



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: SIWAREX WP231
 $n_{\max}$: 10 000
Class: III / III L

***Submitted By: Contact Info. Updated December 2020**

Siemens
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Standard Features and Options

- Semi-automatic (push button) zero setting mechanism (SAZSM)
- Automatic Zero Tracking (AZT)
- Initial Zero Setting Mechanism (IZSM)
- Semi-automatic (push button) tare
- Multiple Tare memory
- Gross/tare/net display
- Unit of measure capability (lb, kg, g, oz, t, tn)
- Center of zero annunciator
- Stability annunciator
- RS 485 (programming port)
- Analog output (0/4-20mA)
- 4x 24V DC digital output
- 4x 24V DC digital input
- SIMATIC S7-1200 PLC backplane bus
- DC Power (24 volts)
- HMI- human machine Interface (touch screen) for display and configuration of one or modules (optional)
- Remote display (optional)
- Category 1 physical seal (pressure sensitive)
- Ethernet port

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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**Siemens**

Indicating Element / SIWAREX WP231

Application: A general purpose indicating element for use with any NTEP certified and compatible weighing/load receiving element.

Identification: All markings are accessed by “tapping” or “clicking” the CC number on the weight display screen which then will display a pop-up box with the required markings.

Sealing: The indicating element uses a category 1 physical seal and should be sealed per the manufacturer’s instructions. A jumper is installed in the module terminal block prior to sealing to prevent modification of calibration. A metal terminal cover and shield are fixed into place covering the load cell cable attachment and the jumper. Two screw terminals hold the metal plate in place, these terminals are tightened through holes in the metal plate and a pressure sensitive adhesive security seal is placed over the terminal screws. The security seal displays a “checkerboard” pattern when removed. When the jumper is in place the device is sealed.

Test Conditions: The emphasis of the evaluation was on the device design, markings, operation and compliance with influence factor requirements. A SIWAREX WP231 indicator was interfaced with Siemens HMI (Human Machine Interface) display and was submitted for this evaluation. Multiple increase/decrease tests were conducted with the indicator interfaced with weighing/load receiving element and a load cell simulator. The device was evaluated for compliance with marking requirements, zero, discrimination and motion detection. The indicating element was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Additional tests were conducted using a power supply of 14.5 VDC, 24 VDC and 26.4 VDC.

Evaluated By: J. Gibson (OH)

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2020 Edition. *NCWM Publication 14 Measuring Devices*, 2019 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:

Model: SIWAREX WP231 Human machine Interface (HMI)





Siemens

Indicating Element / SIWAREX WP231

Model: SIWAREX WP231 Weighing Module

Sealing

