



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell
Compression
Model: CN3
 n_{max} : 5000, Single Cell, Class III,
10 000, Single Cell, Class III L
Capacity: 500 kg to 50 000 kg

Submitted By:

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Standard Features and Options

- Specific load cell capacities and v_{min} values covered by this certificate are listed in the table below.
- Nominal output: 2.0 mV/V
- Stainless Steel material
- 6 wire design
- Minimum Dead Load: 0 kg

Model	Capacity (kg)	v_{min} Class III (kg)	v_{min} Class III L (kg)
CN3	500	0.025	0.025
	1000	0.067	0.067
	2000	0.133	0.133
	5000	0.333	0.333
	10 000	0.5	0.5
	20 000	1.0	1.0
	30 000	1.5	1.5
	50 000	2.5	2.5

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.

Hal Prince
Chairman, NCWM, Inc.

Craig VanBuren
Chair, NTEP Committee
Issued: October 12, 2020

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**Flintec UK Ltd.**

Load Cell / CN3

Application: The load cells may be used in Class III or Class III L 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.

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

Test Conditions: A Model CN3, 500 kg, 1000 kg, and 10 000 kg capacity load cells were tested by the NMi Certin B.V. at the Netherlands facility. Testing was conducted in accordance with the OIML-CS for OIML R60 Certificate System, signed by the NCWM as a utilizing participant of load cell test data. Testing was conducted using deadweights as the reference standard. The load cells were tested over a temperature range of $-10\text{ }^{\circ}\text{C}$ to $40\text{ }^{\circ}\text{C}$ 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 was analyzed for single load cell applications. OIML R60 selection criteria was used to determine which load cell capacities were tested.

Evaluated By: M.M.J. Meijer (NMi); E.van der Grinten (NMi)

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2020 Edition. *NCWM Publication 14: Measuring Devices*, 2020 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)

Example(s) of Device:



CN3 500 kg



CN3 10 000 kg