

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Compression, Bending Model: PA08x Series n_{max}: 4000 to 6000, Single Cell and Multiple Cell Capacity: 10 kg to 300 kg Accuracy Class: III Submitted By: Beijing True-Tec Co., Ltd 4/F, Bldg. 2, No. 8, Hong Da Bei Lu BDA Beijing, Beijing 100176 Tel: +86 10 67869219 x 0 Fax: +86 10 67862581 Contact: Jigang Sun Email: jjgang.sun@true-tec.com Web site: www.true-tec.com

Standard Features and Options

The specific load cells and parameters covered by this Certificate are identified in the table on Page 2.

- Nominal Output: 2 mV/V
- Excitation Voltage: 5-15 VDC
- Minimum dead load: 0 kg
- Counterforce Material: Aluminum
- 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.

Brett Gurney Chairman, NCWM, Inc.

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James Cassidy Chairman, National Type Evaluation Program Committee Issued: December 17, 2018

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Beijing True-Tec Co., Ltd

Load Cell / PA08x Series

<u>Application</u>: The load cells may be used in Class III and Class IIIL 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} values, and temperature range are suitable for the application. The manufacturer may market the load cells with fewer scale divisions (n_{max}) and with larger 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.

Specific Load Cells and Parameters:

Model	Capacity	n _{max}	Vmin	Minimum Dead Load
PA08R*	10 kg	6000	0.0006 kg	0 kg
PA08R	15 kg	6000	0.001 kg	0 kg
PA08R	20 kg	6000	0.0013 kg	0 kg
PA08R	30 kg	6000	0.002 kg	0 kg
PA08R	50 kg	6000	0.0025 kg	0 kg
PA08R	75 kg	6000	0.0038 kg	0 kg
PA08R	100 kg	6000	0.0050 kg	0 kg
PA08R	150 kg	6000	0.0075 kg	0 kg
PA08R*	200 kg	6000	0.010 kg	0 kg
PA08G*	50 kg	6000	0.003 kg	0 kg
PA08G	75 kg	6000	0.004 kg	0 kg
PA08G	100 kg	6000	0.006 kg	0 kg
PA08G	150 kg	6000	0.009 kg	0 kg
PA08G	200 kg	6000	0.012 kg	0 kg
PA08G	250 kg	6000	0.015 kg	0 kg
PA08L	50 kg	4000	0.003 kg	0 kg
PA08L	75 kg	4000	0.004 kg	0 kg
PA08L	100 kg	4000	0.006 kg	0 kg
PA08L	150 kg	4000	0.010 kg	0 kg
PA08L	200 kg	4000	0.013 kg	0 kg
PA08L	250 kg	4000	0.017 kg	0 kg
PA08L*	300 kg	4000	0.020 kg	0 kg

*Load cell tested

Identification: A pressure sensitive identification badge containing manufacturer name, model, capacity, NTEP certificate number and serial number is located on the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

<u>Test Conditions</u>: This certificate superseded Certificate of Conformance Number 14-080 and was issued to add the 150 and 200 kg capacities plus lower the v_{min} values for the Model PA08R cells. A model PA08R 100 kg capacity load cell was tested by the NMi Certain B.V. at The Netherlands facility. Testing was conducted in accordance with the OIML Certificate System, 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 not conducted. The data were analyzed for single load cell applications. OIML R60 selection criteria was used to determine cells tested. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 14-080</u>: Model PA08x (10 kg, 50 kg, 100 kg and 300 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 not conducted. The data were analyzed for single load cell applications. OIML R60 selection criteria was used to determine cells tested.



Beijing True-Tec Co., Ltd

Load Cell / PA08x Series

Evaluated By: E. van der Grinten (NMi), R. Scholten (NMi) 14-080; M.M.J. Meijer (NMi), E. van der Grinten (NMi) 14-080A1

Type Evaluation Criteria Used: NIST, <u>Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing</u> and <u>Measuring Devices</u>, 2018. NCWM, <u>Publication 14: Weighing Devices</u>, 2018.

<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) 14-080, 14-080A1

Examples of Device:

