



NATIONAL TYPE EVALUATION PROGRAM

*Certificate of Conformance*  
*for Weighing and Measuring Devices*

**For:**  
Load Cell  
Column  
Model: C2P1  
 $n_{max}$  Multiple: 4 500  
Capacity: 20 000 to 200 000 lb  
Accuracy Class: III L

**Submitted By:**  
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**Standard Features and Options**

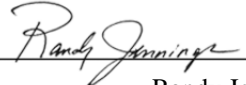
The specific models of load cells covered by this Certificate are identified by the capacity of each load cell represented. The specific load cell capacities,  $v_{min}$  and minimum dead loads are listed below.

Capacity	$v_{min}$ (lb)	Minimum Dead Load (lb)
20 000	1.8	25
50 000	4.5	25
100 000	9.0	25
200 000	18.0	25

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.

  
Tim Tyson  
Chairman, NCWM, Inc.

  
Randy Jennings  
Chairman, National Type Evaluation Program Committee  
Issued: May 19, 2011

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## Vishay Transducers

### Load Cell / C2P1

**Application:** The load cells may be used in Class III scales for both single and multiple cell applications consistent with the model designations and parameters specified in this certificate.

**Test Conditions:** This Certificate supersedes Certificate of Conformance number 87-060A1 and was issued without additional testing to reactivate Certificate of Conformance number 87-060A1 without lapse. Changes were also made to update the contact information. Previous test conditions are listed below for reference.

**Certificate of Conformance Number 87-060A1:** This Certificate supersedes Certificate of Conformance number 87-060 and was issued without additional testing to reactivate Certificate of Conformance number 87-060 without lapse. Changes were also made to update the contact information.

**Certificate of Conformance Number 87-060:** Two 50 000 lb capacity load cell was tested to capacity using a dead weight machine. The data were analyzed for multiple load cell applications. The cell was tested over a temperature range of -10 °C to 40 °C. Three tests were run on the load 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 manufacturer's laboratory was used to collect the test data.

Representatives from the National Bureau of Standards evaluated the manufacturer's test facility, witnessed repeat tests on the load cells, and analyzed the data. The results indicate that the load cells comply with the applicable requirements of NBS Handbook 44.

This certificate replaces previously issued Provisional Certificate of Conformance Number 87-060P and Provisional Addendum Certificate Number 87-060PA.

**Evaluated By:** NIST Force Group, NIST Office of Weights and Measures, 87-060

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2011. NCWM, Publication 14: Weighing Devices, 2011.

**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) 87-060A1, 87-060A2

#### **Example of Device:**



Model C2P1