



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell
Single Point Beam
Model: L6E, L6E3 and L6E3-R1
 n_{\max} : 5 000, Class III, Single/Multiple Cell
Capacity: 50 kg to 500 kg
Accuracy Class: III

Submitted By:

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Standard Features and Options

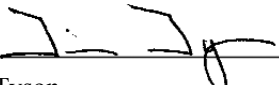
The specific load cell capacities, v_{\min} , n_{\max} and minimum dead load values covered by this Certificate are listed in page two. Load cells tested are indicated by an *.

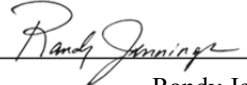
Models L6E/L6E3 (350 Ω Bridge Nom), wiring color code: Red(+Ex), Black(-Ex), Green(+Signal), White(-Signal)
Model L6E3-R1 (1000 Ω Bridge Nom), wiring code: Red(+Ex), Black(-Ex), Green(+Signal), White(-Signal)

- Nominal Output: 2.0 mV/V
- Aluminum Material
- 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 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.


Tim Tyson
Chairman, NCWM, Inc.


Randy Jennings
Chairman, National Type Evaluation Program Committee
Issued: July 13, 2011

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Zemic (USA), Inc.

Load Cell / L6E, L6E3 and L6E3-R1

Model	Capacity	v_{\min} Class III Single Cell and Multiple Cell	n_{\max} Class III Single Cell and Multiple Cell	Minimum Dead Load
L6E	50 kg*	0.0025 kg	5 000	0.004 kg
L6E	60 kg	0.0030 kg	5 000	0.004 kg
L6E	75 kg	0.0038 kg	5 000	0.005 kg
L6E	80 kg	0.0040 kg	5 000	0.006 kg
L6E	100 kg	0.0050 kg	5 000	0.007 kg
L6E	150 kg*	0.0075 kg	5 000	0.014 kg
L6E	200 kg	0.0100 kg	5 000	0.018 kg
L6E	250 kg	0.0125 kg	5 000	0.023 kg
L6E	300 kg	0.0150 kg	5 000	0.027 kg
L6E	400 kg	0.0200 kg	5 000	0.036 kg
L6E	500 kg	0.0250 kg	5 000	0.045 kg
L6E3	50 kg	0.0025 kg	5 000	0.003 kg
L6E3	60 kg	0.0030 kg	5 000	0.004 kg
L6E3	75 kg	0.0038 kg	5 000	0.005 kg
L6E3	80 kg	0.0040 kg	5 000	0.005 kg
L6E3	100 kg	0.0050 kg	5 000	0.007 kg
L6E3	150 kg	0.0075 kg	5 000	0.010 kg
L6E3	200 kg	0.0100 kg	5 000	0.013 kg
L6E3	250 kg	0.0125 kg	5 000	0.017 kg
L6E3	300 kg*	0.0150 kg	5 000	0.020 kg
L6E3	400 kg	0.0200 kg	5 000	0.027 kg
L6E3	500 kg	0.0250 kg	5 000	0.033 kg
L6E3-R1	50 kg*	0.0025 kg	5 000	0.004 kg
L6E3-R1	60 kg	0.0030 kg	5 000	0.004 kg
L6E3-R1	75 kg	0.0038 kg	5 000	0.005 kg
L6E3-R1	80 kg	0.0040 kg	5 000	0.006 kg
L6E3-R1	100 kg	0.0050 kg	5 000	0.007 kg
L6E3-R1	150 kg	0.0075 kg	5 000	0.014 kg
L6E3-R1	200 kg	0.0100 kg	5 000	0.018 kg
L6E3-R1	250 kg	0.0125 kg	5 000	0.023 kg
L6E3-R1	300 kg	0.0150 kg	5 000	0.027 kg
L6E3-R1	400 kg	0.0200 kg	5 000	0.036 kg
L6E3-R1	500 kg	0.0250 kg	5 000	0.045 kg

*load cells tested

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.

Identification: 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.



Zemic (USA), Inc.

Load Cell / L6E, L6E3 and L6E3-R1

Test Conditions: Four cells, Model L6E 50 and 150 kg), L6E3 (300 kg) and L6E3-R1 (50 kg) 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 three cells. The data were analyzed for single and multiple load cell applications. OIML R60 selection criteria were used to determine cells tested.

Evaluated By: A.C Pauwels, R. Scholten (NMI)

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

Examples of Device:



Model L6E



Models L6E3 and L6E3-R1