NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Single Point
Model: SLB215 & SLB415
n_{max} : 5000, Multiple Cell
Capacity: 110 kg to 4400 kg
Accuracy Class: III

Submitted By:
Mettler-Toledo, LLC
1150 Dearborn Drive
Worthington, OH 43085
Tel: 614-438-4387
Fax: 614-438-4355
Contact: Scott Davidson
Email: scott.davidson@mt.com
Web site: www.mt.com

Standard Features and Options

- The specific load cells covered by this Certificate are identified by the load cell capacities (see table below).

- Nominal Output: 1 mV/V and 2 mV/V
- Nominal Input Impedance: 350 Ohms
- Excitation Voltage: 5-15 Vdc
- Minimum dead load: 0 kg
- Counterforce Material: Stainless Steel
- 4 Wire Design

Load Cell Parameters:

Capacity	n_{max}	v_{min}	Minimum Dead Load
110 kg *	5000	0.018 kg	0 kg
220 kg	5000	0.037 kg	0 kg
550 kg	5000	0.092 kg	0 kg
1100 kg *	5000	0.183 kg	0 kg
2200 kg	5000	0.367 kg	0 kg
3000 kg	5000	0.500 kg	0 kg
4400 kg	5000	0.733 kg	0 kg

*Load cells tested

SLB215 (thread hole), SLB415 (rocker pin)

Temperature Range: -10 ºC to 40 ºC (14 ºF to 104 ºF)

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.

John Gaccione
Chairman, NCWM, Inc.

Stephen Benjamin
Chairman, National Type Evaluation Program Committee

Issued: August 8, 2013

Mettler-Toledo, LLC

Load Cell / SLB215 & SLB415

Application: The load cells may be used in Class III Scales for multiple cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the v_{min} values, and temperature range are suitable for the application. The manufacturer may market the load cells with fewer scale divisions (n_{max}) and with larger v_{min} values than those listed on the certificate. However, the load cells must be marked with the appropriate n_{max} and v_{min} for which the load cell may be used.

Identification: A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

Test Conditions: A Model SLB415 (110 kg and 1100 kg capacity) load cell were tested by the NMi Certain B.V. at The Netherlands facility. Testing was conducted in accordance with the OIML DoMC Mutual Acceptance Arrangement, signed by the NCWM as a utilizing participant for load cell testing. Testing was conducted using deadweights as the reference standard. The load cells were tested over a temperature range of -10 °C to 40 °C with tests run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure. The data were analyzed for multiple load cell applications. OIML R60 selection criteria was used to determine cells tested.

Evaluated By: C. Bontenbal (NMi), R. Scholten (NMi)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2013. NCWM, Publication 14: Weighing Devices, 2013.

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)

Examples of Device: