

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: **Computing Scale** Non-computing Scale Model: NTF Series n_{max} : 3000 to 5000 (See table Page 2) emin: 0.02 kg /0.05 lb (See table Page 2) Capacity: 1000 to 5000 kg/2200 to 10 000 lb (See table Page 2) Platform: (See table Page 2) Accuracy Class: III

Submitted By:

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Standard Features and Options

- Automatic Zero Tracking (AZT)
- Initial Zero Setting Mechanism (IZSM)
- Semi-Automatic Zero (Push Button)
- Keyboard Tare
- Programmable Tare
- Semi-Automatic Tare (Puss Button)
- AC Power (100-240 V)
- DC Power (12 V)
- Battery Power (6V)
- Liquid Crystal Display
- Alphanumeric Display
- **RS232** Communications
- Linearity Calibration Points
- Price calculation
- Weighing
- Counting
- Accumulation

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.

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Kristin Macey Committee Chair, National Type Evaluation Program Committee Issued: August 8, 2017

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Gravity Measurement, Inc.

Computing Scale / NTF Series

Model	Capacity	e _{min}	n _{max}	Platform Size
NTF8080XY	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	1
	4000 kg / 8800 lb	1 kg / 2 lb	4000 / 4400	
	5000 kg / 10 000 lb	1 kg / 2 lb	5000 / 5000	
NTF100100XY	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	
NTF100120XY	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 / 10 000 lb	1 kg / 2 lb	5000 / 5000	
NTF120120XY	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	
NTF120150XY	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	
NTF150150XY	1000 kg / 2200 lb	0.2 kg / 0.5 lb	5000 / 4400	150 cm x 150 cm (59 in x59 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	

Note: In the model number,

The number follow NTF designate the dimension of PCF & PSF series weighing/load receiving element which is included in NTEP certificate of Conformance Number 17-093.

X represents "C" or "S", "C" designates as carbon steel platform scale, and "S" designates stainless platform scale

Y represents the approved indicator which is included in NTEP certificate of Conformance Number 17-057.

Example: A model NTF100100C-CWB7 has a 100 cm x 100 cm (39.5 in x 39.5 in), carbon steel W/LRE and a CWB7 indicator.



Gravity Measurement, Inc.

Computing Scale / NTF Series

Application: For use in general purpose weighing applications.

Identification: The required making information is located on the back of the indicator and also affixed to the frame of the load receiving element.

Sealing: For both Options 1 and 2, the indicator, the junction box, and the indicator cable connection require security seals.

Option 1: Indicator -a wire security seal through either 2 (two) screws or a screw and a rod located on the underside of the indicator; Junction Box - a wire security seal threaded through 2 (two) screws located on the junction box; Indicator cable connection – a wire security seal through the clip preventing removal of cable.

Option 2: Indicator - a paper security seal placed across the enclosure seam on the side of the indicator; Junction Box - a wire security seal threaded through 2 (two) screws located on the junction box; Indicator cable connection - a wire security seal through the clip preventing removal of cable

<u>Test Conditions</u>: This certificate is issued based upon the following tests and upon information provided by the manufacturer. The emphasis of this evaluation was on the interfacing of NTEP certified main elements to create a new model. The model PSF & PCF Weighing/Load Receiving Elements (NTEP Certificate of Conformance Number 17-093) were evaluated using indicators listed on NTEP CC Number 17-057 (CPB9, CWBx, CWBRx, SPB9, SWBx, SWBRx). The full set of testing was performed for the separate main elements which included a series of increasing and decreasing load, eccentricity, discrimination, voltage, temperature and permanence tests. The test data, markings and sealing were reviewed. No additional tests were deemed necessary.

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:



Cable connection security seal



Indicator with paper security seal



Indicator with wire security seal



Gravity Measurement, Inc. Computing Scale / NTF Series



Junction boxes with wire security seals

