National Conference on Weights and Measures
15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

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

For:
Load Cell
Bending Beam
Models: 9123-IF series
n_{max}: Multiple Cells: 5 000
Capacity: 250 lb to 2 000 lb (See Below)

Accuracy Class: III

Submitted by:
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Standard Features and Options

Model 9123-IF series is identified by the designation 9123-A5-YK-Z_1Z_2IF where A5 – is the accuracy Class III, 5000 Multiple; Y – is the rated capacity in pounds, K – 1000 pounds (if used); Z_1Z_2 – defines non-metrological features e.g. cable length or connector; IF – refers to the integral foot mounting design.

Accuracy Class III				
Model Number	Maximum Capacity (E_{max}) lb	Minimum Load Cell Interval v_{min} Multiple	Minimum Dead Load (E_{min})	Maximum Number of Intervals (n_{max})
9123-A5-250-Z_1Z_2IF	250	0.015	10	5 000
9123-A5-500- Z_1Z_2IF	500 *	0.030	10	5 000
9123-A5-750- Z_1Z_2IF	750	0.045	10	5 000
9123-A5-1K- Z_1Z_2IF	1000	0.060	10	5 000
9123-A5-1.5K- Z_1Z_2IF	1500	0.090	10	5 000
9123-A5-2K- Z_1Z_2IF	2000	0.120	10	5 000

* Load cell capacity submitted for evaluation.
Nominal output: 3.0 mV/V
Four (4) wire design
Construction Material: Stainless Steel
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: February 20, 2001

Louis E. Straub
Chairman, NCWM, Inc.

G. Weston Diggs
Chairman, National Type Evaluation Program Committee

Issue date: February 21, 2001

Revere Transducers, Inc.
Shear Beam, Compression Load Cell
Models: 9123-IF Series

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 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, 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: Two 500 lb capacity load cells were tested at NIST using dead weights as the reference standard. The data was analyzed for 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.

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

Type Evaluation Criteria Used: NIST Handbook 44, 2001 Edition

Tested By: NIST Force Group

Information Reviewed By: S. Patoray (NCWM)