



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: TLB-XX (See below)
 n_{\max} : 5000
Accuracy Class: III

Submitted By:

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Standard Features and Options

Automatic Zero Tracking (AZT)
Semi-Automatic (Push Button) Zero
Programmable Tare
Semi-Automatic (Push Button) Tare
DC Power Supply 12-24 VDC
Gross/Net Display
Linearity Calibration Points (5)
Remote Calibration
LED Display

XX Suffix Designates Communication Options:

TLB – (analog + serial RS485)
TLB485 – (serial RS485)
TLBPROFI – (PROFIBUS)
TLBPROFINETIO – (PROFINET/IO)
TLBCANOPEN – (CANOPEN)
TLBDEVICENET – (DEVICENET)
TLBETHEIP – (ETHERNET/IP)
TLBETHERCAT – (ETHERCAT)
TLBETHETCP – (ETHERNET/TCP/IP)
TLBMODBUSTCP – (MODBUS/TCP)
TLBCCLINK – (CC-LINK)
TLBSERCOS – (SERCOS-III)
TLBPOWERLINK – (POWERLINK)

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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.

Ronald Hayes
Chairman, NCWM, Inc.

John Gaccione
Committee Chair, National Type Evaluation Program Committee
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Indicating Element / TLB-XX

Application: A general purpose indicating element to be interfaced with an NTEP certified and compatible weighing element.

Identification: The adhesive identification badge is located on the top of the indicator. If the badge is removed the word “VOID” repeatedly appears.

Sealing: The indicator is sealed by using a self-destructive adhesive label placed over the seam between the top and bottom half of the indicator. The seal prevents the top and bottom half from being separated allowing access to the jumper shown below from being moved. When the jumper is on, the indicator can be calibrated and configured. The jumper is off the indicator cannot be calibrated or configured. Also when in calibration or configuration mode, the annunciators continually scroll to show the indicator is not in the regular weighing mode. See pictures below for sealing method and jumper location.



Jumper Location



Sealing Method

Test Conditions: The emphasis of this evaluation was on the device design, operation, marking requirements, performance, and compliance with influence factors. The indicator was interfaced with a Rice Lake BM 1212 (NTEP CC 95-072) weighing/load receiving element to verify zero, discrimination zone of uncertainty, and motion detection requirements. A load cell simulator was used to perform several increasing/decreasing tests, DC voltage testing at 12 VDC and 24 VDC, and temperature testing over a range of -10 °C to 40 °C (14 °F to 104 °F).

Evaluated By: T. Buck(OH)

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2014 Edition. *NCWM Publication 14 Weighing Devices*, 2014 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)



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Example of Device:

