

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Weighing/Load Receiving Element Model: PSF & PCF Series nmax: 3000 to 5000 (See Table Page 2) emin: 0.2 kg to 1 kg /0.5 lb to 2 lb (See Table Page 2) Capacity: 1000 to 5000 kg / 2200 to 10 000 lb (See Page 2) Platform: (See Table Page 2) Accuracy Class: III Submitted By: Gravity Measurement, Inc. 611 Rotterdam Industrial Park Schenectady, NY 12306 Tel: 518-526-5942 Contact: Z. Rick Pang Email: pang@gravitymeasurement.com Web site: www.gravitymeasurement.com

Standard Features and Options

See Page 2 for specific models and parameters covered by this certificate.

- PSF denotes stainless steel platforms
- PCF denotes carbon steel platforms

Load Cells used: Changzhou Newton Force Weighing System Co., Ltd. model XD6-H (500 kg – 2000 kg) [NTEP CC No. 17-059] or metrologically equivalent NTEP certified load cells.

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.

umes Cassidy

Chairman, NCWM, Inc.

Committee Chair, National Type Evaluation Program Committee Issued: August 3, 2017

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

The National Conference on Weights and Measures (NCWM) 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.



Gravity Measurement, Inc.

Weighing/Load Receiving Element / PSF & PCF Series

Application: General purpose weighing/load receiving element.

Specific Models, Sizes, Capacities and Parameters:

Model	Capacity	e _{min}	n _{max}	Platform Size
PSF0808 PCF0808	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	80 cm x 80 cm (31.5 in x 31.5 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	
PSF1010 PCF1010	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	100 cm x 100 cm (39.5 in x 39.5 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	
PSF1012 PCF1012	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	100 cm x 120 cm (39.5 in x 47.2 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10000 lb	1 kg / 2 lb	5000 / 5000	
PSF1212 PCF1212	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	120 cm x 120 cm (47.2 in x 47.2 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	
PSF1215 PCF1215	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	120 cm x 150 cm (47.2 in x 59 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	
PSF1515 PCF1515	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	150 cm x 150 cm (59 in x 59 in)
	2000 kg / 4400 lb	0.5 kg / 1 lb	4000 / 4400	
	2500 kg / 5000 lb	0.5 kg / 1 lb	5000 / 5000	
	3000 kg / 6000 lb	1 kg / 2 lb	3000 / 3000	
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	

Identification: The required markings are located on a sticker affixed to the side of the base.

Sealing: Access to the junction box is sealed with a wire security seal threaded through 2 (two) screws. The other metrological features are sealed as per the sealing instructions from the NTEP Certificate for the indicating element.

<u>Test Conditions</u>: This certificate is issued based upon the following tests and upon information provided by the manufacturer. For this evaluation, three units were provided as follows: a model PSF1515, 2200 lb x 0.5 lb capacity that was connected with a model



Gravity Measurement, Inc.

Weighing/Load Receiving Element / PSF & PCF Series

CWB7 indicator (NTEP C17-057); and a model PCF1515, 10 000 lb x 2 lb capacity connected to a model SWB7 indicator (NTEP CC 17-057). The emphasis of the evaluation was on device design, marking, operation and compliance with influence factor requirements. Several increasing/decreasing load, shift tests and level indication tests were performed. A load of approximately 1/2 capacity was applied to the weighing / load receiving elements over 300 times and a span of over 30 days.

Evaluated By: E. Morabito (NY)

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2017 Edition. NCWM Publication 14 Weighing Devices, 2017 Edition.*

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

Information Reviewed By: J. Truex (NCWM)

Examples of Device:



Method for sealing junction box



Model PCF

Model PSF