

## ■ OUTLINE

SPT-7200 series is a magnet float type level gauge by which liquid level and temperature in tank can be measured.

This level can be detected by this gauge, by activating reed switch completely sealed in guide pipe by the magnet in the float.

The detected resistance is converted into a current signal and be outputted to a remote indicator and/or data logger.

The temperature sensor up to 2 probes can be assembled, and the signal can be outputted after converting it into 4-20mA current signal same as level data.

When it is required to use RS232C signal to host computer, it is recommended to adopt TIC multi-monitor, DIR-M1600-ALG.

## ■ FEATURES

- Compact and Cost Saved Design.  
Rationally designed to comply with customers' requirement
- Output signal can be integrated into same signal.  
In case of the current signal, Ballast Tank Level Gauge is used for Fuel Tank Level Gauge, and the signal system can be integrated.
- A division type level gauge will be also available.  
The guide pipe divided into two or more pieces corresponding to complicated tank structure and an immersed type gauge in liquid tank can also be manufactured.



MODEL CODE

SP	—	7200	Specifications		
Function of temperature measurement					Temperature measurement: Not provided
	T				Temperature measurement: Provided
Construction (IP65)			W		Non-Explosion Proof
			S		IS: Type: Ex ia II CT5
Number of Temperature Sensor					Not provided
			—1R		1 Temp. Sensor
			—2R		2 Temp. Sensors

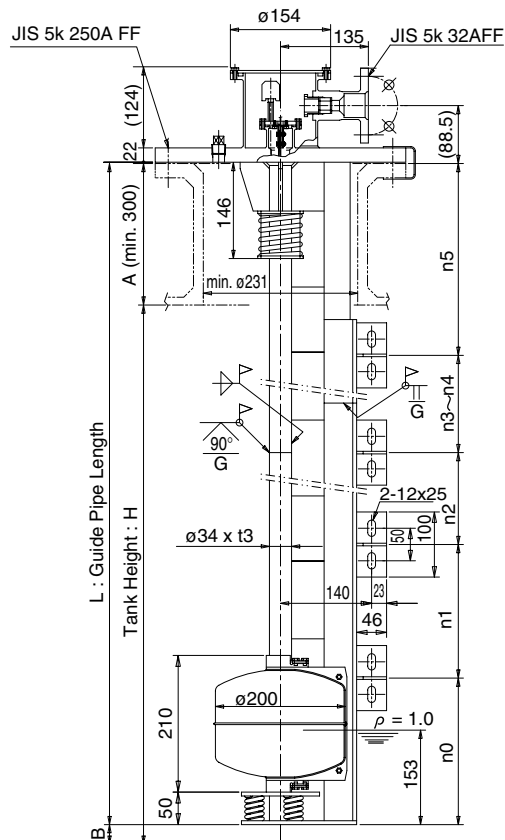
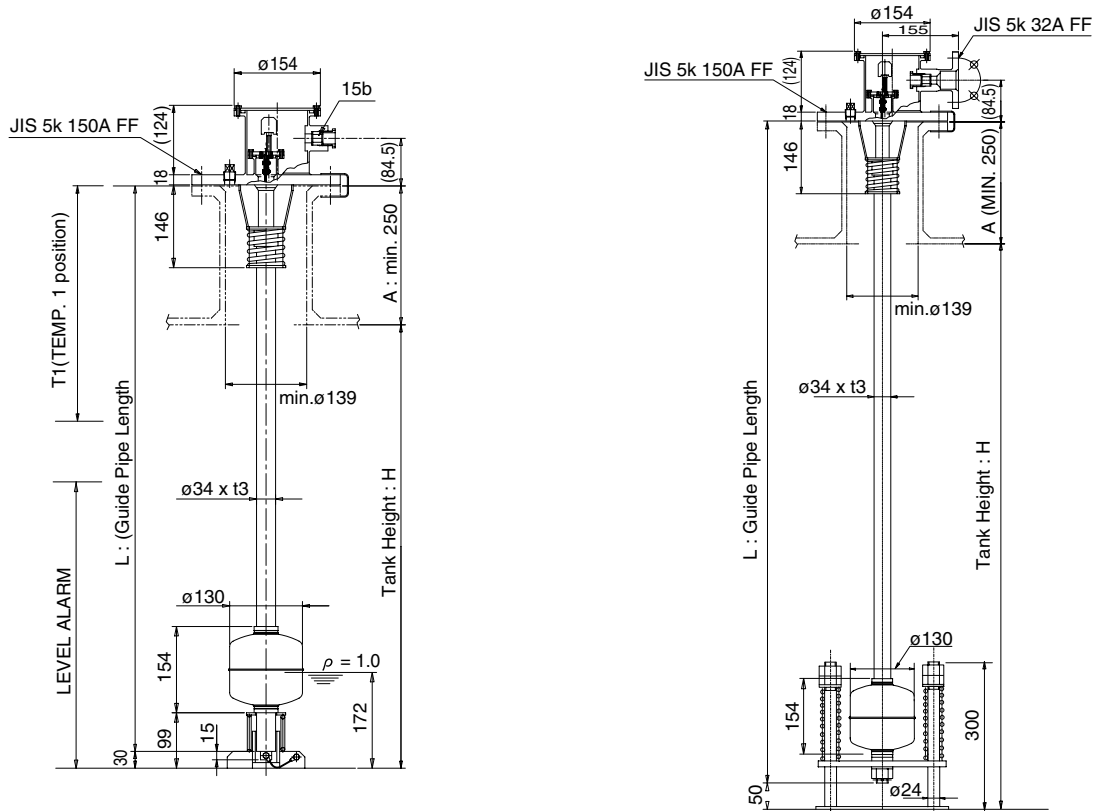
It shall be combined use with Barrier, TZB-081 for level sensor and TZB-051 for temperature sensor.

STANDARD SPECIFICATION

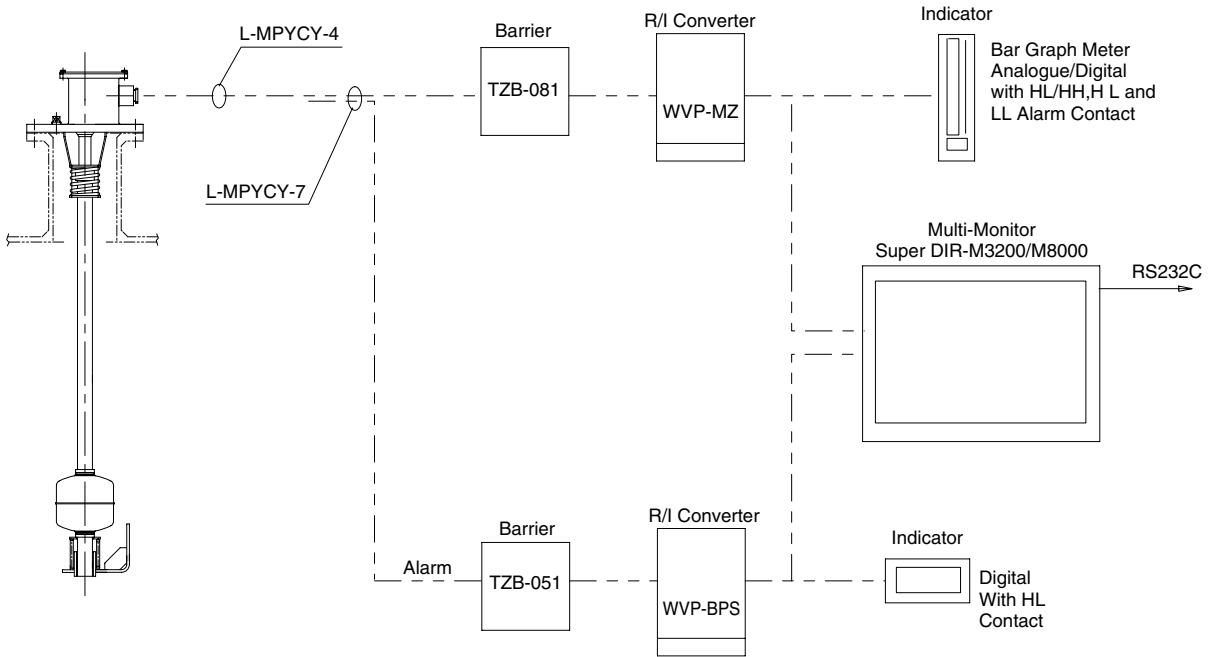
- Measurable Object: Liquid Level and Temperature (Density Range: 0.6 to 2 g/cm<sup>3</sup>)
- Measurement System: Magnet Float for Level Thermal Resistance Type, Pt100Ω
- Applicable Pressure: Atmosphere Pressure as Standard  
It can be produced sensor so as to correspond to its head pressure for immersed type level sensor.
- Measurable Range: Maximum 25 m for level  
-25 to 105°C for temperature
- Accuracy: Resolution ±20 mm for level  
±0.5°C for thermal resistance  
The accuracy after converting the current is shown below.  
Level: 1% Full Span  
Temperature: ±2.0°C  
An error of remote indicator is also added.
- Display System: Analogue or Digital +Analogue for level Digital for temperature  
(It is available to supply display unit with alarm setting future.)  
Non-explosion type local indicator is only available to manufacture.
- Construction: Water Proof grade, IP65  
Explosion Grade: IS Grade Ex ia II CT5 equivalent to IEC Standard
- Installation: Fitting Flange: JIS5K150AFF  
Cable Flange: JIS5K32AFF  
Cable Gland: 15 and/or 20
- Material: Guide Pipe: SUS304 as Standard  
SUS316, SUS316L as option  
Fitting Flange: SUS304 as Standard SUS316, SUS316L as option  
Float: SUS316L as Standard

CONSTRUCTION AND DIMENSION

Sample of Construction



SYSTEM CONFIGURATION



OTHER INSTRUMENTS FOR MARINE APPLICATION

Besides SPT-7200, the following level gauges and relevant instruments for marine applications are available from Tokyo Keiso.

- SP-1200: Flow Magnet Type Level Gauge
- SPT-3500: Magnet Float Type Level Gauge with using Contact less Hall IC
- PL3700: Pressure Sensor using for Ullage Space in Tank and/or Gas Return Line
- MIA-LIDEC: Acoustic Type High level, Overfill Alarm and/or Dryness Sensor
- FP-7091S-T: Float Type High and Overfill Alarm
- FB-5000, FB-7000: Float Type Bilge Level Alarm

\* Specification is subject to change without notice.

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