



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance
for Weighing and Measuring Devices

For:

Load Cell
Compression
Models: GF-11
 n_{max} : 10 000, Multiple Cell, Class III L
Capacity: 10 000 lb to 100 000 lb
Accuracy Class: III L

Submitted By:

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Standard Features and Options

Standard Features:

- Nominal Output: 2 mV/V
- Cable: 4-wire
- Nominal Output Impedance: 350 Ohm
- Counterforce Material: Alloy Steel, Stainless Steel

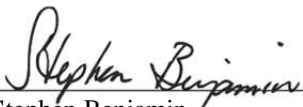
Load Cell Parameters:


Capacity	V_{min}	
	Class III L Multiple Cell	Minimum Dead Load
10 000 lb	0.7 lb	100 lb
15 000 lb	1.0 lb	150 lb
20 000 lb	1.5 lb	200 lb
25 000 lb	2.0 lb	250 lb
40 000 lb	3.0 lb	400 lb
50 000 lb*	4.0 lb	500 lb
60 000 lb	5.0 lb	600 lb
75 000 lb	6.5 lb	750 lb
100 000 lb	8.0 lb	1000 lb

*Two load cells tested

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.


Stephen Benjamin
Chairman, NCWM, Inc.


Kurt Floren
Chairman, National Type Evaluation Program Committee
Issued: March 18, 2013

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**Zhejiang South-Ocean Sensor Manufacturing Co., Ltd.**

Load Cell / GF-11

Application: The load cells may be used in for the applicable Class III L 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.

Identification: A pressure sensitive identification badge containing the manufacturer, model designation, serial number, V_{\min} , n_{\max} , Class and capacity 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: This Certificate supersedes Certificate of Conformance number 12-046 and was issued without additional testing to reactivate Certificate of Conformance number 12-046. Changes were also made to update the contact information. Previous test conditions are listed below for reference.

Certificate of Conformance Number 12-046: This certificate is issued based upon the following tests and upon information provided by the manufacturer. Two 50 000 lb capacity load cells were tested using dead weights as the reference standard. The excitation voltage was 10 Vdc. The data were analyzed for multiple load cell applications. The cells were tested over a temperature range of -10 to 40 °C. The temperature effect on zero was measured and time dependence (creep) tests were performed. The barometric pressure test was performed. NCWM Pub 14 selection criteria were used to determine cells tested.

Evaluated By: K. Chesnutwood (NIST Force Group) 12-046

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2013. NCWM, Publication 14: Weighing Devices, 2012.

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) 12-046, 12-046A1

Examples of Device:

