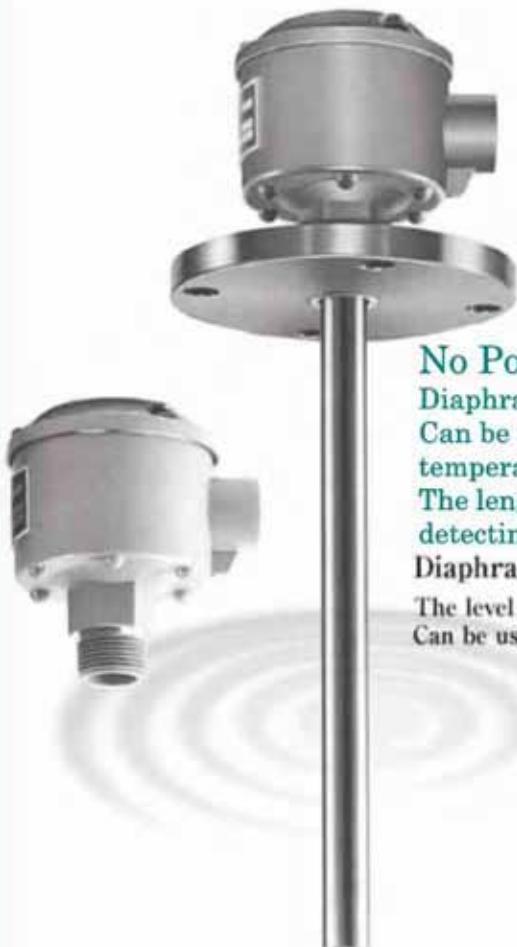




# KF-500

## DIAPHRAGM TYPE LEVEL SWITCH



### No Power Needed !

Diaphragm detects level.

Can be used for viscous liquids as well as high-temperature liquids.

The length of detecting pipe may determine the detecting level.

Diaphragm detects the level.

The level can be decided by pipe length.

Can be used for viscous liquids.

## Principle of Operation

As water level inside a tank rises to get the end of detection pipe wet and keeps rising beyond, the pressurized water gets higher pressure inside the detection pipe. When the measuring face of diaphragm gets pressure, the diaphragm pushes a micro switch and turns on. Secondly, as water level descends and pressure inside the detection pipe gets lower, the reversionary power of the micro switch and the tare of the diaphragm turn off the micro switch. The pressure shifting affected by rise and fall of water level makes it possible to activate the micro switch.

## Features

**Durability:** The stroke of diaphragm board that is a moving part is so short to be 2mm that the elasticity of the board may not be impaired. Therefore, it is longer lasting with no failure at all.

**Corrosion Resistance:** Liquid inside tank gets the detection pipe wet but never the switch.

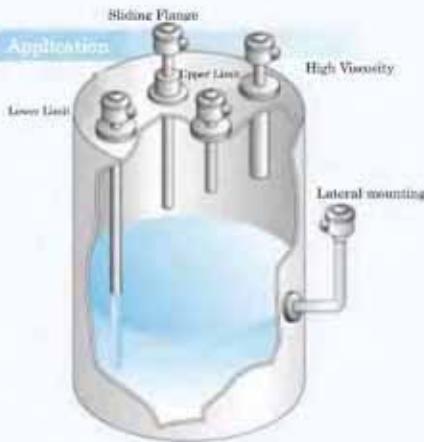
**Pervasive Use:** It can reliably operate to measure clay or viscous liquids and be workable under such a high temperature that no float switch can operate.

**Reliability:** The operation is very reliable because moving parts are simply designed.

**Easy to Handle:** The sensing mechanism can easily be attached with 1/2B pipe and detached as well as the material of the pipe, varied by the liquid, can easily be selected(SGP, SUS304, 316, 316L, PVC, HTPVC and so on).

## Precautions for Use

## Application



- 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. The detection pipe and the sliding flange are separately quoted.
- It is also possible to change the detection water-level by fixing a sliding flange.
- Make the tank opened when using.

## ■ Specification

Type	KF-500	KF-500H
Contact Capacity	AC250V 5A DC250V 0.25A	AC250V 5A DC250V 0.3A
Temperature	-20 ~ 70°C	-25 ~ 150°C
Pressure	Ambient Pressure	Ambient Pressure
Construction	IP42 equiv	IP42 equiv
Motion Level	40 ± 10mm	50 ± 10mm
Reversion Level	30 ± 10mm	40 ± 10mm
Body Weight	0.6 kg	0.6 kg
Cable Outlet	G 3/4	G 3/4
Material	ADC12	ADC12
Diaphragm	Silicon Rubber	Silicon Rubber
Painting	Munsell 5B 8/4	Munsell 5B 8/4

### Note:

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.

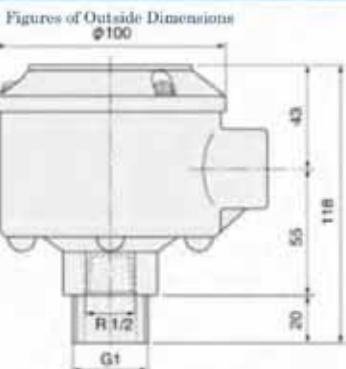
\* In installing at the place over 150°C., we recommend KF-500HS which is heatproof up to 250°C, but consult with our sales staff because its shape is different...

\* Flange 25A is the smallest. ANSI and DIN can be available.

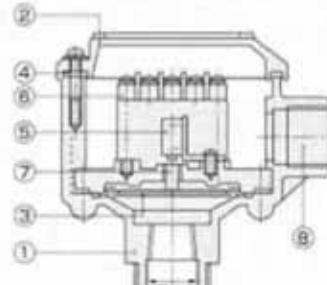
\* The closed tank is unusable.

\* This can be an explosion-proof product when an intrinsically safe explosion-proof barrier is used.

## Figures of Outside Dimensions/ Internal Structure/ Contact Construction

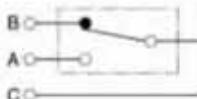


### Figures of Internal Structure



Type	Parts Name	Material
1	Body	ADC12
2	Cover	ADC12
3	Diaphragm	Silicon Rubber
4	Gasket	NBR
5	Microswitch	
6	Terminal Stand	
7	Presser Fitting	C3604
8	Cable Outlet	G 3/4

### Figures of Contact Construction



※予告なく仕様変更することがありますので予めご了承下さい。

Specifications and description of this catalog are subject to change without notice for improvement.

## ■ 営業品目 HANDLING ITEMS

- |                  |                |
|------------------|----------------|
| ① 回転式レベルスイッチ     | ② フロースイッチ      |
| ③ 振動式レベルスイッチ     | ④ 電極式レベルスイッチ   |
| ⑤ 音波式レベルスイッチ     | ⑥ フロートスイッチ     |
| ⑦ 静電容量式レベルスイッチ   | ⑧ フロート式レベルメータ  |
| ⑨ 静電容量式近接センサ     | ⑩ 組音波式レベルメータ   |
| ⑪ 静電容量式レベルメータ    | ⑪ コンペア周辺機器     |
| ⑫ ダイヤフラム式レベルスイッチ | ⑫ ダストモニタ       |
| ⑬ チルトスイッチ        | ⑯ レーザー式レベルメータ  |
| ⑭ リーク式レベルスイッチ    | ⑰ 電波式レベルメータ    |
| ⑮ マイクロウェーブスイッチ   | ⑱ 液体分析オンラインセンサ |
| ⑯ サウンジング式レベルメータ  | ⑲ 液体超音波流量計     |

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**KANSAI AUTOMATION CO.,Ltd.**

Headquarters : TEL. 81-6-6312-2071 FAX. 81-6-6314-0848

URL: <http://www.kansai-automation.co.jp>

e-mail: [info@kansai-automation.co.jp](mailto:info@kansai-automation.co.jp)

Headquarters: 2-14, Togano-cho, Kita-ku, Osaka 530-0056, Japan

Tel 81-6-6312-2071 Fax 81-6-6314-0848

Tokyo Branch: 1-29-6, Hamamatsu-cho, Minato-ku, Tokyo 105-0013, Japan

Tel 81-3-5777-6931 Fax 81-3-5777-6933

Nagoya Office: 3-31-27, Uchiyama, Chigusa-ku, Nagoya 464-0075, Japan

Tel 81-52-741-2432 Fax 81-52-741-1588

Kyushu Office: 1-2-39, Asano, Kokura Kitaku, Kitakyushu 802-0001, Japan

Tel 81-93-511-4741 Fax 81-93-511-4580

## 代理店 / Agent

**SCIENCE GATE**  
Your Automation Partner



SCIGATE AUTOMATION (S) PTE LTD

No.1 Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488 Fax: (65) 6562 0588

Email: [sales@scigate.com.sg](mailto:sales@scigate.com.sg) Web: [www.scigate.com.sg](http://www.scigate.com.sg)

Business Hours: Monday - Friday 8.30am - 6.15pm

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Please surely read the instruction manual when you operate instruments.