

***National Type Evaluation Program
 Certificate of Conformance
 for Weighing and Measuring Devices***

For:
 Load Cell
 Single-Ended Shear Beam
 Model: 5123-XX-YK-ZZZZ Series
 n_{max} : Single Cell: 3000
 n_{max} : Multiple Cells: 5000
 Capacity: 1000 lb to 10 000 lb

 Accuracy Class: III

Submitted by:

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Standard Features and Options

The Model 5123 Series is identified by the designation 5123-X₁ X₂-YK-Z₁ Z₂ Z₃ Z₄, where

5123	X ₁	X ₂	YK	Z ₁	Z ₂	Z ₃	Z ₄
	A = Class III	n_{max} in thousands	capacity in thousands of pounds	electrical cable length or connector		P = analog D = digital	wiring and private label variations

Load Cell Parameters:

Capacity (lb)	Single Cell v_{min} (lb)	Multiple Cell v_{min} (lb)	Minimum Dead Load (lb)
1000	0.08	0/07	75
2500	0.30	0/17	125
4000	0.43	0/28	125
5000	0.50	0.35	150
7500	0.60	0.52	150
10 000	0.80	0.70	150

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

This device was evaluated under the National Type Evaluation Program (NTEP) 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.

Effective Date: April 9, 1999

Louis E. Straub

Louis E. Straub
 Chairman, NCWM, Inc.

G. Weston Diggs

G. Weston Diggs
 Chairman, National Type Evaluation Program Committee

Issue date: July 12, 1999

Note: The National Conference on Weights and Measures does not "approve", "recommend", or "endorse" any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

Revere Transducers, Inc.
Single-Ended Shear Beam Load Cell
Model: 5123-XX-YK-ZZZZ Series

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. 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 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 must be on an accompanying document including the serial number of the load cell.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 86-037A2 and is issued to include a digital output option. A representative sample of a load cell equipped with a digital output option was tested at NIST (Model SSB, Certificate of Conformance Number 86-041A3) using dead weights as the reference standard. The data were analyzed for single cell load cell applications. The load cell was tested over a temperature range of -10 °C to 40 °C. Three tests were run at each temperature. The temperature effect on zero was measured and a time dependence test (creep) was performed. The barometric pressure test was waived due to the insensitivity of the load cell to barometric pressure. Previous test conditions are listed below for reference.

Certificate of Conformance Number 86-037A2: This Certificate superseded Certificate of Conformance Number 86-037A1 and was issued to correct the reference made to Class III L.

Certificate of Conformance Number 86-037A1: This Certificate superseded Certificate of Conformance Number 86-037 Amended and was issued at the request of the manufacturer to revise the v_{\min} values.

Certificate of Conformance Number 86-037: Two 2500-lb capacity load cells were tested using dead weights as the reference standard. The data were analyzed for both single and multiple load cell applications. The cells were tested over a temperature range of -10 °C to 40 °C. 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.

Representatives from the National Institute of Standards and Technology evaluated the manufacturer's test facility, witnessed repeat tests on the load cells, and analyzed the data.

The results of the evaluations indicate the load cells comply with applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1999 Edition

Tested By: NIST Force Group

Information Reviewed By: H. Oppermann, R. Whipple (NIST) 86-037A2; L. T. Sebring (NIST) 86-037A3