

## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Compression

Model: L6Q-xx Series

n<sub>max</sub>: 5 000, Class III, Single and Multiple Cell

Capacity: 100 kg to 500 kg Accuracy Class: III **Submitted By:** 

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### **Standard Features and Options**

The specific load cell capacities,  $v_{min}$ ,  $n_{max}$  and minimum dead load values covered by this Certificate are listed in page two. Load cells tested are indicated by an \*.

Nominal Output: 2.0 mV/VAluminum Alloy Material

• 6 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.

Kurt Floren

Chairman, NCWM, Inc.

Chairman, National Type Evaluation Program Committee

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# Zemic (USA), Inc.

### Load Cell / L6Q-xx Series

Model	Capacity	v <sub>min</sub> Class III	Minimum Dead Load
		Single cell and Multiple cell	
L6Q-xx	100 kg*	0.0050 kg	0.0 kg
L6Q-xx	150 kg	0.0075 kg	0.0 kg
L6Q-xx	200 kg	0.0100 kg	0.0 kg
L6Q-xx	250 kg	0.0125 kg	0.0 kg
L6Q-xx	500 kg	0.0250 kg	0.0 kg

<sup>\*</sup>Load Cells Tested: 100 kg (2 cells)

**Application:** The load cells may be used in Class III scales for single and 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  $v_{min}$  value, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions ( $n_{max}$ ) and with greater  $v_{min}$  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>Identification</u>: A pressure sensitive identification label located on the cell, states manufacturer name, model number, serial number, rated capacity,  $v_{min}$ , class, and CC number. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

<u>Test Conditions</u>: Two load cells were tested by the NMi Certain B.V. at The Netherlands facility. Testing was conducted in accordance with the OIML DoMC Mutual Acceptance Arrangement, signed by the NCWM as a utilizing participant for load cell testing. Testing was conducted using deadweights as the reference standard. The load cells were tested over a temperature range of -10 °C to 40 °C with tests 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 performed on two cells. The data were analyzed for single and multiple load cell applications. OIML R60 selection criteria were used to determine cells tested.

**Evaluated By:** C. Bontenbal (NMi), R. Scholten (NMi)

<u>Type Evaluation Criteria Used:</u> NIST, <u>Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices</u>, 2011. NCWM, <u>Publication 14: Weighing Devices</u>, 2011.

**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:**

