

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Single Point Models: L6D and L6D-R1 Series n_{max}: 5 000, Class III, Single/Multiple Cell Capacity: 2.5kg to 50 kg Accuracy Class: III Submitted By: Zemic USA, Inc. 9252 Hall Road Downey, CA 90241 Tel: 626-938-0200 x 226 Fax: 626-938-0202 Contact: Jaime San Pedro Email: jaimes@cecvp.com Web site: www.cecvp.com.

Standard Features and Options

The specific load cell capacities, vmin values, and minimum dead loads covered by this Certificate are listed in page two.

Model L6D (350Ω Bridge Nom), wiring color code: Red(+Ex), Black(-Ex), Green(+Signal), White(-Signal) Model L6D-R1 (1000Ω Bridge Nom), wiring code: Red(+Ex), White(-Ex), Green(+Signal), Blue(-Signal)

Standard Features:

- 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: February 4, 2011

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Zemic USA, Inc.

Load Cell / L6D and L6D-R1 Series

Model	Capacity	V _{min} Class III	v _{min} Class III	Minimum Dead
		Single cell, n=5000	Multiple cell, n=5000	Load
L6D & L6D-R1	2.5 kg	0.0002 kg	0.0002 kg	0 kg
L6D & L6D-R1	3 kg*	0.0002 kg	0.0002 kg	0 kg
L6D & L6D-R1	5 kg	0.0003 kg	0.0003 kg	0 kg
L6D & L6D-R1	6kg	0.0004 kg	0.0004 kg	0 kg
L6D & L6D-R1	8 kg	0.0005 kg	0.0005 kg	0 kg
L6D & L6D-R1	10 kg	0.0007 kg	0.0007 kg	0 kg
L6D & L6D-R1	15 kg	0.0010kg	0.0010kg	0 kg
L6D & L6D-R1	20 kg*	0.0013 kg	0.0013 kg	0 kg
L6D & L6D-R1	30 kg	0.0020 kg	0.0020 kg	0 kg
L6D & L6D-R1	35 kg	0.0023 kg	0.0023 kg	0 kg
L6D & L6D-R1	40 kg	0.0026 kg	0.0026 kg	0 kg
L6D & L6D-R1	50 kg	0.0033 kg	0.0033 kg	0 kg

*2 load cells tested

<u>Application</u>: 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, rated output, V_{min} , class, CC number and country of origin. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

<u>Test Conditions</u>: Two Model L6D (3kg and 20 kg capacity) 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 both cells. The data were analyzed for single and multiple load cell applications. OIML R60 selection criteria was used to determine cells tested.

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

Type Evaluation Criteria Used: NIST, <u>Handbook 44: Specifications</u>, <u>Tolerances and Other Technical Requirements for Weighing</u> and <u>Measuring Devices</u>, 2010. NCWM, Publication 14: Weighing Devices, 2010.

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)



Zemic USA, Inc. Load Cell / L6D and L6D-R1 Series

Example of Device:

