

DIAPHRAGM TYPE LEVEL SWITCH Model **KF-500**



**No Power Needed !
Use The Liquid Feature
To Detect Level.**

Applicable to high-temperature liquids
as well as viscous liquids.

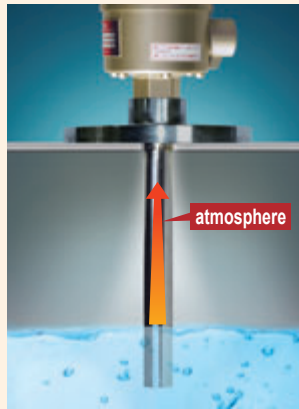
**A simple design of the moving part now comes up with the reliable operation.
The detection level is arbitrarily adjustable depending upon the length
of the detection pipe.**

■ Principle of Operation

The Diaphragm Type Level Switch is a level switch detecting an object to be measured, through utilizing the pressure change affected by water rise and fall in a pipe.

As water level rises, air pressure inside a pipe gets higher. When the measuring face of diaphragm falls under the air pressure, the diaphragm presses a micro switch, thus turning it on.

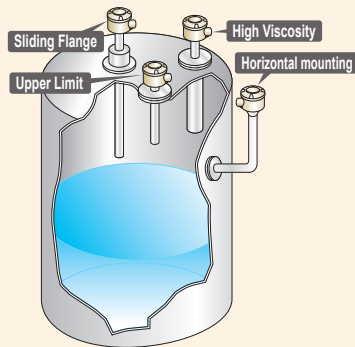
In turn, as the water level descends and the air pressure inside the detection pipe gets lower, the output contact will return to the initial condition.



■ Precautions for Use

- In view of working pressure being minute, completely seal the housing body and the detection pipe with seal adhesives in liquid form.
- Exercise your discretion to select a detection pipe by material, bore diameter and length according to the nature of liquid.
- It is also possible to change the detection water-level by fixing a sliding flange.
- Make the tank opened when using.
- Detection pipe and Flange can optionally be available.

■ Application



■ Standard Specifications

Spec.	Model	KF-500	KF-500H
Contact Capacity		250VAC 5A	250VAC 5A
		250VDC 0.25A	250VDC 0.3A
		30VDC 5A	30VDC 5A
Temperature		-20 to +70°C	-25 to +150°C
Pressure		atm.	atm.
Enclosure Rating		Equivalent to IP54	Equivalent to IP54
Operating Water Level *1		40±10mm	50±10mm
Breaking Water Level *1		30±10mm	40±10mm
Weight		0.6kg	0.6kg
Conduit Connection		G 3/4	G 3/4
Housing Material		ADC	ADC
Diaphragm		Silicon Rubber	Silicon Rubber

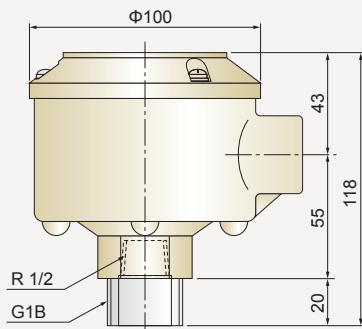
- Flange 25A is the smallest. ANSI and DIN can be available.
- The closed tank is unusable.
- This can be an explosion-proof product when an intrinsically safe explosion-proof barrier is used. *2

Note:

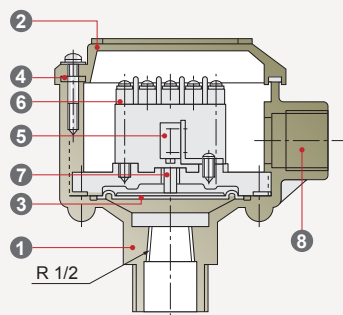
- *1) The motion level signifies a level from the pipe tip to the surface, witnessed when screwing a 1/2B SGP pipe in 500mm into the thread part of body has a switch turn on.
- *2) You may replace by a micro switch which can be operational under a minute current, depending upon the barrier relay type. Confirm the electric rating of the barrier relay now in use and contact our Sales representative.
- *3) In installing at the place over 150°C, we recommend KF-500H(S) which is heatproof up to 250°C, but consult with our sales staff because its shape is different.

General Drawings / Internal Structure / Contact Construction

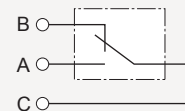
● Figures of General Drawing



● Figures of Internal Structure



● Figures of Contact Construction



No.	Parts Name	Material
1	Housing	ADC
2	Lid	ADC
3	Diaphragm	Silicon Rubber
4	Gasket	NBR
5	Micro Switch	
6	Terminal Block	
7	Push Rod	C3604
8	Conduit Connection	G 3/4

Line of business

- Rotary Paddle Type Level Switch
- Vibration Type Level Switch
- Swing Type Level Switch
- Acoustic Level Switch
- Capacitance Type Level Switch
- Capacitive Proximity Sensor
- Capacitance Type Level Indicator
- Diaphragm Type Level Switch
- Tilt Switch
- Leak Type Level Switch
- Microwave Type Switch
- Sounding Bob Type Level Indicator
- Flow Switch
- Conductance Type Level Switch
- Float Switch
- Float Type Level Indicator
- Ultrasonic Type Level Indicator
- Equipments For Conveyor Lines
- Dust Monitor System
- Zirconia Oxygen Analyzer
- Laser Type Level Indicator
- RADAR Type Level Indicator
- On-line Sensors for Accurate Liquid Analysis
- Ultrasonic Flow meter

*Please be sure to read USER'S GUIDE, Installation & Operation Instructions before using the instrument.

*The specifications herein may be subject to change without advance notice.

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