

High Precision Servo Type WATER LEVEL METER

MODEL

Main	NS-101	NS-103
Detector	NST-10	NST-30

An epoch-making water level meter
with out standing resolution, linearity and stability



Main unit
NS-101



Detector
NST-10

Introduction

This system is with improved resolution and stability that have been achieved on the strength of extensive expertise gained in our development of the existing servo type water level meters (SW series), particularly by raising the measurement accuracy through the adoption of compensational nature that the conventional meters do not offer.

Features

- 1) The system offers an excellent resolution as 50microns (1/20mm) or less.
- 2) The linear error has been improved to 0.1 percent or less.
- 3) The system excels in stability for its possessing the functions for water quality and water temperature compensations, that the conventional meters do not offer.

Drift with time : $\pm 0.2\%$ /24 hrs or less

Drift with temperature : $\pm 0.1\%$ /10 or less
(water temperature at between 0 and 40)

Drift with water quality $\pm 0.2\%$ full scale
(tap water to 3% brine water)

- 4) This system is best suited not only for water level measurement but also for wave height measurement of ripples or wavelets.
- 5) The units making up the main component (model NS-103) are provided with their own power source, and therefore each unit can be separated and operated independently.
- 6) For the protection of the detection probe, the unit is provided with a switch for raising the position of the probe after use.
- 7) The system can be connected to various recorders, because it is provided with connectors for voltage output, at 4 to 20mA

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[Specifications]

Main unit	: NS - 1 0 1	NS - 1 0 3
Channel number	: 1 channel	3 channels
Output V	: ± 3 V / FS(Load over 10 k Ω) \pm	
Calibration output	: 0 , + 50 % , + 100 % / full scale	
Operating Temperature	: 0 ~ 4 0	
Power source	: AC100V \pm 10V(Other AC power sources are available on request)	
Electricity consumption	: Approx . 15VA	Approx . 45VA
Dimensions	: Approx . 134W \times 225D \times 136H(mm)	Approx . 430W \times 345D \times 150H(mm)
Weight	: Approx . 2.7 kg	Approx . 12 kg

Detector	: NST - 1 0	NST - 3 0
Max.measuring water level	: $\pm 5 0$ mm	$\pm 1 5 0$ mm
Applicable water quality range	: Tap water to 3% NaCl solution	
Lineary speed	: 300mm/s	
Resolution	: Below 50 μ	
Lineary error	: Below $\pm 0.1\%$ full scale	
Stability	: $\pm 0.2\%$ /24hrs or less	
	: $\pm 0.1\%$ /10 or less (water temperature at between 0 to 40)	
	: $\pm 0.2\%$ full scale (tap water to 3% NaCl solution)	
Dimensions	: Approx . 230W \times 78D \times 90H(mm)	Approx . 230W \times 78D \times 90H(mm)
Weight	: Approx . 1.6 kg	Approx . 2.6 kg

[Standard accessories]

Main unit	: NS-101	NS-103
Power cable	: 1 pc.	1 pc.
Output cable	: 1 pc.	3 pcs.
Fuse(0.5A)	: 2 pcs.	4 pcs.
Fuse(2A)	: 4 pcs.	8 pcs.
Cloth cover	: - - -	1 pc.
Instruction manual	: 1 pc.	1 pc.

[Outside view of detector]

Detector	: NST-10	NST-30
Connecting cable 5m	: 1 pc.	1 pc.
Grounding electrode	: 1 pc.	1 pc.
Fitting	: - - -	1 pc.
Wooden box	: 1 pc.	1 pc.

Options

- Connecting cable (max50m)
- I output : 4 to 2 0 mA / FS(Load below 400)

* Specifications are subject to change without notice .

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