



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Compression
Model: PR 6212 Series
 n_{max} : 2000 to 3000, Class III, Multiple Cell
2000 to 5000, Class III, Multiple Cell
Capacity: 500 kg to 10 000 kg
Accuracy Class: III/III

Submitted By:
Minebea Intec GmbH
Meiendorfer Strasse 205 A
22145 Hamburg
Germany
Tel: +49.40.67960-238
Fax: +49.40.67960-500
Contact: Juergen Stolte
Email: juergen.stolte@minebea-intec.com
Web site: www.minebea-intec.com

Standard Features and Options

- The specific load cell models, capacities and v_{min} values covered by this Certificate are listed in the table below.
- Nominal Output: 2.0 mV/V
- Stainless Steel
- 4 Wire Design
- Minimum Dead Load: 0 kg

| Model | Capacity (kg) | Class III, Multiple Cell | | Class III, Multiple Cell | |
|--------------------|---------------|--------------------------|-----------|--------------------------|-----------|
| | | v_{min} (g) | n_{max} | v_{min} (g) | n_{max} |
| PR 6212 Series | 500* | 62.5 | 3000 | 62.5 | 5000 |
| | 1000 | 125 | 3000 | 62.5 | 5000 |
| | 2000 | 250 | 3000 | 83.3 | 5000 |
| *load cells tested | 3000* | 600 | 2000 | 200 | 2000 |
| | 5000 | 1000 | 2000 | 333 | 2000 |
| | 10 000 | 2000 | 2000 | 666 | 2000 |

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.

James Cassidy
Chairman, NCWM, Inc.

Kristin Macey
Chairman, National Type Evaluation Program Committee
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1135 M Street, Suite 110 / Lincoln, Nebraska 68508

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Minebea Intec GmbH

Load Cell / PR 6212 Series

Application: The load cells may be used in multiple cell applications Class III and III L 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} value, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions (n_{\max}) and with greater 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 lasered identification label located on the cell, states manufacturer name, model, serial number, v_{\min} and rated capacity. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

Test Conditions: A 500 kg and a 3000 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 to determine sensitivity of the load cell design to changes in barometric pressure was conducted. The data were analyzed for multiple load cell applications. OIML R60 selection criteria were used to determine cells tested.

Evaluated By: M.M.J. Meijer, E. van der Grinten (NMI)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2017. NCWM, Publication 14: Weighing Devices, 2017.

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)

Example of Device:

