



Level gauges born from innovative idea

High-frequency Level Gauge

Tanji's High-frequency Level Gauge Product Line

Integrated type

Patent

Easy installation!!

AT series

Multi point detection by one unit is possible!

- Amplifier section built into head
- Low cost
- Detection of continuous analog output and contact output
- Easy installation
- Installation location and measurement range can be arbitrarily changed.



Separated type

Patent

Applicable to high-pressure conditions

BTL series

Separation of the amplifier section from the head permits the use under high-temperature and high-pressure conditions!

- Vacuum to 1Mpa*1
- Fluid measurement temperature range*2 -20~200C°
- Installation location and measurement range can be arbitrarily changed.



*1 Contact us for more pressure range than those described.
*2 Contact us for details.

Level switch

Patent

The performance is less affected by adhesion of impurities to the electrode.

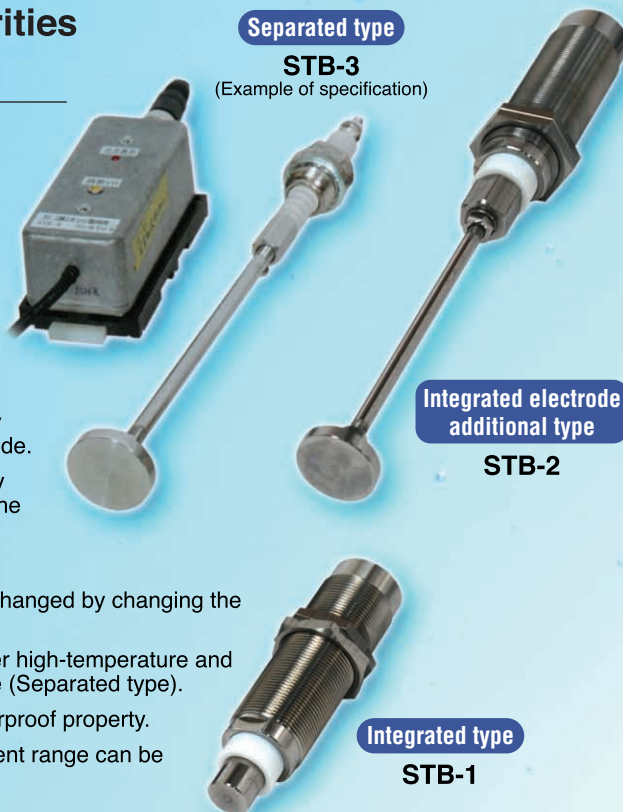
STB series

STB series level switch is available for a wide range of measuring object including liquids, powders, and solids.

- The performance is less affected by adhesion of impurities to the electrode.
- The output status and the sensitivity setting are adjustable by LED and the volume of the main body.
- Low cost and high reliability
- Measurement range can be freely changed by changing the attachment of the electrode.
- The measurement of the point under high-temperature and high-pressure conditions is possible (Separated type).
- High corrosion resistance and waterproof property.
- Installation location and measurement range can be arbitrarily changed.

Separated type

STB-3
(Example of specification)



Integrated electrode additional type

STB-2

Integrated type

STB-1

Optional parts



Battery-operated type

Patent

Easy handling / Convenience / Environmental Measures

KT series

The remaining volume can be checked in only one second after pushing the button!

- Operates on AA battery
- Lightweight and easy to carry.
- The level of liquid can be confirmed with a 10-step LED.
- Battery operated or use with the AC adapter (100V).
- Installation location and measurement range can be arbitrarily changed.



Compact level sensor

*Specifications are subject to change without notice.

Smallest level sensor with a linear output

MTL type

Measurement range can be set freely. Wetted parts take up little space in the tank!

Separated type

- Linear output 4~20mA or DC1~5V
- For water-soluble liquid only
- Multi point detection
- Installation PT3/8~
- Separated amplifier
- Installation location and measurement range can be arbitrarily changed.



Drip-proof type

Patent

Drip-proof and IP66 compliant!

HT series

Suitable for outdoor or mist environments!

- Drip-proof version of AT series
- The sensor, head, and pipe are made of SUS304 to increase corrosion resistance.
- Installation location and measurement range can be arbitrarily changed.



Compact level switch

New Product

MTB type

Installable in all directions Space-saving and controllable!

- For water-soluble liquid only
- Installation PT1/8~
- Separated amplifier
- Installation location and measurement range can be arbitrarily changed.

Patent



Level controller



This controller is easy to use and has broad utility. Also it can be equipped with various options.



Scaling display controller

TK-D

Scaling option permits detection of linear output in arbitrary unit.

- Comparative output : Maximum 4 points detection is possible.
- Application model : AT, BLT, HT (Continuous analog output type)
- Lamp display, buzzer alarm, protection circuit, sensor input power source, etc. (Option)

Level controller for contact point signal

TK-A

This controller accepts both AC and DC power supplies.

- Comparative output : Maximum 4 points detection is possible.
- Application model : AT, BLT, HT (Open collector output type)
- Lamp display, buzzer alarm, protection circuit, etc. (Option)

Specifications

Integrated type AT series

Example of use: Various open-top tank level control

Model	AT302	AT401
Measurement range L	Standard (200mm, 300mm, 500mm, 950mm) Up to 4m is available on request.	
Measurement method	Capacitance type	
Operating temperature range	-10~60°C (Depending on environment)	
Storage temperature range	-40~80°C	
Operating humidity	35~85% (Non condensing)	
Power supply voltage	DC10~30V	
Consumption current	50mA Max	150mA Max
Control output (Each open collector output)	1 point: Upper limits or lower limits 2 points: Upper and lower limits 3 points: Upper and lower limits and a medium between upper and lower limits	4 points: Uppermost and lowermost limits and upper and lower limits 5 point: Uppermost and lowermost limits and upper and lower limits and a medium between upper and lower limits Linear output: 4~20mA, DC1~5V *Linear output can be added to above contact point output (only DC1~5V).
Material	Sensor head: Aluminum Pipe: SUS304(Standard) Titanium/SUS316L(Optional) Electrode: Teflon-coated SUS304 rod Insulator: Teflon	
Dimensions	ø71 x 70+ (Length of electrode)	
Wire length	Lead: 2.5m(Standard)	
Weight	Approx. 800g (L=500mm)	

Applications

- Various equipments, washers, etc.
- Places where temperature and pressure basically do not increase.
- Places where there is no restriction by installation.

Separated type BTL series

Example of use: Closed tank and high temperature tank

Model	BTL204	BTL301
Measurement range L	Standard (200mm, 300mm, 500mm, 950mm) Up to 4m is available on request.	
Measurement method	Capacitance type	
Operating temperature range	AMP: -10~60°C (Depending on environment), Electrode: -20~200°C(Contact us)	
Storage temperature range	AMP: -40~80°C	
Operating humidity	AMP: 35~85% (Non condensing)	
Power supply voltage	DC10~30V	
Consumption current	50mA Max	150mA Max
Control output (Each open collector output)	1 point: Upper limits or lower limits 2 points: Upper and lower limits 3 points: Upper and lower limits and a medium between upper and lower limits	4 points: Uppermost and lowermost limits and upper and lower limits 5 point: Uppermost and lowermost limits and upper and lower limits and a medium between upper and lower limits Linear output: 4~20mA, DC1~5V *Linear output can be added to above contact point output (only DC1~5V).
Material	Sensor head: SUS304 (Standard) Insulator within the head: Teflon AMP waterproof and dustproof BOX: Aluminum-die-cast	Pipe: SUS304 (Standard) Titanium, SUS316L (Optional) Electrode: Teflon-coated SUS304 rod
Dimensions	Head: Screw type ø62x77+length of electrode Flange type flange rating x50+length of electrode AMP waterproof and dustproof BOX : 80x80x60	
Wire length	Lead : 2.5m(Standard) BNC cable : 2m(Basically unmodifiable)	
Weight	JIS 10K flange type Approx. 3500g (L=500mm)	

Applications

- Boiler, various plants
- The use under high temperature and pressure conditions.

Level switch STB series

Example of use: Measurement of points in small spaces

Model	STB-1	STB-2	STB-3
Measurement method	Capacitance type		
Measurement type	Integrated type	Integrated electrode additional type	Separated type
Operating temperature range	10~60°C (Depending on environment)		AMP: -10~60°C (Depending on environment) Electrode: 200°C MAX (Contact us)
Storage temperature range	-40~80°C		
Operating humidity	35~85% (Non condensing)		
Protection	IP67 compliant		According to product specifications
Power supply voltage	DC10~30V		
Consumption current	20mA or less		
Control output	3 wire direct current NPN output(Sink current 100mA MAX)		
Material	Sensor head: SUS304(Standard) Electrode: SUS304(Standard) Titanium, SUS316L(Optional) Insulator: Teflon		AMP: Aluminum-die-cast Electrode: (Contact us)
Dimensions	ø30x117	ø30x122+length of electrode	AMP BOX: 39x93x32
Wire length	Lead: 2.5m(Standard)		Lead: 1m(Standard) Coaxial cable between AMP and sensor: According to product specifications
Weight	Approx. 300g	Main body(300g) + electrode	AMP: Approx. 100g Electrode: According to product specifications

Applications

- Point level detection in various equipments
- Measurement under the condition that adhesions of slurry and high viscosity liquids are not avoided.

Portable type KT series

Example of use: Detection of liquid level in drum and other cans where visual confirmation is impossible.

Model	KT
Measurement range L	Standard (360mm, 500mm, 850mm) Up to 4m is available on request.
Measurement method	Capacitance type
Operating temperature range	-10~35°C (Depending on environment)
Storage temperature range	-40~80°C
Operating humidity	35~85% (Non condensing)
Power supply	AA battery x2 (Standard)
Battery life	300 minutes of continuous operation (When using alkaline battery).
Option	No input-output: Standard AC adaptor: AC100V power outlet
Control output	10-step LED display
Material	Head : Aluminum(Black alumite treatment) Pipe : SUS304(Standard) Titanium, SUS316L(Optional) Electrode : Teflon-coated SUS304 rod Insulator : Teflon
Dimensions	ø65 x 137 + length of electrode
Weight	Approx. 1.3kg(L=850mm)

Applications

- Display of the remaining liquids quantity in drum and other cans where visual confirmation is impossible.
- Prevention of the spill of waste oil.
- Water, oil and other liquids can be measured.

Measurement temperature : 25°C Tap water



Planning / development / production

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