

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Indicating Element Digital Electronic Model: C320 n<sub>max</sub>: 10 000 Accuracy Class: III / III L Submitted By: Rinstrum Pty Ltd. 4/3 1 Henry Street Loganholme, Queensland Australia 4129 Tel: +61 7 32167166 Fax: +61 7 32166211 Contact: Darren Pearson Email: darren.pearson@rinstrum.com Web site: www.rinstrum.com

## **Standard Features and Options**

- Semi-Automatic (push button) Zero Setting Mechanism (SAZSM)
- Automatic Zero Tracking (AZT)
- Rinlink (infrared communication port for technician use)
- Semi-Automatic (push button) Tare
- Keyboard (preset) Tare
- Gross/Net Display
- Alphanumeric Display
- Category 1 physical seal
- Audit trail (calibration and configuration counters)
- Units Selection (lb, oz, ton, kg, g, metric ton)

- Multiple Programmable Print Formats
- Multiple Range (2 ranges maximum)
- Multi Interval (2 intervals maximum)
- WiFi / Ethernet / USB ports (optional expansion ports)
- AC Power (100 VAC to 240 VAC)
- DC power (5.0 VDC to 24 VDC)
- LCD Display
- Plastic Enclosure

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.

Gene Robertson Chair, NCWM, Inc.

Mangungue

Mahesh Albuquerque Chair, NTEP Committee Issued: October 12, 2023

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**Rinstrum Pty Ltd** Indicating Element / C320

Application: General-purpose indicator for use with NTEP certified and compatible weighing/load receiving elements.

**Identification:** An adhesive identification badge containing all required information is located on the exterior of the housing. This badge repeats the word "VOID" when removed.

<u>Sealing</u>: Category 1 sealing with audit trail for calibration and configuration: To seal the indicator remove the two screws located on the rear of the indicator that holds the front cover and PC board. On the upper right corner of the PC board is the "Cal Switch" with two tabs that stick up that a cap sits over and can be sealed with lead and wire seal thru the two holes in the tabs. An optional adhesive tamper proof seal can also be used to cover the opening of the "Cal Switch".

The C320 is equipped with non-resettable counters that increment every time the unit is calibrated or configured. To view the counters power down the indicator and then power back up or enter the setup menus.

The calibration and configuration counters will be displayed during the power up sequence for approximately two seconds.

- a. The calibration counter will be identified by Cal Cnt then Cxxxx (example: C.0005).
- b. The setup configuration counter will be identified by Config then F.xxxx (example: F.0005).

<u>Test Conditions</u>: The emphasis of the evaluation was on the device design, operation, marking requirements, performance, and compliance with influence factors. A Rinstrum model C320 was submitted for evaluation and interfaced with a load cell simulator. Several increasing/decreasing load tests, and warm up tests were performed. The device was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Tests were also conducted using 85 VAC to 264 VAC, and 4.1 VDC to 26.4 VDC. The indicating element was also interfaced with a weighing/load receiving element to verify compliance with zero, zone of uncertainty, motion detection, unit conversion and printer format requirements. The "Rinlink" infrared communication port was verified for correct functionality.

Evaluated By: B. Stone (OH) 23-090 (CN 10888)

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices,* 2023 Edition. *NCWM Publication 14 Weighing Devices,* 2023 Edition.

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: D. Flocken (NCWM) 23-090



**Rinstrum Pty Ltd** Indicating Element / C320

## Example(s) of Device:





