



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance
for Weighing and Measuring Devices

For:

Load Cell
Single Point
Model: NA Series
 n_{\max} : 3000 Class III, Single Cell
Capacity: 3 kg to 1500 kg
Accuracy Class: III

***Submitted By: Contact. Info Updated October 2017**

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Standard Features and Options

- Model NA Series, specific load cell capacities and v_{\min} values are listed in the table below.
- Nominal output: 2.0 mV/V
- Aluminum material
- 4 wire design
- Minimum dead load: 0 kg

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.

Jerry Buendel
Chairman, NCWM, Inc.

Ronald Hayes
Chairman, National Type Evaluation Program Committee
Issued: March 8, 2016

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Load Cell / NA Series

Application: The load cells may be used in Class III scales for single 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.

Load Cell Models, Capacities and V_{\min} Values: * Denotes load cells tested.

Model	Capacity	V_{\min} Class III
NA1	3 kg*	0.0004 kg
NA1	6 kg	0.0008 kg
NA1	10 kg	0.0013 kg
NA1	15 kg	0.0019 kg
NA1	20 kg*	0.0020 kg
NA1	30 kg	0.0030 kg
NA1	35 kg	0.0035 kg
NA1	40 kg	0.004 kg
NA1	50 kg	0.005 kg
NA1	60 kg	0.006 kg
NA1	80 kg	0.008 kg
NA1	100 kg	0.010 kg
NA2	200 kg*	0.021 kg
NA2	250 kg	0.026 kg
NA2	300 kg	0.032 kg
NA2	350 kg	0.037 kg
NA2	500 kg	0.053 kg
NA3	200 kg	0.021 kg
NA3	300 kg*	0.043 kg
NA3	500 kg	0.071 kg
NA3	600 kg	0.086 kg
NA3	750 kg	0.107 kg
NA3	800 kg	0.114 kg
NA3	1000 kg	0.143 kg
NA3	1200 kg	0.171 kg
NA4	200 kg	0.021 kg
NA4	250 kg	0.026 kg
NA4	300 kg	0.032 kg
NA4	500 kg	0.053 kg
NA4	600 kg	0.063 kg
NA5	200 kg	0.021 kg



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Load Cell / NA Series

NA5	250 kg	0.026 kg
NA5	300 kg	0.032 kg
NA5	500 kg	0.053 kg
NA5	600 kg	0.063 kg
NA10	3 kg	0.0004 kg
NA10	6 kg	0.0008 kg
NA10	10 kg	0.0013 kg
NA10	15 kg	0.0019 kg
NA10	20 kg	0.0020 kg
NA10	30 kg	0.0030 kg
NA10	35 kg	0.0035 kg
NA10	40 kg	0.004 kg
NA10	50 kg	0.005 kg
NA10	60 kg	0.006 kg
NA10	80 kg	0.008 kg
NA10	100 kg	0.010 kg
NA128	200 kg	0.021 kg

Identification: A pressure sensitive identification label located on the cell, states manufacturer name, model, serial number, rated capacity, class, and NTEP certificate number. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

Test Conditions: This Certificate supersedes Certificate of Conformance number 15-079 and is issued without additional tests to reactivate Certificate of Conformance number 15-079 without lapse. Contact information has also been updated. Previous test conditions are listed below for reference.

Certificate of Conformance Number 15-079: Four load cells (3kg, 20 kg, 200 kg and 300 kg capacity) 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 to determine sensitivity of the load cell design to changes in barometric pressure was conducted. The data were analyzed for single load cell applications. OIML R60 selection criteria were used to determine cells tested.

Evaluated By: E. van der Grinten, J. Kornjnenburg (NMI) 15-079

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2015. NCWM, Publication 14: Weighing Devices, 2015.

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) 15-079, 15-079A1

Examples of Device:



Hope Technologic (Xiamen) Co., LTD

Load Cell / NA Series



NA1



NA2



NA10



NA3

