

(SHOP)

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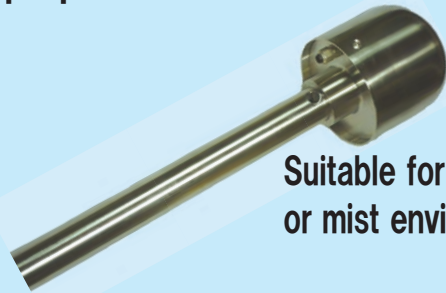


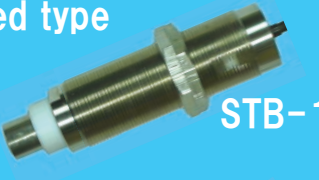






TANJI V4 2009.03. 2,000

## PRODUCTS GENERAL CATALOG



High-frequency Level Gauge

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<b>Level switch</b> <b>STB</b> series	STB series is less affected by adhesion of including liquids, powders, and solids. Integrated type  STB-1	Integrated electrode additional type  STB-2	Separated type  STB-3 20P																																
<b>Compact level sensor</b>	Space-saving design permits downsizing and accurate measurement. <b>MTL</b> 	Separated type, compact size Linear output, separated amplifier <b>MTB</b> 	Compact level switch (For water-soluble liquid only) 24P																																
<b>Scaling display controller</b> <b>TK-D</b>	Scaling option permits detection of linear output in arbitrary unit.  26P	<b>Level controller for contact point signal</b> <b>TK-A</b>	Power supply can be selected from AC or DC.  27P																																
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# Merits by introduction of the system

## Level sensors born from innovative idea

We introduced a capacitance type measurement method and realized multi point control by one unit although one point control by one unit was the common knowledge.  
And we also enabled stepless control by one unit.

## Simple structure and easy adjustment

Our level gauges are simple in structure and easy to adjust and can be installed anywhere.

## Customizing to meet your needs

We would like to offer various options and plan the product suitable for a wide range of operating conditions.

## You can try our samples free of charge.

We lend you samples. You should try it.  
(Contact us for more information.)

When the insulator is sandwiched between two electrodes, the capacitor is formed between electrodes.

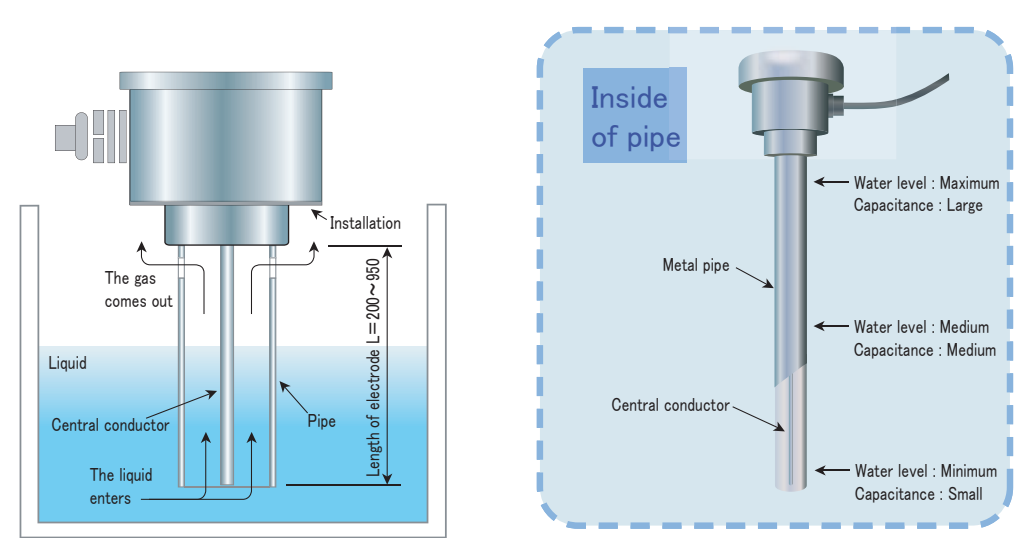
We apply this principle of capacitor to manufacture our level gauges.

Our level gauges use the central conductor and the metal pipe instead of two electrodes.

When the liquid enters the pipe, the capacity of the capacitor (so-called capacitance) changes in proportion to the liquid level.

The amount of the change can be converted electrically and be used as an output signal.

Principle of operation



# Product features

Patent number 3557538  
Patent number 3841239

## Flexible planning

The type of pipe, length, output type(contact point or linear), and installation location can be selected to flexibly meet various user needs.

## Usable with most types of liquids

Our level gauges can be used with most types of liquids.  
(Also special liquids can be covered.)  
The performance is less affected by waves, foams, and suspended solids.  
(We suggest ways of resolving all problems.)

## Easy handling

Upper and lower limits can be easily set and stepless adjustment is possible.  
Amplifier section is built into head. (AT•HT•KT•STB)

## Easy control

Output terminal can be directly connected to sequencer and relay circuit.  
(Connection output type)  
Continuous analog output is possible.  
(1~5VDC output, 4~20mA output)

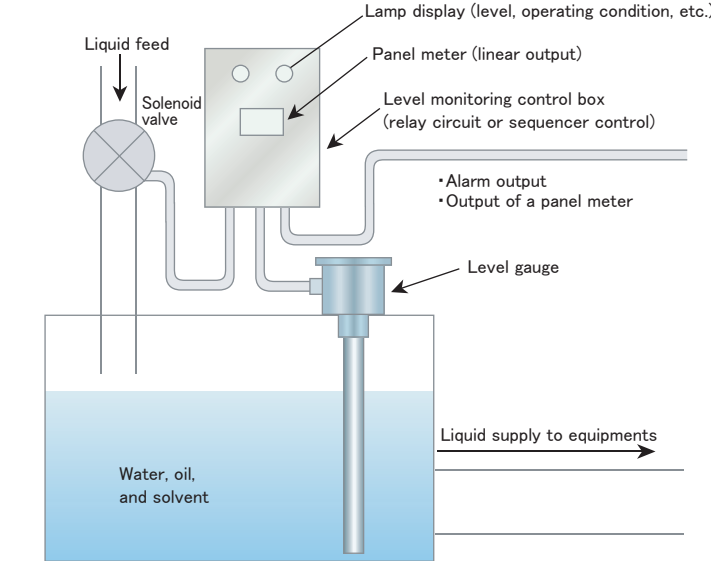
## Easy maintenance

Because there are no moving parts, maintenance is easy.  
Our level gauges are compact and lightweight. And wetted parts have high corrosion resistance. (SUS304 standard)

## Easy installation

Available to resin tanks.  
Space-saving regardless of tank capacity.  
Our level gauges can be installed anywhere.

Introduction example



# Integrated type

# AT

## series

## Multi point detection by one unit is possible!

### Features

- Amplifier section is built into head.
- Low cost level control.
- Detection of continuous analog output and contact output.
- Easy installation.  
(Bolt or bracket fixation)

Easy installation

### Applications

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

### Model number configuration

AT302-500SL3M

Model series (Integrated type)  
AT302  
AT401

Measurement range  
200~950mm(Standard)  
Up to 4000mm

Electrode material  
S: SUS304

Sensitivity  
L: Water-soluble fluid  
M: High-sensitive water-soluble fluid  
(Liquid containing much oily ingredient)  
H: Oily fluid

Output

Model AT302	Model AT401
1: 1 point output	A: Linear output DC1~5V
2: 2 point output	C: Linear output 4~20mA
3M: 2 points + medium output	4: 4 point output
	4A: 4 points + linear(DC1~5V)
	5M: 4 points + medium
	5MA: 4 points + medium + linear(DC1~5V)

### Replacement pipe



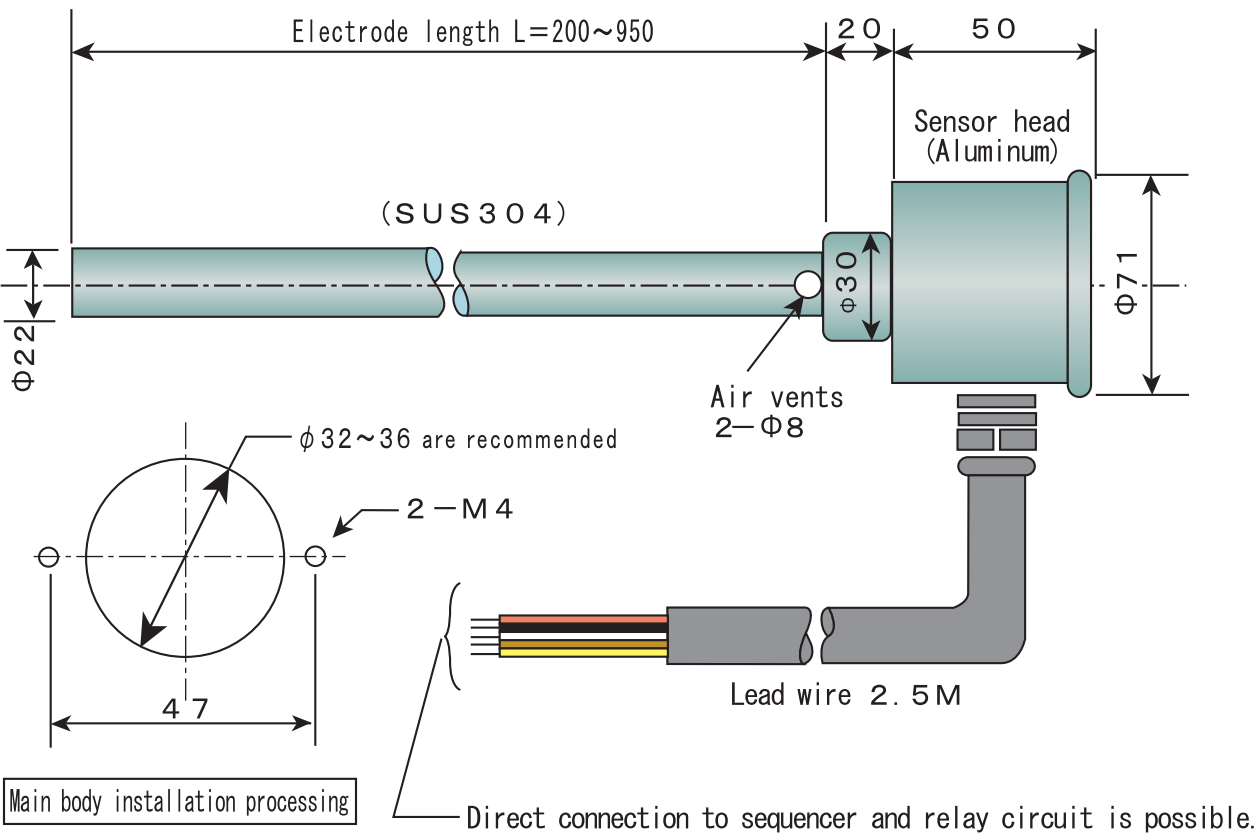
Replacing the pipe can cope with problems caused by suspended solids, pipe clogging, foams, and high viscosity liquids.

## Specifications

Measurement temperature : 25°C tap water

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	10~30V DC	
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 points : 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	φ 71 × 70+(Length of electrode)	
Wire length	Lead : 2.5m(Standard)	
Weight	Approx. 800g (L=500mm)	

## Appearance





# Drop-proof type HT series

## Drop-proof version of AT series

### Features

- Suitable for outdoor or mist environments!
- The sensor, head, and pipe are made of SUS304 to increase corrosion resistance.
- Installation location and measurement range can be arbitrarily changed.



### Applications

- Various equipments, washers, etc.
- Places where temperature and pressure basically do not increase.
- The use for outdoor or mist environments
- Places that require corrosion resistance.

### Model number configuration

HT302-500SL3M

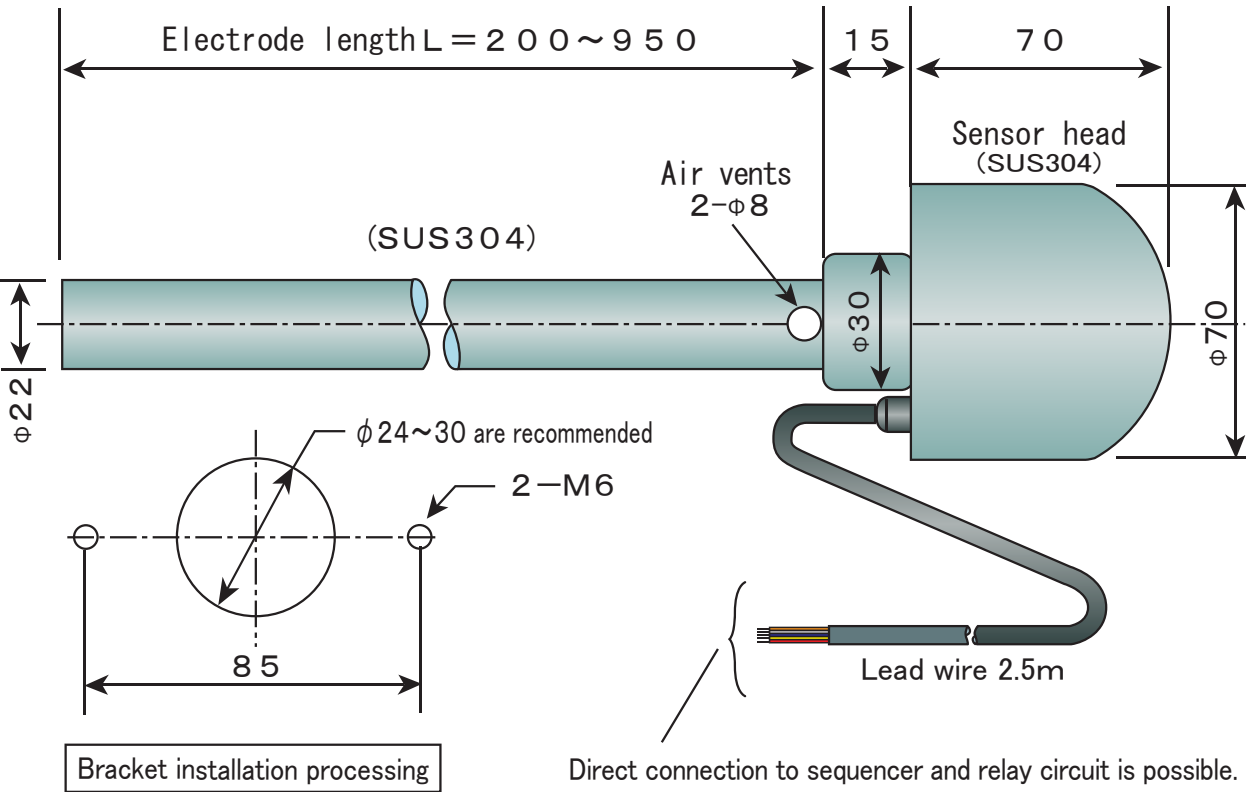
Model series (Integrated type)	HT302 HT401
Measurement range	200~950mm(Standard) Up to 4000mm
Electrode material	S : SUS304
Sensitivity	L : Water-soluble fluid M : High-sensitive water-soluble fluid (Liquid containing much oily ingredient) H : Oily fluid
Output	<div> Model HT302  1 : 1point output  2 : 2point output  3M : 2points + medium output </div> <div> Model AT401  A : Linear output DC1~5V  C : Linear output 4~20mA  4 : 4point output  4A : 4points + linear(DC1~5V)  5M : 4points + medium  5MA : 4points + medium + linear(DC1~5V) </div>

### Specifications

Measurement temperature : 25℃ tap water

Model	HT302	HT401
Measurement range L	Standard(200mm, 300mm, 500mm, 950mm) Up to 4m is available on request	
Measurement method	Capacitance type	
Operating temperature range	-10~60℃ (Depending on environment)	
Storage temperature range	-40~80℃	
Operating humidity	35~85% (Non condensing)	
Protection	IP66 compliant	
Power supply voltage	10~30VDC	
Consumption current	50mA Max	150mA Max
Control 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 (Each open collector output)	4 points : Uppermost and lowermost limits and upper and lower limits 5 points : 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(OnlyDC1~5V).
Material	Sensor head : Aluminum Pipe : SUS304(Standard), Titanium・SUS316L(Option) Electrode : Teflon-coated SUS304 rod Insulator : Teflon	
Dimensions	φ 70 × 85+(Length of electrode)	
Wire length	Lead : 2.5m(Standard)	
Weight	Approx.1100g(L=500mm)	

### Appearance



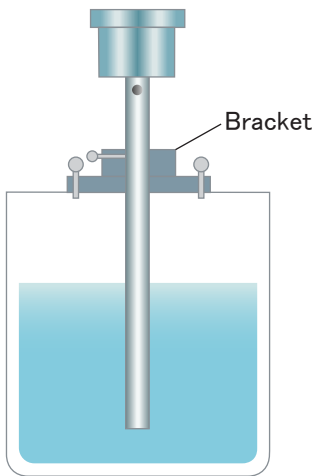
### Replacement pipe

- Replacing the pipe can cope with problems caused by suspended solids, pipe clogging, foams, and high viscosity liquids.

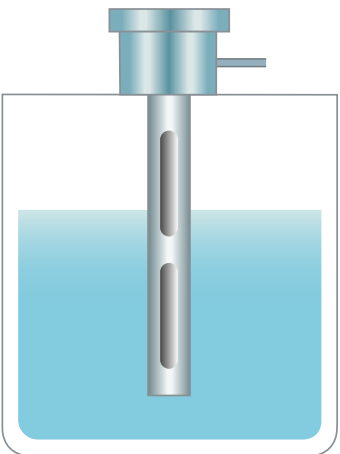
# AT type HT type

## Usage example

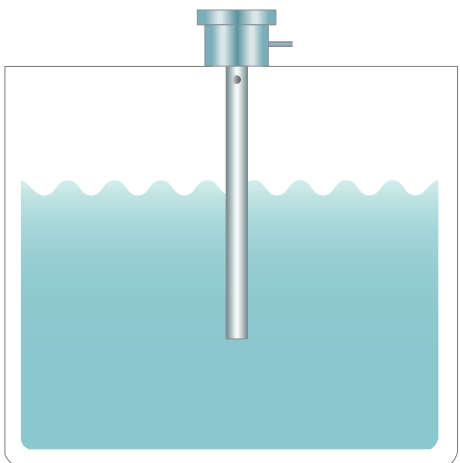
- The change of detecting position by the bracket



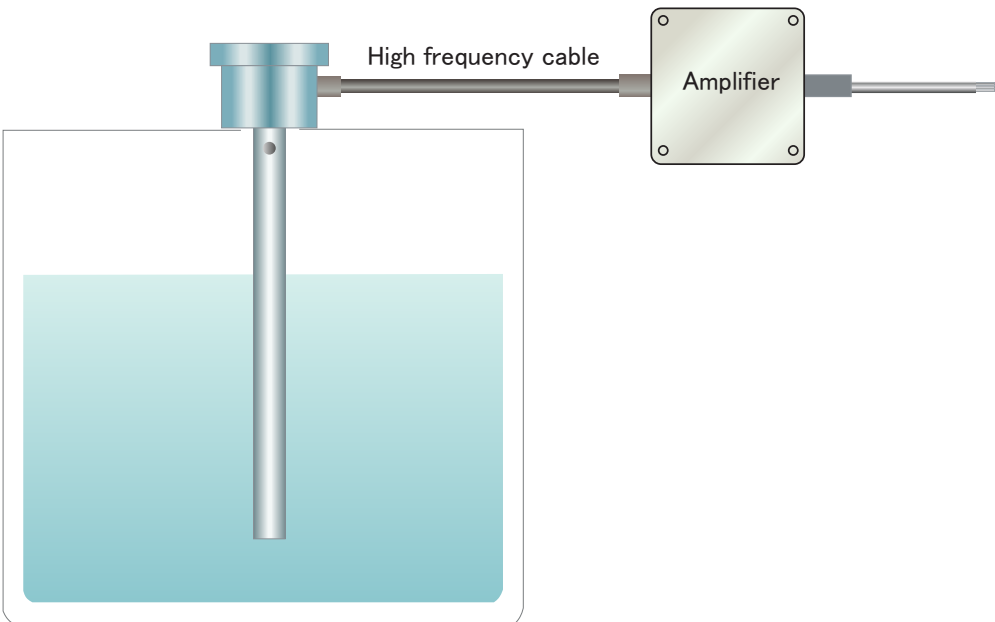
- The example that increasing the diameter of the pipe and using elongate hole type or random perforated type pipe can cope with problems caused by adhesion materials and high viscosity liquids.



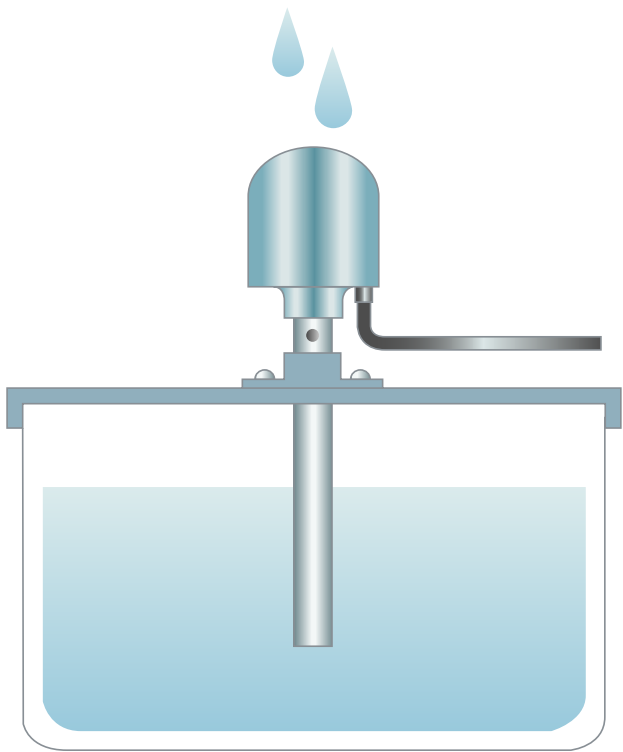
- The stable measurement in places that there are fast-moving water, violent wave, foaming atmosphere is possible because the pipe prevents waves.



- The examples that level gauges are used under slightly high temperature and separated the amplifier simply.



- The use under adverse environmental conditions  
HT type with SUS body is recommended in case ambient atmosphere is exposed to corrosive gas and stronger material than SUS is required.

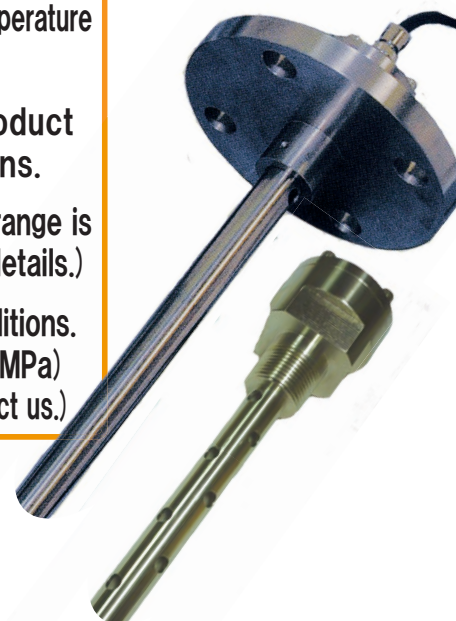


# Separated type BTL series

## BTL series have features of AT series

### Features

- Separation of the amplifier and the head permits level control under high-temperature and high-pressure conditions.
- We can manufacture the product tailored to your specifications.
- Fluid measurement temperature range is  $-20\sim 200^{\circ}\text{C}$ . (Contact us for details.)
- Applicable to high pressure conditions. (Vacuum to 1MPa)  
(For 1MPa or more pressure, contact us.)



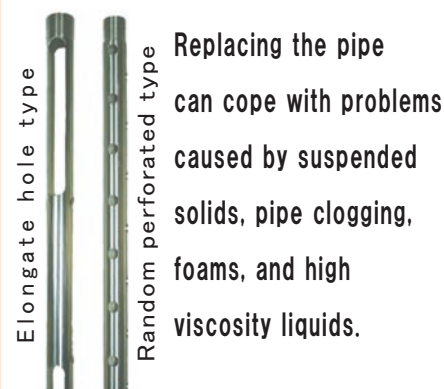
### Applications

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

### Model number configuration

<b>BTL204-500 S L 3M-22 P</b>	
Model series (Separated type) BTL204 BTL301	Diameter of pipe 22:22mm
Measurement range 200~950mm(Standard) Up to 4000mm	Connection P : PTscrew F : Flange
Electrode material S:SUS304	
Sensitivity L : Water-soluble fluid M : High-sensitive water-soluble fluid (Liquid containing much oily ingredient) H : Oily fluid	
Output Model BTL204 1 : 1point output 2 : 2point output 3M: 2points + medium output	Model BTL301 A : Linear output DC1~5V C : Linear output 4~20mA 4 : 4point output 4A : 4points + linear(DC1~5V) 5M : 4points + medium 5MA: 4points + medium + linear(DC1~5V)

### Replacement pipe



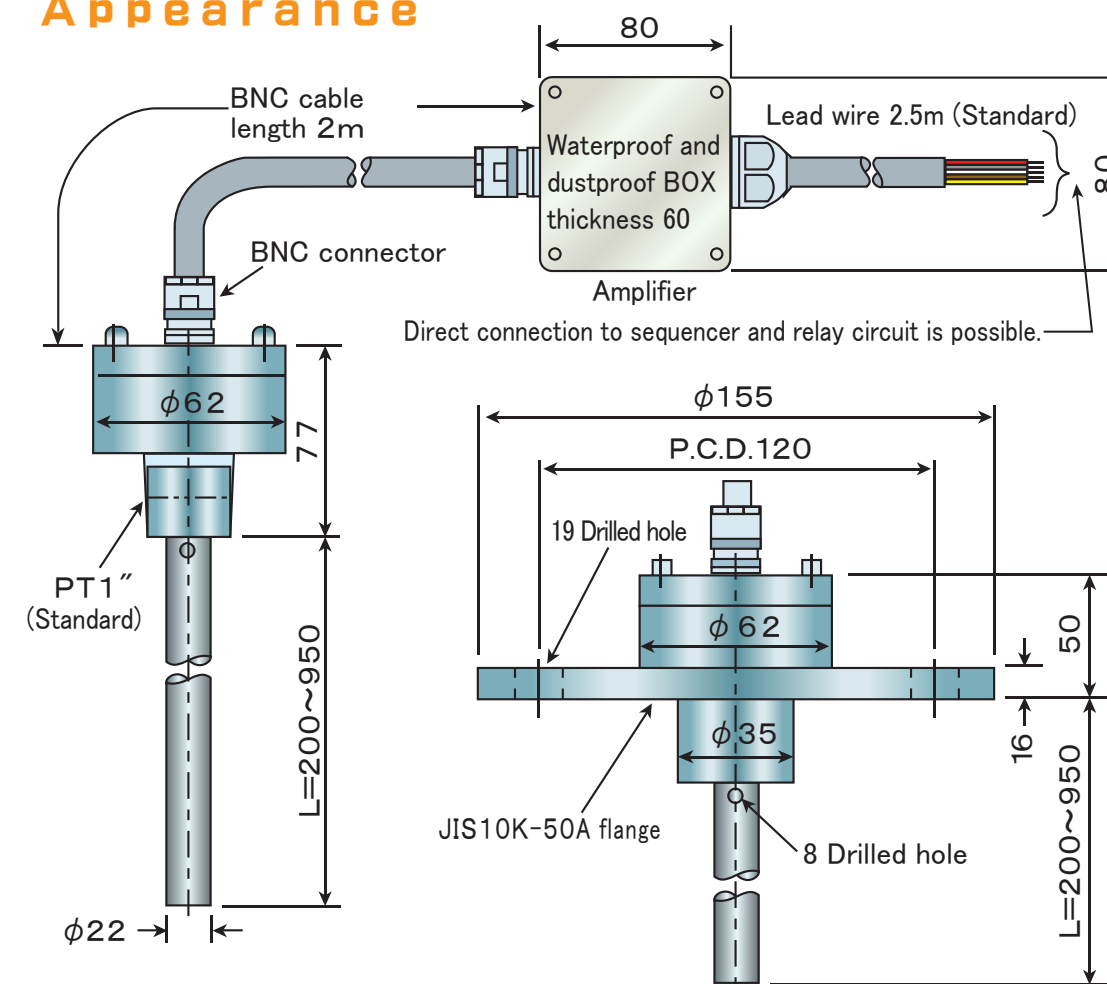
Replacing the pipe can cope with problems caused by suspended solids, pipe clogging, foams, and high viscosity liquids.

