



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: 680, 680 HE, CLS 680
 n_{max} : 10 000 See note in standard features and options section
Accuracy Class: III / IIIL

Submitted By:


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Standard Features and Options

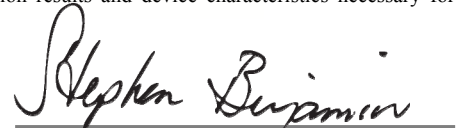
- Semi-Automatic (push button) Zero Setting Mechanism
- Automatic Zero Tracking (AZT)
- Semi-Automatic (push button) Tare
- Initial Zero Setting Mechanism (IZSM)
- Keyboard Tare
- Gross/Net Display
- 100 – 240 VAC
- 9 – 36 VDC
- Unit Switching (lb & kg)
- Remote Printer Capability
- Weight Accumulation
- Multiple Calibration Points (5)
- RS485
- USB
- RS232
- Ethernet
- Plastic, aluminum or stainless-steel housing
- Category 1 sealing method (Wire Security Seal and Audit trail)
- CLS communication software (Model: CLS 680 only)

Note: Models 680 and 680HE have a 10 000 n_{max} Model CLS 680 has a 5000 n_{max} .

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.



Craig VanBuren
Chairman, NCWM, Inc.



Stephen Benjamin
Committee Chair, NTEP Committee
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Rice Lake Weighing Systems
Indicating Element / 680, 680 HE, CLS 680

Application: General purpose indicating element for use with any NTEP certified and compatible weighing element.

Identification: The required information appears on a self-destructive label on the side of the indicator. The capacity x division statement is on a label adjacent to the weight display.

Sealing: All models use a category 1 sealing method consisting of a wire security seal. The 680 and CLS 680 use a wire seal threaded through three drilled head screw on the bottom and or back of the housing which prevents access to the calibration and configuration parameters switch. The 680HE uses a wire seal threaded thru drilled clevis pins that prevent the latches from being opened. All models have an audit trail. Press menu button, reads audit, press tare button reads Lrv, press print button, reads calibr, press the down button, reads cal no. press tare button, reads config, press the down button, reads conf. no, press menu 2 times back to weigh mode.

Test Conditions: This certificate supersedes Certificate of Conformance 19-021A1 and is issued to add a new aluminum housing, DC power supply, main processor board and CLS software. The emphasis of the evaluation was on the device design, operation, performance, and compliance with influence factors. The indicator was interfaced with a load receiving element to verify compliance with zero, zone of uncertainty and motion detection requirements. A load cell simulator was interfaced to the device, multiple increasing/decreasing tests were performed. The device was tested over a temperature range of -10° C to 40° C (14° F to 104° F). Tests were conducted using 8.8 VDC 12 VDC and 39.6 VDC. Previous test conditions are listed below.

Certificate of Conformance 19-021A1: This certificate supersedes Certificate of Conformance 19-021 and is issued to add a new plastic housing, DC power supply, main processor board and additional Category 1 sealing method. The emphasis of the evaluation was on the device design, operation, performance, and compliance with influence factors. The indicator was interfaced with a load receiving element to verify compliance with zero, zone of uncertainty and motion detection requirements. A load cell simulator was interfaced to the device, multiple increasing/decreasing tests were performed. The device was tested over a temperature range of -10° C to 40° C (14° F to 104° F). Tests were conducted using 8.7 VDC 18 VDC and 39.6 VDC. Previous test conditions are listed below.

Certificate of Conformance 19-021: The emphasis of the evaluation was on the device design, operation, marking requirements, performance, and compliance with influence factors. The indicator was interfaced with a load receiving element to verify compliance with zero, zone of uncertainty and motion detection requirements. A load cell simulator was interfaced to the device, several increasing/decreasing tests were performed. The device was tested over a temperature range of -10° C to 40° C (14° F to 104° F). Tests were conducted using 85 VAC and 264 VAC.

Evaluated By: M. Kelley (OH) 19-021, J. Gibson (OH) 19-021A1, 19-021A2

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2020 Edition. *NCWM Publication 14 Weighing 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: J. Truex (NCWM) 19-021, D. Flocken (NCWM) 19-021A1, 19-021A2



Rice Lake Weighing Systems
Indicating Element / 680, 680 HE, CLS 680

Example of Device:

Model 680



Model 680 HE



Model CLS 680

