



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell

S-Type, Tension

Model: CGSB-SS

n_{\max} : Single Cell, Class III, 3 000 and 5 000

Single Cell, Class III L, 10 000

Capacity: 100 lb to 10 000 lb (50 kg to 5.0 t)

Accuracy Class: III / III L

***Submitted By: Contact Info. Updated: December 09**

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Standard Features and Options

*The specific load cell capacities, v_{\min} values and minimum dead loads covered by this Certificate are listed in the tables on page 2.

Standard Features:

- Nominal Output: 3.0 mV/V
- 4-wire Design

CGSB-SS-	X_1	$X_2 n_{\max}$	YK	Z_1	Z_2	Z_3	Z_4
	A = Class III B = Class III L	3 = 3 000 5 = 5 000 10 = 10 000	Capacity in Thousands of Pounds (e.g., 5K = 5 000 lb)	Electrical Cable Length		Features Which Have No Metrological Effect	Wiring and Private Label Variations

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.

Randy Jennings
Chairman, NCWM, Inc.

Judy Cardin
Chairman, National Type Evaluation Program Committee
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Coti Global Sensors, Inc.

Load Cell / CGSB-SS

Model Designation:

Capacity		Class III (3 000) v_{\min} (lb)	Class III (5 000) v_{\min} (lb)	Class III L (10 000) v_{\min} (lb)	Minimum Dead Load (lb)
Model	lb				
100 *	100	0.010	0.01	0.003	2
150	150	0.015	0.016	0.005	2
200	200	0.020	0.021	0.006	2
250	250	0.025	0.026	0.008	2
300 *	300	0.030	0.031	0.009	2
500 *	500	0.050	0.052	0.015	5
750	750	0.075	0.078	0.026	5
1K	1000	0.100	0.104	0.034	10
1.5K	1500	0.150	0.156	0.051	10
2K	2000	0.200	0.208	0.068	10
2.5K	2500	0.250	0.260	0.085	10
3K *	3000	0.300	0.312	0.102	10
5K	5000	0.500	0.520	0.170	10
10K	10 000	1.000	1.040	0.340	10

* Load Cells Submitted for Evaluation

Capacity (t) metric ton		Class III (3 000) v_{\min} (kg)	Class III (5 000) v_{\min} (kg)	Class III L (10 000) v_{\min} (kg)	Minimum Dead Load (kg)
Model	kg				
50 kg	50	0.005	0.005	0.002	0.9
0.1 t	100	0.010	0.010	0.003	0.9
0.25 t	250	0.025	0.026	0.008	2.3
0.50 t	500	0.050	0.052	0.017	4.5
1.00 t	1000	0.100	0.104	0.034	4.5
2.50 t	2500	0.250	0.260	0.085	4.5
5.00 t	5000	0.500	0.520	0.170	4.5

Application: The load cells may be used in Class III and III L scales for single and 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 must be on an accompanying document including the serial number of the load cell.

Test Conditions: This certificate supersedes Certificate of Conformance number 03-039 and is issued to indicate transfer of the NTEP Certificate of Conformance from Coti, Inc. to Coti Global Sensors, Inc. and the change of model numbers. Previous test information and documentation provided by the company was reviewed. The test conditions for the original type evaluation are listed below for reference.



Coti Global Sensors, Inc.

Load Cell / CGSB-SS

Certificate of Conformance Number 03-039: This certificate is issued based upon the following tests and upon information provided by the manufacturer. One 100-lb, one 500-lb and one 3000-lb capacity load cells were tested at the manufacturer's facility using dead weights as the reference standard. In addition, two 300-lb, and two 3000-lb capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for single 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 test conditions for the previous evaluations are listed below for reference. Representatives from NIST evaluated the manufacturer's test facility, witnessed repeat tests on load cells and analyzed the data.

Evaluated By: NIST Force Group, NIST Office of Weights and Measures

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 1998. NCWM, Publication 14: Weighing Devices, 1998.

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:

