST Force Group)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2013. NCWM, Publication 14: Weighing Devices, 2012.

**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)

Example of Device:

