



## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Load Cell  
Shear Beam  
Model: B Series  
nmax: 6000 Single and multiple cells Class III  
Capacity: See the table following the identification section

**Submitted By:**

Changzhou Runningtech Sensing Co. Ltd.  
No. 20 Wangxian Road  
Xinbei District  
Changzhou, Jiangsu China 213133  
Tel: 008613857804316  
Fax: 008651985853526  
Contact: Eric Song  
Email: [eric.s@runningtec-h.com](mailto:eric.s@runningtec-h.com)  
Website: [runningtec-h.com](http://runningtec-h.com)

**Standard Features and Options**

The specific load cell capacities,  $v_{\min}$  values, and minimum dead loads covered by this Certificate are listed on page two.

**Standard Features:**

- Nominal Output: 1.94 2.0 and 3.0 mV/V
- Stainless Steel Construction
- Alloy Steel Construction
- 4-Wire Design

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of *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. \*Editorial changes, not affecting the type or metrological content, corrected this certificate.

Gene Robertson  
Chair, NCWM, Inc.

Mahesh Albuquerque  
Chair, NTEP Committee  
Issued: September 28, 2023

9011 South 83<sup>rd</sup> Street / Lincoln, Nebraska 68516

The National Conference on Weights and Measures (NCWM) does not approve, recommend, or endorse any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.



**Changzhou Runningtech Sensing Co. Ltd.**  
Loadcell / B Series

**Application:** The load cells may be used in Class III scales for single-cell 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 the 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 the manufacturer name, model number, serial number, rated capacity,  $V_{min}$ , class, and CC number. Other pertinent information will be specified in the accompanying documentation.

A=Alloy steel construction S= Stainless Steel construction

Capacity Rated Output Vmin and Nmax Table				
Model	Capacity	Rated Output	Vmin	Nmax
B535A; B535S; B735A; B735S B550A; B550S; B750A; B750S	220 kg / 500 lb	1.94mV/V / 2mV/V	0.009 kg / 0.02 lb	6000
	550 kg / 1250 lb		0.022 kg / 0.05 lb	6000
	1100 kg / 2500 lb		0.044 kg / 0.1 lb	6000
	1760 kg / 4000 lb		0.070 kg / 0.16 lb	6000
	2200 kg / 5000 lb		0.088 kg / 0.2 lb	6000
	4400 kg / 10000 lb		0.147 kg / 0.33 lb	5000
B320A; B520A; B520S; B720A; B720S	100 kg / 250 lb	2 mV/V	0.004 kg / 0.01lb	6000
	250 kg / 500 lb		0.01 kg / 0.02 lb	6000
	500 kg / 1000 lb		0.02 kg / 0.04 lb	6000
	750 kg / 1500 lb		0.03 kg / 0.06 lb	6000
	1000 kg / 2000 lb		0.04 kg / 0.08 lb	6000
	1250 kg / 2500 lb		0.05kg / 0.1 lb	6000
	1500 kg / 3000 lb		0.06 kg / 0.12 lb	6000
	2000 kg / 4000 lb		0.08 kg / 0.16 lb	6000
	2500 kg/5000lb SE		0.1 kg / 0.2 lb	6000
B530A; B530S; B730A; B730S	100 kg / 250 lb	2 mV/V	0.004 kg / 0.01lb	6000
	250 kg / 500 lb		0.01 kg / 0.02 lb	6000
	500 kg / 1000 lb		0.02 kg / 0.04 lb	6000
	1000 kg / 2500 lb		0.04 kg / 0.1 lb	6000
	2000 kg / 4000 lb		0.08 kg / 0.16 lb	6000
	2500 kg/5000lb SE		0.1 kg / 0.2 lb	6000
	3000 kg / 5000 lb LE		0.1 kg / 0.2 lb	5000
	5000 kg / 10000 lb		0.17 kg / 0.33 lb	5000
B540A; B540S; B740A; B740S	300 kg / 500 lb	2 mV/V	0.012 kg / 0.02 lb	6000
	500 kg / 1000 lb		0.02 kg / 0.04 lb	6000
	1000 kg / 2500 lb		0.04 kg / 0.1 lb	6000
	2000 kg / 4000 lb		0.08 kg / 0.16 lb	6000
	3000 kg / 5000 lb		0.1 kg / 0.2 lb	5000
	5000 kg / 10000 lb		0.17 kg / 0.33 lb	5000
	7500 kg / 15000 lb		0.25 kg / 0.5 lb	5000
	10000 kg / 20000 lb		0.33 kg / 0.67 lb	5000
B310A; B510A; B510S; B710A; B710S	100 kg / 250 lb	3 mV/V	0.004 kg / 0.01lb	6000
	250 kg / 500 lb		0.01 kg / 0.02 lb	6000
	500 kg / 1000 lb		0.02 kg / 0.04 lb	6000
	750 kg / 1500 lb		0.03 kg / 0.06 lb	6000
	1000 kg / 2000 lb		0.04 kg / 0.08 lb	6000
	1250 kg / 2500 lb		0.05kg / 0.1 lb	6000
	1500 kg / 3000 lb		0.06 kg / 0.12 lb	6000
	2000 kg / 4000 lb		0.08 kg / 0.16 lb	6000
	2500 kg/5000lb SE		0.1 kg / 0.2 lb	6000
	3000 kg/5000lb LE		0.1 kg / 0.2 lb	5000
	5000 kg / 10000 lb		0.17 kg / 0.33 lb	5000
	7500 kg / 15000 lb		0.25 kg / 0.5 lb	5000
	10000 kg / 20000 lb		0.33 kg / 0.67 lb	5000
B315A; B515A; B515S; B715A; B715S	100 kg / 250 lb	3 mV/V	0.004 kg / 0.01lb	6000
	250 kg / 500 lb		0.01 kg / 0.02 lb	6000
	500 kg / 1000 lb		0.02 kg / 0.04 lb	6000
	750 kg / 1500 lb		0.03 kg / 0.06 lb	6000
	1000 kg / 2000 lb		0.04 kg / 0.08 lb	6000
	1250 kg / 2500 lb		0.05kg / 0.1 lb	6000
	1500 kg / 3000 lb		0.06 kg / 0.12 lb	6000
	2000 kg / 4000 lb		0.08 kg / 0.16 lb	6000
	2500 kg/5000lb SE		0.1 kg / 0.2 lb	6000
	3000 kg/5000lb LE		0.1 kg / 0.2 lb	5000
	5000 kg / 10000 lb		0.17 kg / 0.33 lb	5000



**Changzhou Runningtech Sensing Co. Ltd.**  
Loadcell / B Series

**Test Conditions:** A Model B510S 2500 kg in stainless steel construction and a B510A 500 kg in alloy steel construction load cells were tested by the NMI Certain B.V. at The Netherlands facility. Testing was conducted in accordance with the OIML-CS arrangement, signed by the NCWM as a utilizing participant for load cell testing. Testing was conducted using deadweights as the reference standard. The load cell was tested over a temperature range of -10 °C to 40 °C with tests run at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test to determine the sensitivity of the load cell design to changes in barometric pressure was conducted. The data was analyzed for single and multiple load cell applications. OIML R60 selection criteria were used to determine which load cell capacities were tested.

**Evaluated By:** M.M.J. Meijer, E. Van der Griten NMI 23-085 (CN 10882)

**Type Evaluation Criteria Used:** *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2023 Edition. *NCWM Publication 14: Weighing Devices*, 2023 Edition.

**Conclusion:** The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

**Information Reviewed By:** D. Flocken (NCWM) 23-085

**Example of Device:**