## Specifications

Measurement temperature :  $25^{\circ}\text{C}$  tap water

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 : $-10\sim 60^{\circ}\text{C}$ (Depending on environment) Electrode : $-20\sim 200^{\circ}\text{C}$ (Contact us)	
Storage temperature range	AMP : $-40\sim 80^{\circ}\text{C}$	
Operating humidity	AMP : 35~85% (Non condensing)	
Power supply voltage	10~30V DC	
Consumption current	50mA Max	150mA Max
Control 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 points : 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 Insulator : Teflon	
Dimensions	Head : Screw type $\phi 62 \times 77$ + length of electrode Flange type flange rating $\times 50$ + length of electrode AMP waterproof and dustproof BOX : $80 \times 80 \times 60$	
Wire length	Lead : 2.5m(Standard) BNC cable : 2m(Basically unmodifiable)	
Weight	JIS10K flange type Approx.3500g(L=500m)	

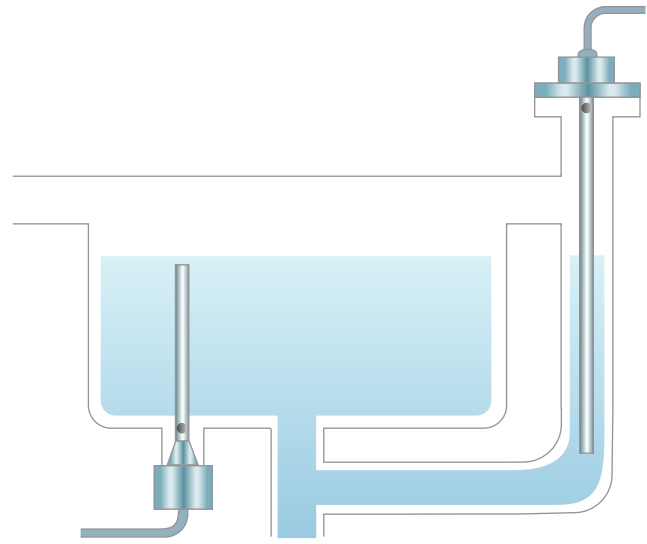
## Appearance



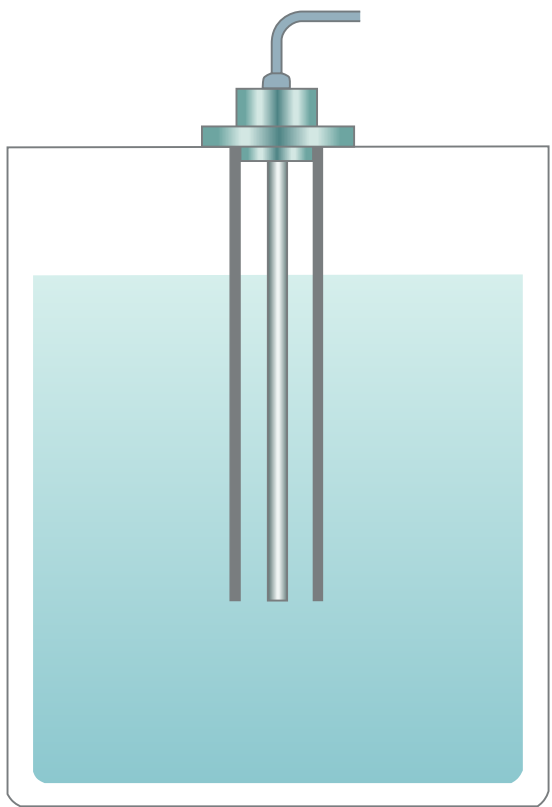
# BTL type

## Usage example

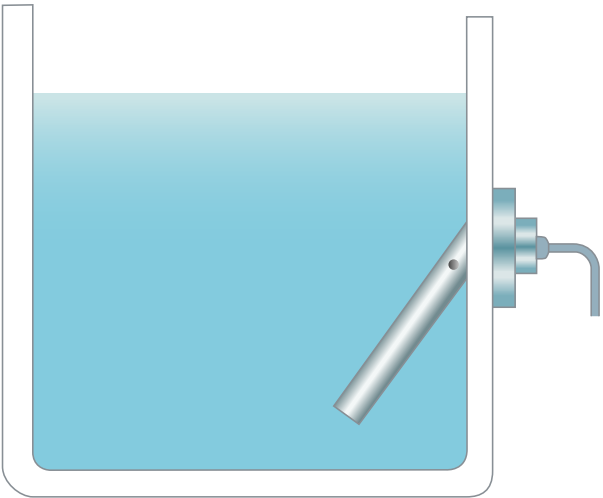
- Installation in closed tanks
  - Pressure resistance : to a maximum of 1MPa  
(For 1MPa or over, consult us.)
  - Temperature range for continuous use :  $-20\sim 200^{\circ}\text{C}$
  - For liquid measurement only  
(For other temperature range, consult us.)



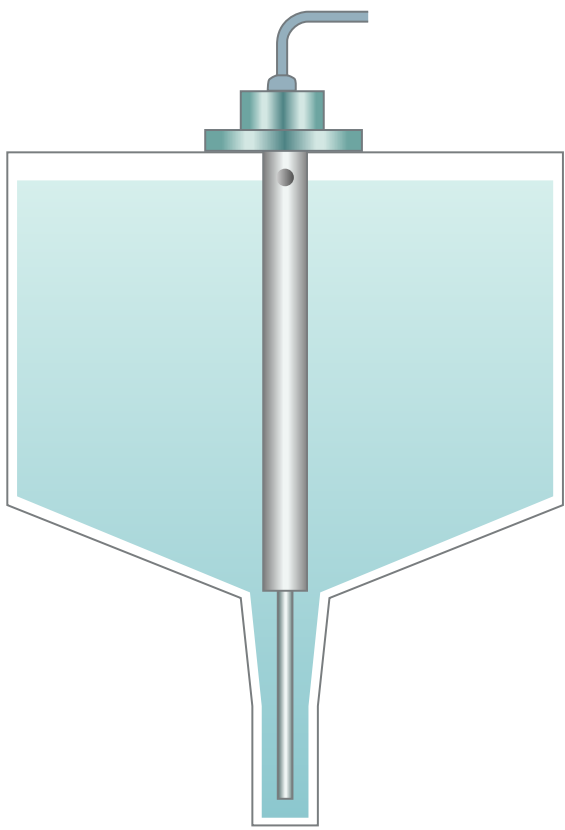
- Use of plate electrode
  - For high viscosity liquid measurement (Use of plate electrodes instead of pipe electrodes)



- Please consult us for production for the special installation
  - We can manufacture the product to meet tank specifications
  - Other material and inner seal material can be changed.



- Tank-integrated sensor for a deformed tank
  - (Use of metal tank instead of pipe electrodes)





Operates on AA battery (Simple measurement)

Features

- Easy to carry (lightweight)
- The level of liquid can be confirmed with a 10-step LED.
- Battery operated or use with the AC adapter (100V).



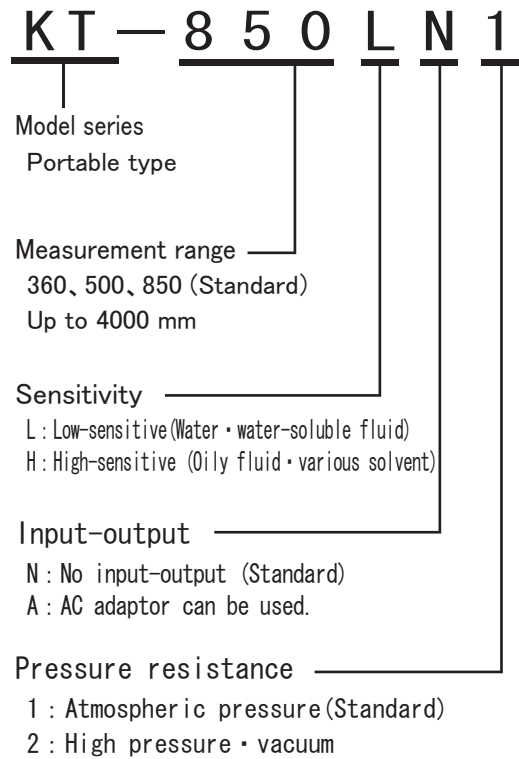
For water

For oil

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.

Model number configuration

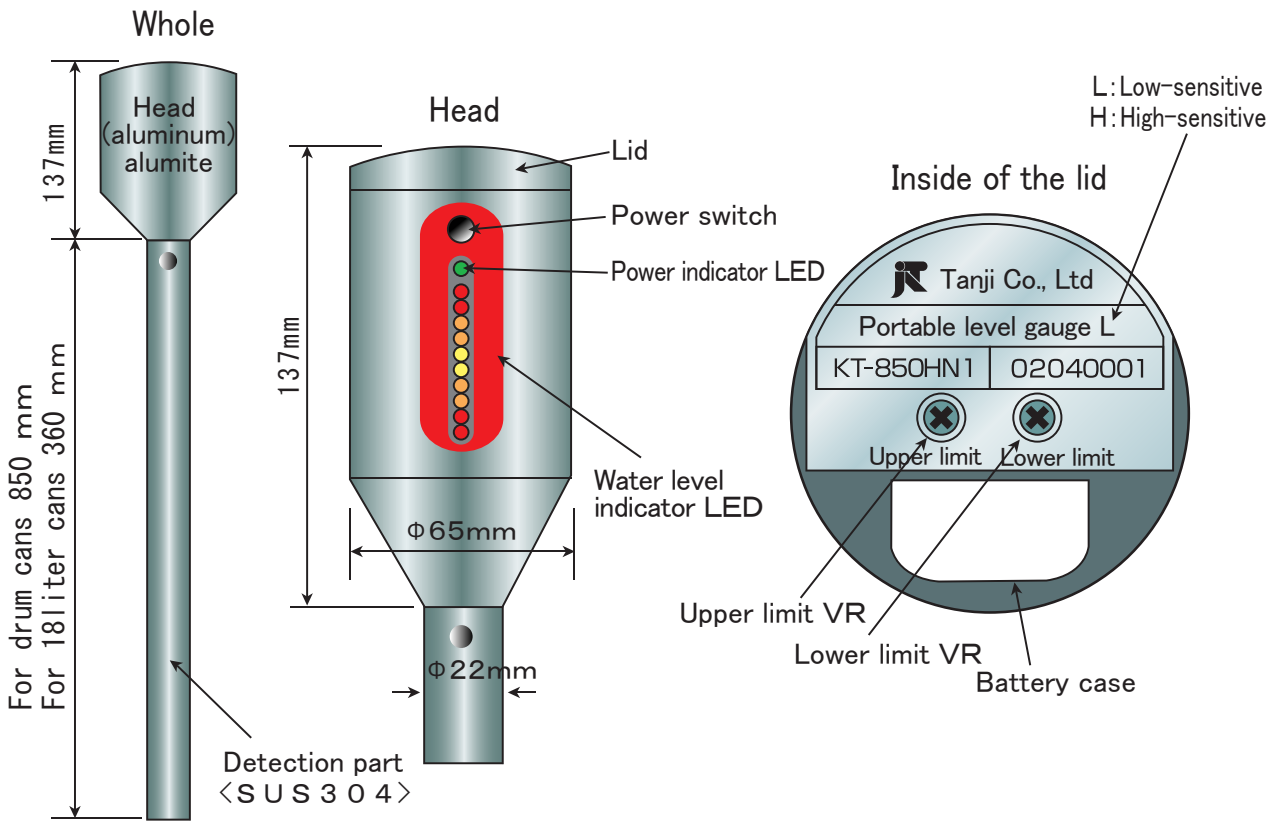


Specifications

Measurement temperature: 25°C tap water

Model	KTseries
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 × 2 (Standard)
Battery life	300 minutes of continuous operation (When using alkaline battery).
Option	No input-output : Standard AC adaptor : AC100V power outlet (AC200V is also available.)
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	φ 65 × 137+(Length of electrode)
Weight	Approx.1.3kg(L=850mm)

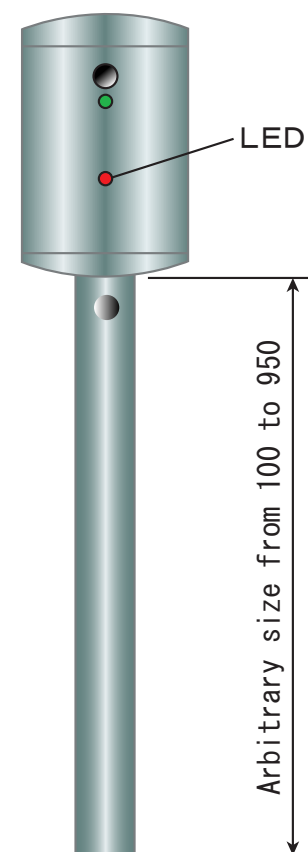
Appearance



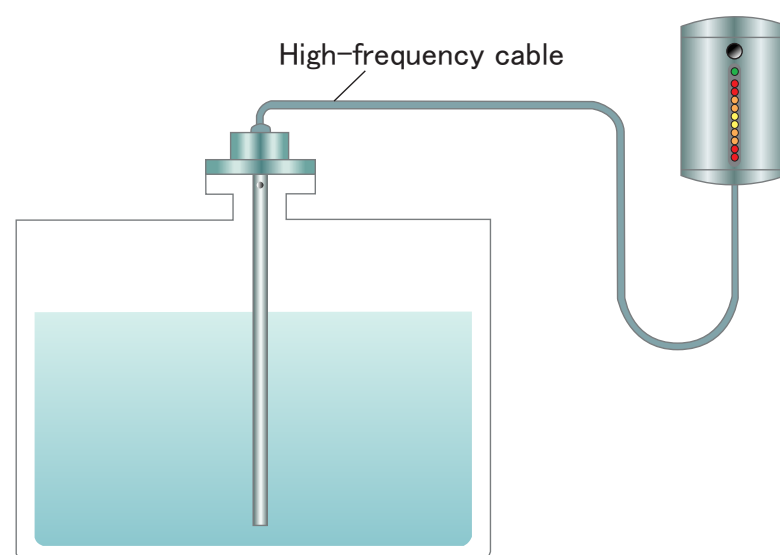
# KT type

## Usage example

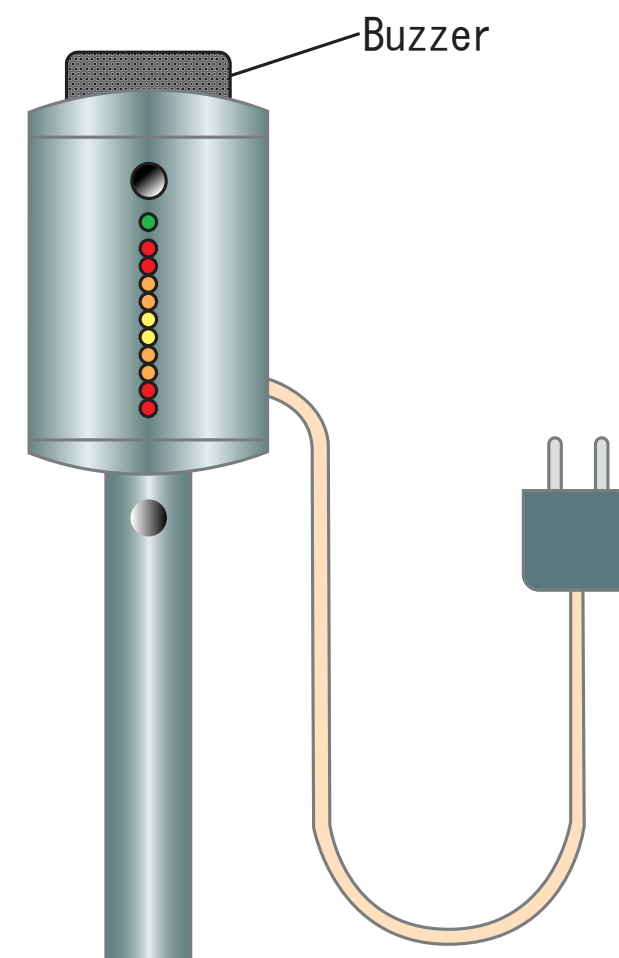
- Detection of upper limit or lower limit for heterologous liquid (Only 1 point lighting)



- Amplifier separated type to meet installation requirements  
From a simplified type to a high-temperature and high-pressure application type, sensor specification can be arbitrarily specified.



- External buzzer option of AC adaptor input  
At upper limit or lower limit



### Option

- Display LED can be changed to the bar graph method.  
(Available on AC adaptor type)  
\*In a dark room and in case that the position of LED can not be seen
- Change of push-button switch (Momentary type is standard.)  
Change to the alternation type is possible.  
\*Momentary type operates only when the switch is pushed.  
Alternation type has ON/OFF switch and operates continually.
- We can produce various brackets for installation.

Measurement range can be freely changed by changing the attachment of the electrode.

Level switch  
**STB**  
series



Features

- 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.
- Measurement range can be freely changed by changing the attachment of the electrode.
- STB series level switch is available for a wide range of measuring object including liquids, powders, and solids.
- The measurement of the point under high-temperature and high-pressure conditions is possible.
- High corrosion resistance and waterproof property.
- Low cost and high reliability.

Applications

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

Model number configuration

STB — 2 S L 3 0 E

Model series (Level switch )  
STB-1  
STB-2  
STB-3

Main body material  
S : SUS304

Sensitivity  
L : Use for metal tanks (For water-soluble fluids)  
H : Use for resin tanks • when using insulating material

Option

Addition of electrode bar : (Required measurement length) [cm] } STB-2  
Addition of disk : (Required measurement length) + E  
Addition of plug : (Required measurement length) + P } STB-3  
Addition of plug disk : (Required measurement length) + PE

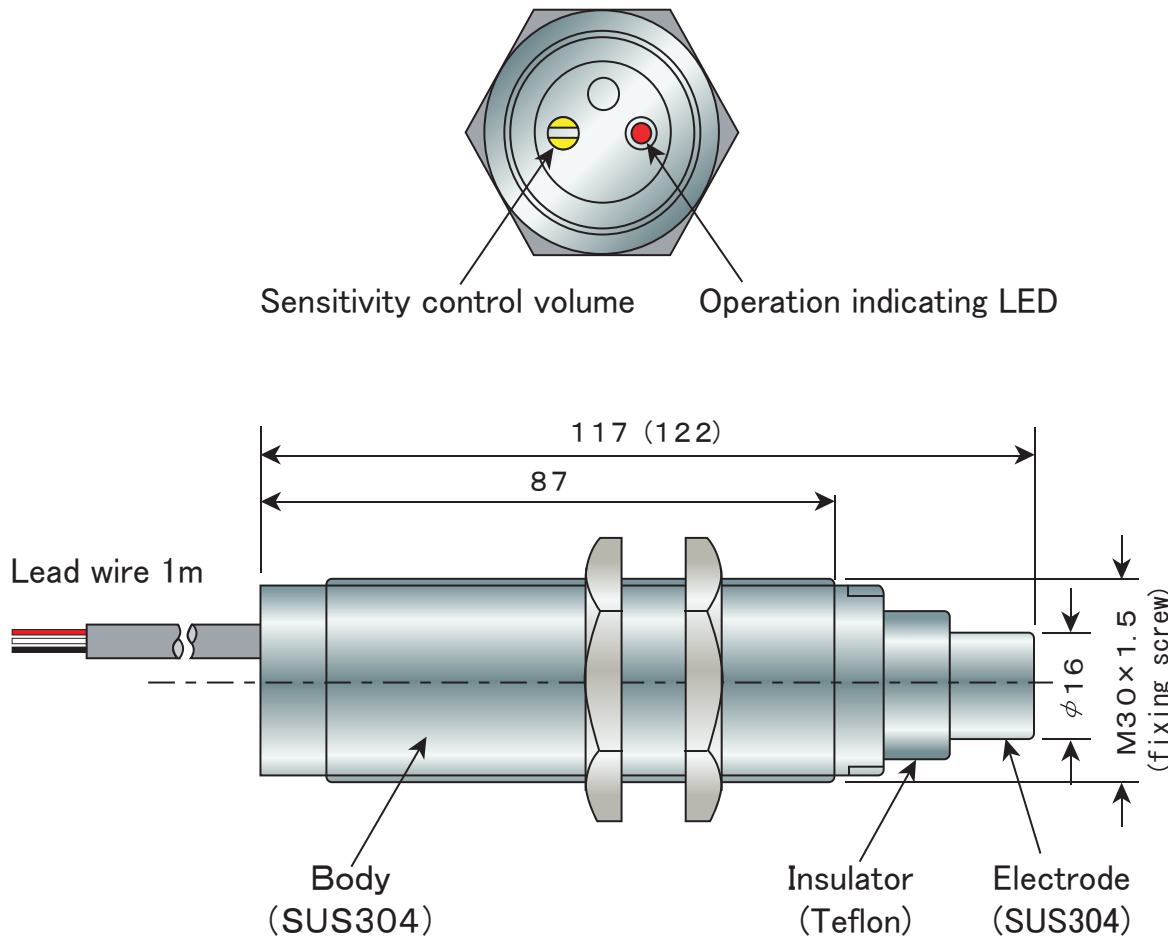
\*Required measurement length=required length from installation location-7cm  
(Length of extension electrode)

Specifications

Measurement temperature : 25°C tap water

M o d e l	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	10 ~ 30V DC		
Consumption current	20mA or less		
Control output	3 wire direct current NPN output (Sink current 100mA MAX)		
Material	B o d y : SUS304 Electrode : SUS304 (Standard) Titanium • SUS316L (Option) Insulator : Teflon		AMP : Aluminum-die-cast Electrode : (Contact us)
Dimensions	φ 30 × 117	φ 30 × 122 + (Length of electrode)	AMP BOX : 39 × 93 × 32
Wire length	Lead: 1m (Standard)		Lead: 1m (Standard) Coaxial cable between AMP and sensor (According to product specifications)
W e i g h t	Approx. 300g	Main body (300g) + electrode	AMP : Approx. 100g Electrode : According to product specifications

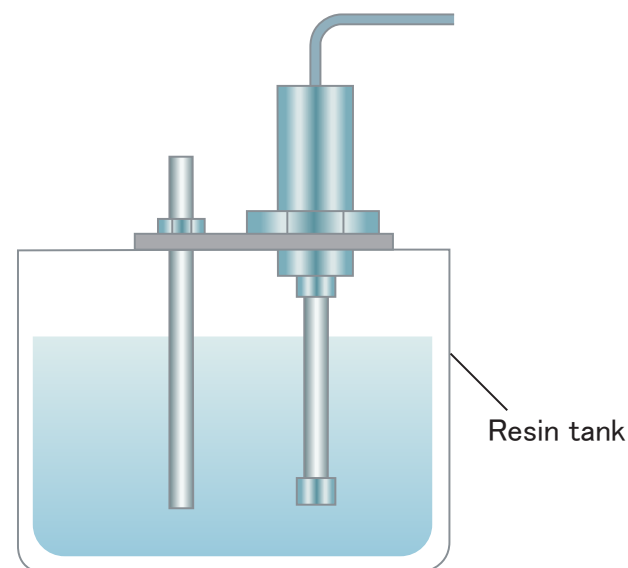
Appearance



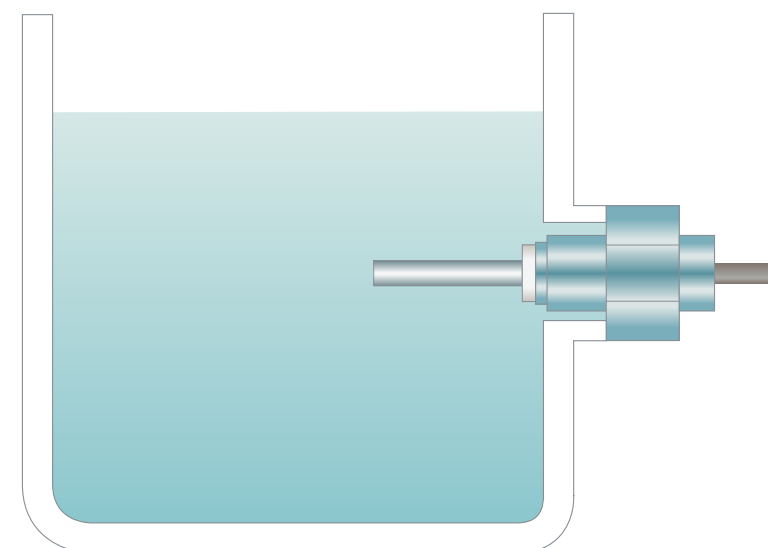
# STB type

## Usage example

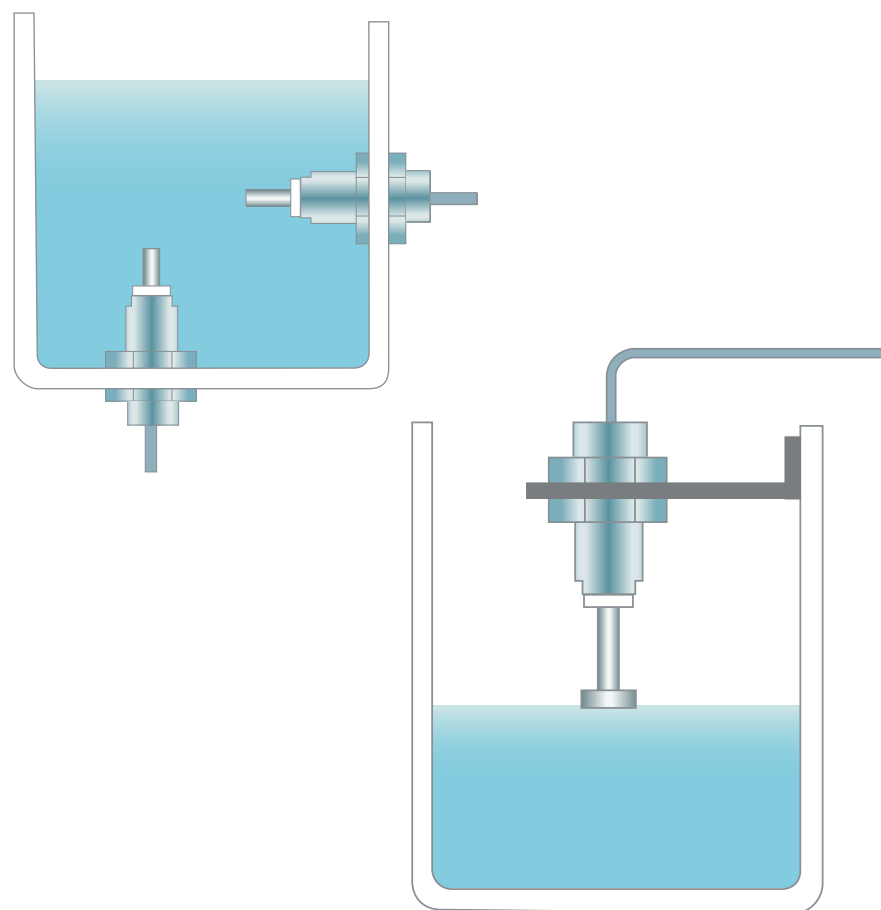
- Use for resin tanks  
The addition of ground electrode permits stable detection in resin tanks.



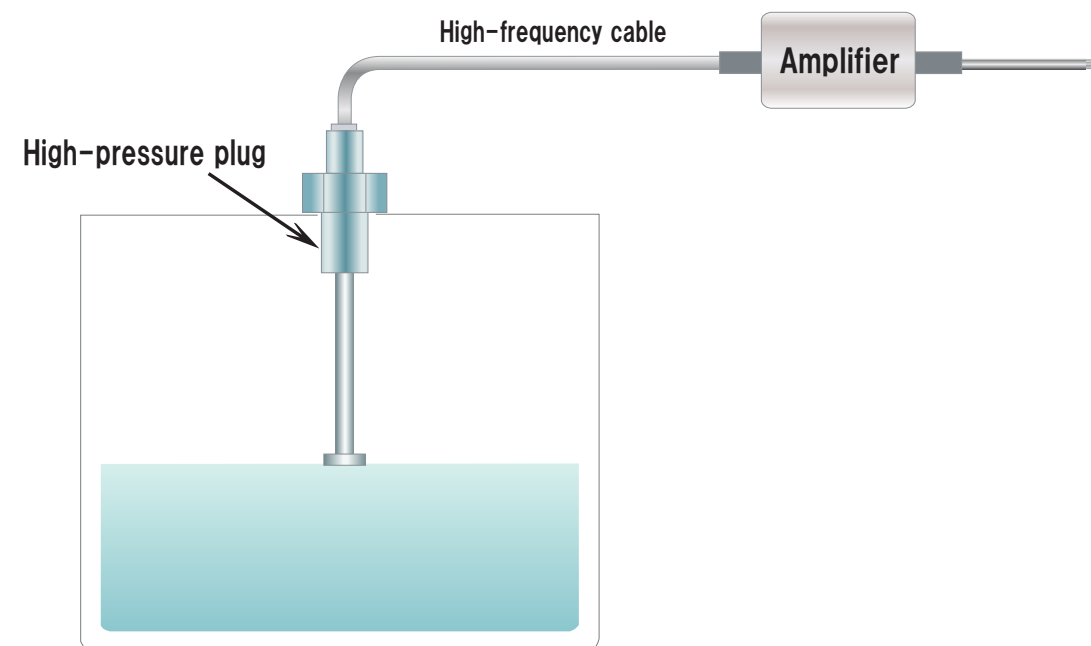
- Sensors can be customized.  
(Flange design and special screw design are available.)



- Measurement of points in small spaces  
(Standard screw for installation M30×P1.5)  
JIS flange processing and pipe thread specification permits installation on the side and bottom of tanks.  
(Contact us for details.)



- Amplifier separated type is available. (STB-3 type)  
Use of a high-temperature and high-pressure plug or an arbitrary sensor permits the measurement of points under high pressure and temperature.  
(Contact us for details.)



# Separated type compact level sensor

## MTL type

**Smallest level sensor capable of a linear output and multi point control**

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



- Linear output  
4 ~ 20mA  
DC 1 ~ 5V
- For water-soluble liquids only.  
(For other liquids, contact us.)
- Multi point detection
- Installation PT3/8 ~
- Separated amplifier

## MTB type

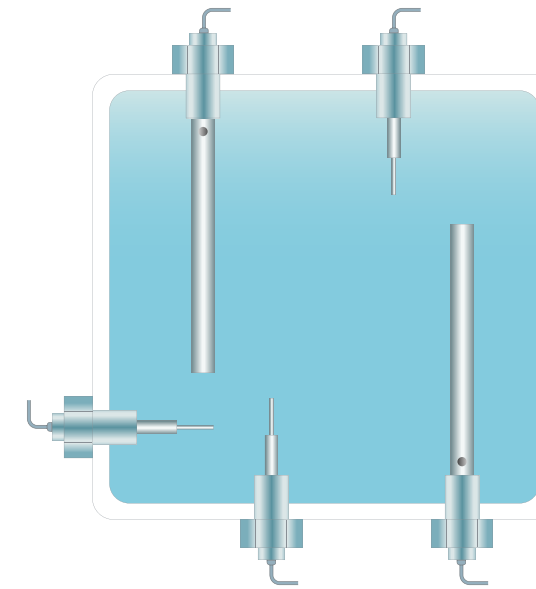
**Installable in all directions  
Space-saving and controllable!**



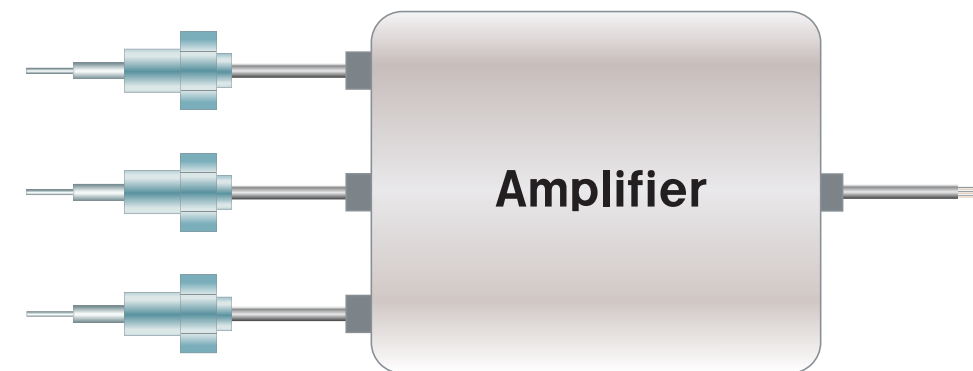
- Level switch 1point output
- For water-soluble liquids only.  
(For other liquids, contact us.)
- Installation PT1/8 ~
- Separated amplifier

## Example of use

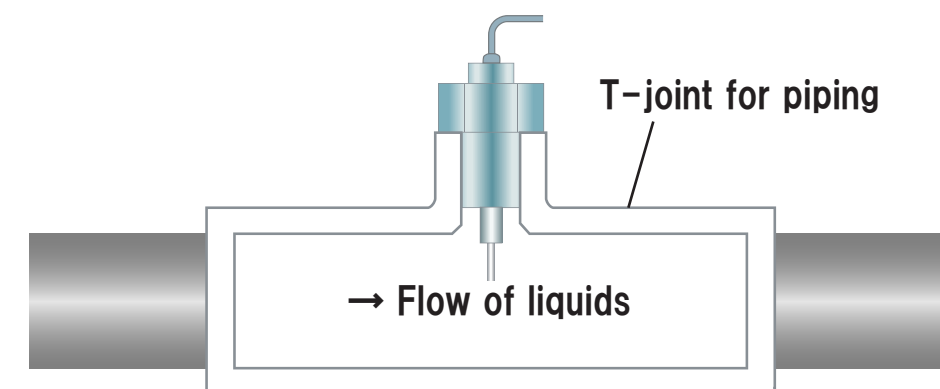
- MTB type can be installed to small tanks of various shapes in an arbitrary direction. (MTL type can be installed in a vertical direction only.)



- The specification that connects two or more MTB types with one amplifier can be produced. (Suitable for space-saving)



- The flow conditions of liquids can be confirmed by detecting the presence of pure water or other liquids in the pipe line.





# Level controller

( We can manufacture the controller tailored to your specifications.)

## TK-D

### Scaling display controller

The scaling display setting in arbitrary unit is possible.



- Comparative output : Up to 4 points detection is possible.
- Application model : AT, BTL, HT  
(Continuous analog output type)
- Lamp display, buzzer alarm, protection circuit, etc.  
(Option)

Specifications TK-D type

Input power	AC100V/DC24V
Consumption current (under maximum load)	AC100V/400W DC24V/7W
Scaling display range	-19999~99999
Input signal	DC1~5V DC4~20mA
Comparative output point (maximum)	Up to 4 points
Contact rating	AC&DC 5A
Ambient temperature range	Within a range of 0 to 50°C
Ambient humidity range	85%RH Max. (Non condensing)
Protection	Not water-proof and drip-proof
Application model	AT・BTL・HT (continuous analog output type)
Option	Lamp display, buzzer alarm, protection circuit, sensor input power source etc.
Dimensions(Standard)	W120×H76×D140(mm)
Weight(Standard)	Approx. 750g

\* The scaling meter used in the controller is subject to change without notice

## TK-A

### Level controller for contact point signal

Power supply can be selected from AC or DC.

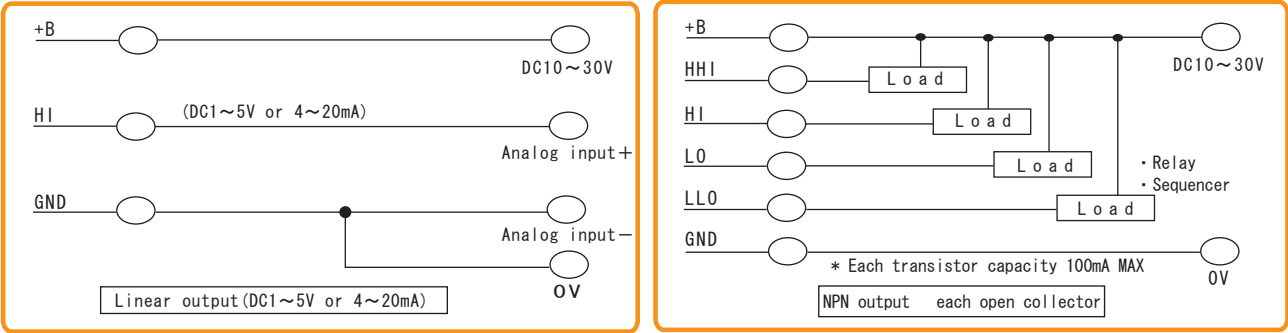


- Comparative output : Maximum 4 points detection is possible.
- Application model : AT, BLT, HT  
(Open collector output type)
- Lamp display, buzzer alarm, protection circuit, sensor input, power supply, etc. (Option)

Specifications TK-A type

Input power	AC100V/DC24V
Consumption current (under maximum load)	AC100V/400W DC24V/10W
Comparative output point (maximum)	Up to 4 points
Contact rating	AC&DC 5A
Ambient temperature range	Within a range of 0 to 50°C
Ambient humidity range	85%RH Max. (Non condensing)
Protection	Not water-proof and drip-proof
Application model	AT・BTL・HT・STB
Option	Lamp display, buzzer alarm, protection circuit, etc.
Dimensions(Standard)	W120×H76×D140(mm)
Weight(Standard)	Approx. 900g

ATHTBT Lconnection diagram



Selection of a level gauge

Measuring fluid

- For water : Water solution diluted with water and seawater
- For water and oil : Liquid having higher concentration of a oil and a solvent
- For oil : Oily liquid and solvent undiluted with water and seawater

Output

- 1 point : Detection of upper limits or lower limits
- 2 points : Detection of upper and lower limits
- 3 points : Detection of upper and lower limits and a medium between upper and lower limits
- 4 points : Detection of uppermost and lowermost limits and upper and lower limits
- 5 points : Detection of uppermost and lowermost limits, upper and lower limits, and a medium between upper and lower limits
- Linear output : DC1 to 5V output shows location voltage of liquid.  
4 to 20mA output shows location voltage of liquid.
- Each contact output+Linear output : Contact point output can be obtained parallel to linear output (only DC1~5V).

Pipe length

- Measure the depth of the tank. (Length from the lid to the bottom) (The localization of lower limit setting position)
- Locate the lower limit detecting position with reference to the lid. (Length from the lid to the lower limit detecting position plus 20mm is recommended).
- \* When length is longer than the depth of the tank, it is possible to adjust it with the spacer (optional).
- \* It is cheaper to adjust a standard type with a spacer.

Diameter and material of pipe

- When metal can not be used for the wetted part : Coat the pipe with resin.
- When using it for food : Resin coating or a sanitary pipe (φ 34)
- When the wetted part requires chemical resistance : SUS316 or titanium

Integrated type

- When the garbage such as a chip is floating in the tank : φ 34 perforated pipe
- Highly-adhesive liquid : φ 34 imperforate pipe
- \* When not corresponding to the above, φ 22 imperforate pipe is available.

Separated type

- Steaming high-temperature liquid : φ 22 or φ 34 imperforate pipe
- Incohesive clean liquid : φ 22 imperforate pipe is available.
- Dirty liquid or the soluble liquid that oil is floating (interfacial state) : φ 22 perforated pipe

Integrated type or separated type

- For high pressure tank : Integrated type or special separated type
- To adjust apart from a level gauge (Amplifier separated) : Separated type
- For water-proof : Integrated type or special separated type
- \* When corresponding to any of the above, select a separated type. For other cases, select an integrated type

Separated type specifications

- Connection : Screw type or flange type
- Size for connection : Thread diameter or flange JIS standard or special item.

Power cable

- Measure the distance from the installation location of a level gauge to a power supply (DC10~30V) or a trunk terminal.
- 2.5m is standard. (It can be extended to arbitrary length.)
- \* Recommendation is within 10m because overlong cable causes a voltage drop when using linear output type(DC1~5V).

Feature comparison

Item \ Type	Float type	Electrode type	Ultrasonic type	Vibration type	Other company's capacitance type	Our capacitance type
Low price	○	○	×	△	×	○
Installation	×	△	×	○	×	○
Adjustment	×	×	○	×	○	○
Continuous measurement	×	×	○	×	○	○
Maintenance	×	△	○	×	○	○
High temperature and pressure	△	×	×	△	○	○
Suspended solid	×	△	△	×	△	△ ※1
Waves	×	△	○	△	×	○
Foams	○	×	×	×	×	○
Solids	×	×	○	×	○	○ ※2
Powders	○	△	○	○	○	○ ※2

※1 Depending on the use conditions  
※2 When using STB type

Initial adjustment liquid

If more stable and high precision measurement is required, please provide us the sample liquid to set a level gauges according to the sample liquid. This can avoid troubles such as unnecessary readjustments and the measurement impossibility.

If unable to do so, please let us know relative permittivity of the liquid to adjust according to the liquid of similar permittivity. The amount of the sample liquid is 2L per meter of measurement length.

If we select the adjustment liquid, we use tap water for water specification and cutting oil or kerosene for oil specification.We will return the sample liquid basically. Please dispose of waste liquid.

Notes on specifications

Specifications in this catalogue are subject to change without notice to improve products. Please contact us for other specifications.

Please note that our level gauges are not certified as intrinsically safe explosion-proof construction.

Order for products of special specifications

As for the integrated type and the separated type, head (tank attaching portion), pipe shape (pipe diameter), material, and detecting portion (electrode length) can be changed. We will estimate for special specifications separately.

Order

When ordering, please contact us or dealers for the price and the date of delivery.

Instructions for use

- Our level gauge series is basically drip-proof construction and not waterproof construction. Please install it not to soak the amplifier in the liquid. (For waterproof type, consult us.)
- Please note that our level gauges are not certified as intrinsically safe explosion-proof construction. And whatsoever for any damages resulting from this level gauge.
- We recommend the regular cleaning according to the measuring liquid though this level gauge is basically maintenance free.
- If there are changes in conditions of the measuring liquid, the detection position may vary. Therefore, we recommend that you allow a wide margin for adjusting the position and carry out a regular check.

# Company profile

## Management principle

- Our company works toward the prosperity of our company and happiness of our employees and contributes to society.

## Management philosophy

- Our company recognizes the technological innovation well and demonstrates the frontier spirit.
- Our company works for the prosperity of our company in the spirit of harmony.

## Company outline

Company Name Tanji Co., Ltd  
President Yosoharu Tanji  
Head office 886-1 Kamiteru-cho, Nagahama-shi, Shiga,526-0015,Japan  
Phone +81-749-65-1950  
Fax +81-749-65-3390  
URL <http://tanji-ss.co.jp>  
E-mail [info@tanji-ss.co.jp](mailto:info@tanji-ss.co.jp)  
Established May, 1988  
Capital 10 million yen

## Business Contents

- Designing department
  - Development of new products, planning of inspection systems, tools, design
  - of automated machinery and laborsaving machinery (design and manufacture of electronic circuit)
- Electrical facility department
  - General electrical work, household electrical work, design
  - and manufacture of automatic control panel, NC machine repair, improvement
- Production department
  - Process and assembly of machine parts
- Measuring instrument development department
  - (Our products)level gauges, fish bagging machine, fish counter

# Design specification sheet

Please fill in the form below and send it to us by fax or e-mail.

Date. . .

Contact person	
Company /department	
Address	
TEL	
FAX	
E-mail address	

Item	Specification
Measuring fluid	Water ▪ oil ▪ solvent
Fluid information	
Control output	1point ▪ 2points ▪ 3points ▪ 4points ▪ 4~20mA ▪ DC1~5V
Measurement length	mm
Pipe diameter	( ϕ 22 is standard ) ϕ mm ※10mm or less is not available
Amplifier	Integrated type ▪ separated type
Ambient pressure	Ordinary pressure(atmospheric pressure) ▪ high pressure ▪ low pressure ▪ vacuum
Maximum predetermined pressure	MPa
Ambient temperature range	from °C to °C ▪ Ordinary temperature
Fundamental temperature	°C
Connection	Bracket ▪ screwed flange ▪ custom design
Cable length	2.5m (standard) ▪ m ※For more 10m, consult us.
Suspended solids	Presence ▪ absence
Viscosity	Presence ▪ absence
Impurity	Presence ▪ absence
Model	AT ▪ BTL ▪ HT ▪ KT ▪ STB ▪ MTL ▪ MTB

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