



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell
Single-Point Bending Beam
Model: PW15AH Series and PW15PH Series
 $n_{\max}$: 5 000, Single Cell
Capacity: 10 kg to 100 kg
Accuracy Class: III

Submitted By:

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Standard Features and Options

PW15AH Series
Nominal output: 2.0 mV/V
6-wire design
Maximum excitation voltage: 10 V AC/DC
Material: Stainless Steel (hermetically sealed) Fixed cable

PW15PH Series
Nominal output: 2.0 mV/V
6-wire design
Maximum excitation voltage: 10 V AC/DC
Material: Stainless Steel (hermetically sealed) Plug entry for cable

Model	Capacity (kg)	$V_{\min}$ (g)	Minimum Dead Load
PW15AH/PH-10kg	10	0.6	0
PW15AH/PH-20kg	20	1.2	0
PW15AH/PH-50kg	50	3	0
PW15AH/PH-100kg	100	6	0

Temperature range of -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 *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.

Hal Prince
Chairman, NCWM, Inc.

Craig VanBuren
Chair, NTEP Committee
Issued: October 28, 2020

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Hottinger Brüel & Kjaer GmbH
Single-Point Bending Beam Load Cell / PW15AH/PH

Application: These load cells may be used in Class III scales for single 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 cell with fewer 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 name, 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 manufacturer name, model designation, serial number of the load cell.

Test Conditions: This Certificate of Conformance supersedes Certificate of Conformance Number 09-013A1 and was issued to indicate a company name change from Hottinger Baldwin Messtechnik GmbH to Hottinger Brüel & Kjaer GmbH. No additional testing was required. Test Conditions are listed below for reference.

Certificate of Conformance Number 09-013A1: A PW15AH 10 kg and PW15PH 50 kg capacity load cells were tested by the NMI Certin B.V., at the Netherlands facility. Testing was conducted in accordance with the OIML-CS, 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 to determine sensitivity of the load cell design to changes in barometric pressure was conducted. The data were analyzed for single load cell applications. OIML R60 selection criteria were used to determine cells tested.

Certificate of Conformance Number 09-013: Two 20 kg capacity load cells were tested using dead weights as the reference standard. The data was analyzed for single cell applications. The load cells were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Three tests were 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.

Evaluated By: K. Jones (CA) 09-013; S.J. Koeman (NMI) 09-013A1; E. van der Grinten (NMI) 09-013A1; M. Manheim (NCWM) 09-013A1, 09-013A2

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2019 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: J. Truex (NCWM)09-013; D. Flocken (NCWM) 09-013A1, 09-013A2

Example(s) of Device:



PW15AH



PW15PH