



NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Non-Computing Scale  
Digital Electronic  
Model: BCE Series (see table on page 2)  
 $n_{max}$ : 220 000  
 $e_{min}$ : 0.0001 g (see table on page 2)  
Capacity: see table on page 2  
Platform: see table on page 2  
Accuracy Class: I / II (see table on page 2)

**Submitted By:**

Sartorius Lab Instruments GmbH & Co. KG  
Otto-Brenner-Straße 20  
Goettingen Germany 37079  
Tel: +49 551 3080  
Contact: Karlheinz Banholzer  
Email: [karlheinz.banholzer@sartorius.com](mailto:karlheinz.banholzer@sartorius.com)  
Website: [www.sartorius.com](http://www.sartorius.com)

**Standard Features and Options**

- Initial Zero Setting Mechanism (IZSM)
- Automatic Zero Tracking (AZT)
- AC/DC Adapter
- Liquid Crystal Display
- External Unit Conversion (g, oz, lb, ozt, dwt)
- Draft Shields (model dependent)
- Initial Tare Mechanism
- Semi-automatic Zero Setting Mechanism (SAZSM)
- Communication Ports: RS-232, USB
- Level Indicator
- Semi-Automatic (Push button) Tare
- Power Saving Feature (Sleep Mode & Auto Shut Off)
- External printer

"The counting feature is not legal for trade," is labeled on the front of the device for non-prescription models.

Models with "I" in their model designation have internal calibration Example: BCE623I-1NUS

**Load Cells Used:**

Types BC-EB, BC-ED, BC-EE: Sartorius Lab Instruments GmbH & Co. KG - Electromagnetic force compensation load cell.  
Type BC-EI: Bizerba SE & Co. KG – WS8 strain gauge load cell with evaluation electronics.

Temperature Range: Class I Devices 17 °C to 27 °C (63 °F to 81 °F) / 10 °C to 30 °C (50 °F to 86 °F) with iso-CAL  
Class II Devices 10 °C to 30 °C (50 °F to 86 °F)

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.

Ivan Hankins  
Chair, NCWM, Inc.

Hal Prince  
Chairman, National Type Evaluation Program Committee  
Issued: February 21, 2022

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

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**Sartorius Lab Instruments GmbH & Co. KG.**

Non-Computing Scale / BCE Series

Model	Maximum Capacity [g]	e [g]	d [g]	n <sub>max</sub> Max / e	Temperature range	Accuracy Class	Type	Draft shield height and Weighing pan size
BCE64-1NUS	60	0.001	0.0001	60000	+17°C to +27°C	I	BC-EB	h=240 mm Ø 90 mm
BCE64I-1NUS	60	0.001	0.0001	60000	+17°C to +27°C +10°C to +30°C iso-CAL	I	BC-EB	h=240 mm Ø 90 mm
BCE124-1NUS	120	0.001	0.0001	120000	+17°C to +27°C	I	BC-EB	h=240 mm Ø 90 mm
BCE124I-1NUS	120	0.001	0.0001	120000	+17°C to +27°C +10°C to +30°C iso-CAL	I	BC-EB	h=240 mm Ø 90 mm
BCE224-1NUS	220	0.001	0.0001	220000	+17°C to +27°C	I	BC-EB	h=240 mm Ø 90 mm
BCE224I-1NUS	220	0.001	0.0001	220000	+17°C to +27°C +10°C to +30°C iso-CAL	I	BC-EB	h=240 mm Ø 90 mm
BCE223-1NUS	220	0.01	0.001	22000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE223I-1NUS	220	0.01	0.001	22000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE323-1NUS	320	0.01	0.001	32000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE323I-1NUS	320	0.01	0.001	32000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE423-1NUS	420	0.01	0.001	42000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE423I-1NUS	420	0.01	0.001	42000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE623-1NUS	620	0.01	0.001	62000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE623I-1NUS	620	0.01	0.001	62000	+10°C to +30°C	II	BC-ED	h=240 mm Ø 120 mm
BCE653-1NUS	650	0.01	0.001	65000	+10°C to +30°C	II	BC-ED	h=50 mm Ø 120 mm
BCE653I-1NUS	650	0.01	0.001	65000	+10°C to +30°C	II	BC-ED	h=50 mm Ø 120 mm
BCE622-1NUS	622	0.1	0.01	6200	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE622I-1NUS	622	0.1	0.01	6200	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE822-1NUS	820	0.1	0.01	8200	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE822I-1NUS	820	0.1	0.01	8200	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE1202-1NUS	1200	0.1	0.01	12000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE1202I-1NUS	1200	0.1	0.01	12000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE2202-1NUS	2200	0.1	0.01	22000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE2202I-1NUS	2200	0.1	0.01	22000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE3202-1NUS	3200	0.1	0.01	32000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE3202I-1NUS	3200	0.1	0.01	32000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE4202-1NUS	4200	0.1	0.01	42000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE4202I-1NUS	4200	0.1	0.01	42000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE6202-1NUS	6200	0.1	0.01	62000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE6202I-1NUS	6200	0.1	0.01	62000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE2201-1NUS	2200	0.1	0.1	22000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE2201I-1NUS	2200	0.1	0.1	22000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE5201-1NUS	5200	0.1	0.1	52000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE5201I-1NUS	5200	0.1	0.1	52000	+10°C to +30°C	II	BC-EE	180 mm x 180 mm
BCE8201-1NUS	8200	1	0.1	8200	+10°C to +30°C	II	BC-EI	180 mm x 180 mm
BCE6200-1NUS	6200	1	1	6200	+10°C to +30°C	II	BC-EI	180 mm x 180 mm
BCE8200-1NUS	8200	1	1	8200	+10°C to +30°C	II	BC-EI	180 mm x 180 mm

**Models with “I” in their model’s designation have internal calibration Example: BCE623I-1NUS**

**iso-CAL: Time and temperate depending automatic internal calibration.**

**Application:** The BCE Series of devices are suitable for use in any class I and II, direct or indirect weighing application.

**Identification:** The device markings are on a pressure sensitive, tamper evident label located on the side of the scale, the appropriate capacity x division markings are adjacent the weight display.

**Sealing:** The device uses a category 1 physical seal and can be sealed by threading a wire security seal. This prevents access to the calibration switch inside the device.



## Sartorius Lab Instruments GmbH & Co. KG.

Non-Computing Scale / BCE Series

**Test Conditions:** This device was submitted to and evaluated by Measurement Canada under the U.S. and Canadian MRA. The technical data was reviewed by the Ohio NTEP laboratory for compliance with Publication 14 and NIST Handbook 44 requirements. The emphasis of the evaluation was on device design, operation, performance, and compliance with influence factor requirements.

**Evaluated By:** C. Hnatiuk (MC), J. Gibson (OH)

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2022 Edition. *NCWM Publication 14 Measuring Devices*, 2021 Edition.

**Conclusion:** The results of the evaluation and provided by the manufacturer indicate the device complies with applicable requirements.

**Information Reviewed By:** D. Flocken (NCWM)

### Examples of Device:

90 mm diameter platter with draft shield



120 mm diameter platter with short draft shield





**Sartorius Lab Instruments GmbH & Co. KG.**

Non-Computing Scale / BCE Series

120 mm diameter platter with tall draft shield



180 mm x 180 mm platter



Sealing of all models

