



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Weighing/Load Receiving Element
Load Cell Electronic
Model: FH Series
 n_{max} : 5 000
 e_{min} : (see below)
Capacity: (see below)
Platform: (see below)
Accuracy Class: III

***Submitted By: Contact Info. Updated: October 2010**

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Standard Features and Options

Platform:

- Dimensions covered by this certificate include a minimum length or width of 3 feet to a maximum length or width of 11.25 feet
- Platform areas of a minimum of 9 square feet to a maximum of 81 square feet

Construction:

- Mild Steel

Load Cells Used:

- 4 Cardinal Model SB-2500S strain gauge shear beam load cell (NTEP CoC 87-059) or Approved metrological equivalent with equal or lesser v_{min} for the FHN5XY model and,
- 4 Cardinal SB05000S strain gauge shear beam load cells (NTEP CoC 87-059) or approved metrological equivalent with equal or lesser v_{min} for FHN10XXYY model

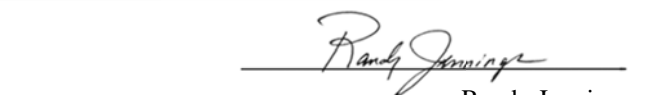
Model	Capacity	e_{min}	Maximum Area
FHN5XY	5 000 lb / 2 200 kg	1 lb / 0.5 kg	35 square feet
FHN10XXYY	10 000 lb / 4 500 kg	2 lb / 1 kg	81 square feet

Where X, XX = width of platform in feet and Y, YY = length of platform in feet.

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. *Editorial changes, not affecting the type or metrological content, corrected this certificate.


Tim Tyson
Chairman, NCWM, Inc.


Randy Jennings
Chairman, National Type Evaluation Program Committee
Issued: October 21, 2010

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Cardinal Scale Manufacturing Co.

Weighing/Load Receiving Element / FH Series

Application: The weighing/load receiving element may be used for general purpose weighing applications when interfaced with a certified indicating element.

Identification: The engraved identification badge is riveted to the side of the platform, near the load cell junction box.

Sealing: The load cell junction box can be sealed with a wire security seal threaded through two screws in the cover.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 96-113 and is issued to add the FHN10XXYY model of weighing/load receiving element. A Model FHN1099, 10 000 lb x 2 lb weighing/load receiving element was evaluated at the manufacturer's plant. The device was interfaced with a Cardinal Model 210 (Certificate of Conformance Number 01-011A1) indicating element. The emphasis of this evaluation was on device design, marking requirements and performance. Several increasing / decreasing load (up to 10 000 lb) and corner shift tests (1/4 capacity in corner, 1/2 capacity in the quadrant) were conducted during the initial evaluation. The device was sealed for permanence. After 300 weighments and 20 days in service, the device was retested repeating the same tests that were conducted during the initial evaluation. The previous test conditions are stated below for reference.

Certificate of Conformance Number 96-113: A 5000-lb, 5' x 7', steel weighing element was tested at the manufacturer's plant. The device was interfaced with a Cardinal Detecto Model 738 indicator (Certificate of Conformance No. 86-035A3). Several increasing/decreasing load and corner/shift tests were conducted during the initial evaluation. Similar tests were conducted after 20 days of use.

Evaluated By: A. P. Buié (MD), C. Carter (OK) 96-113; T. Lucas (OH) 96-113A1

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2003. NCWM, Publication 14: Weighing Devices, 2003.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: S. Patoray (NCWM), L. Bernetich (NCWM) 96-113A1