

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Shear Beam Model: B8D-xx Series n_{max}: 5000, Class III, Single and Multiple Cell 10 000, Class IIIL, Multiple Cell Capacity: 200 kg to 5000 kg (500 lb to 10 000 lb) Accuracy Class: III / III L 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, 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/V
- Stainless Steel Material
- 4 Wire Design

Model	Capacity (kg)	Capacity (lb)	V _{min} Class III Single/Multiple cell (kg/lb)	V _{min} Class IIIL Multiple cell (kg/lb)	Minimum Dead Load (kg & lb)
B8D-xx	200 *	500	0.02/0.05	0.02/0.03	0.0
B8D-xx	500	1000	0.05/0.10	0.03/0.05	0.0
B8D-xx	1000	2500	0.10/0.25	0.05/0.13	0.0
B8D-xx	-	4000	/0.40	/0.20	0.0
B8D-xx	2000	5000	0.20/0.50	0.20/0.25	0.0
& B8D-xx-SE					
B8D-xx	5000	10 000	0.50/1.00	0.25/0.50	0.0

*load cells tested: 200kg

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.

Chairman, NCWM, Inc.

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Chairman, National Type Evaluation Program Committee Issued: March 6, 2012

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Zemic (USA), Inc.

Load Cell / B8D-xx Series

Application: The load cells may be used in Class III or Class IIIL 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 and class. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

Test Conditions: The load cell was 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. 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 (NMi), R. Scholten (NMi)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2012. NCWM, Publication 14: Weighing Devices, 2011.

<u>Conclusion</u>: 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: