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INSTRUCTION MANUAL

Pressure Type Level Switches

HP-1A Series



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Overview The HP-1A Series is a Pneumatic Level Switch that is particularly suitable for high viscosity fluids.

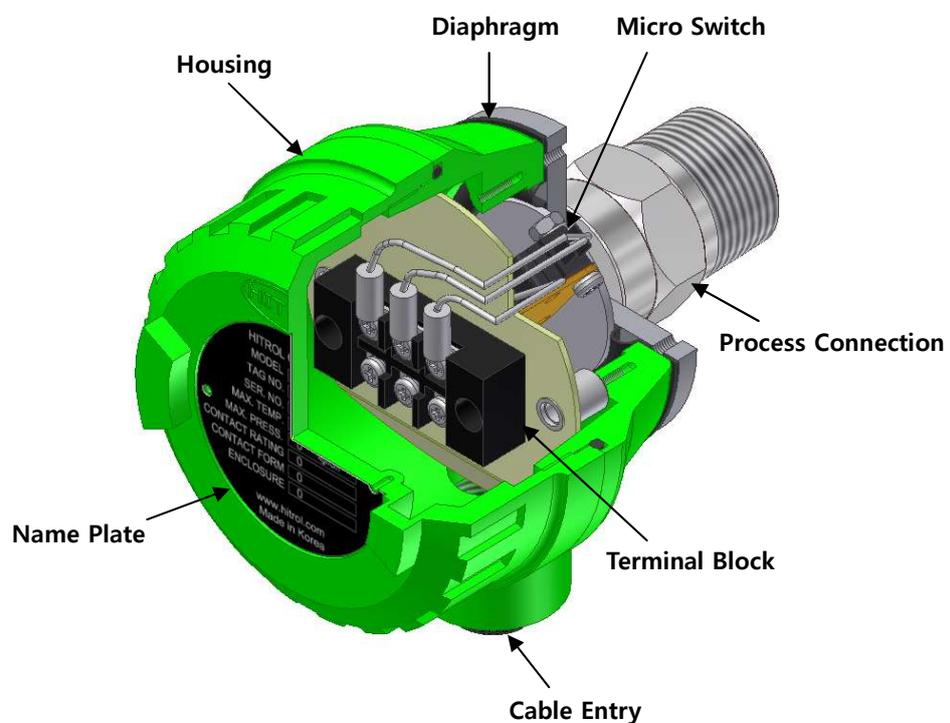
The small size makes it easy to detect the liquid level in the container of small mechanical equipment.

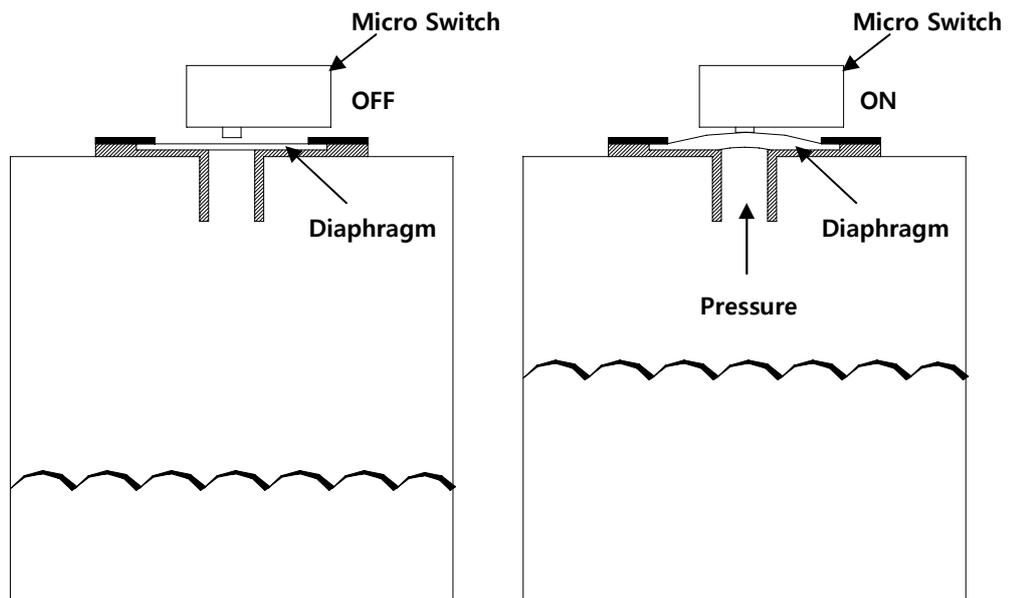
- Application**
- a variety of industrial chemical machinery equipment
 - water treatment equipment
 - Food and beverage production machines, filters, cleaners, etc.

- Characteristics**
- It is specialized in the level control of high viscosity liquids.
 - Its small size makes it easy to control the liquid level of the integrated machine facility.

Product composition and Operation Principle

As the water level increases, air pressure is delivered to the air room inside the switch unit. As the diaphragm located above it moves, it operates the micro switch and the corresponding contact point becomes It can be output to alarm and control the level.





- Not working under pressure when water level is low
- As the water level rises, the switch is operated by pushing the Diaphragm under pressure.

<Operation Principle>

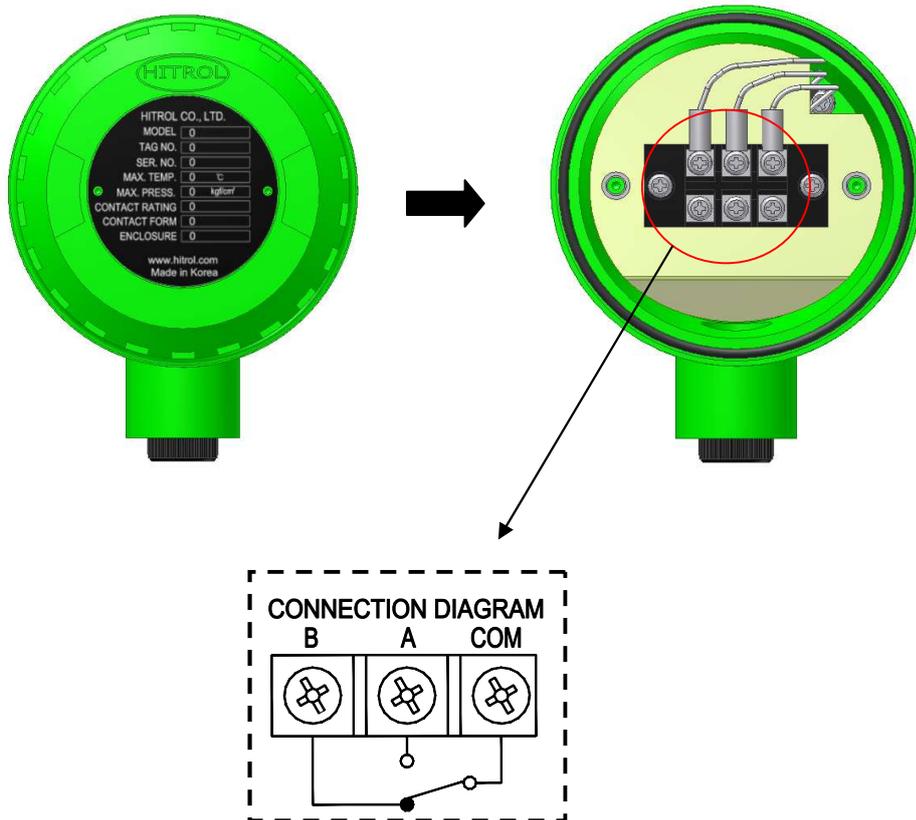
Specification

Model	HP-1A
Mounting	TOP , SCREW
Max. Process Press. / Max. Temperature	Up to 0.5kg/cm ² Max . 60°C
Ambient Temp.	-20°C ~ +60°C
Output Signal	1-SPDT
Enclosure	Weather-Proof (IP65)
Approvals	-20°C ~ +60°C
Process Connection	PT 1" (Std.)
Housing	ALDC 12. (Std.)
Diaphragm	Silicon Rubber
Cable Entry	PF 3/4"(F) (Std.)
Contact Rating	AC 250V, 5A / DC 125V, 0.5A

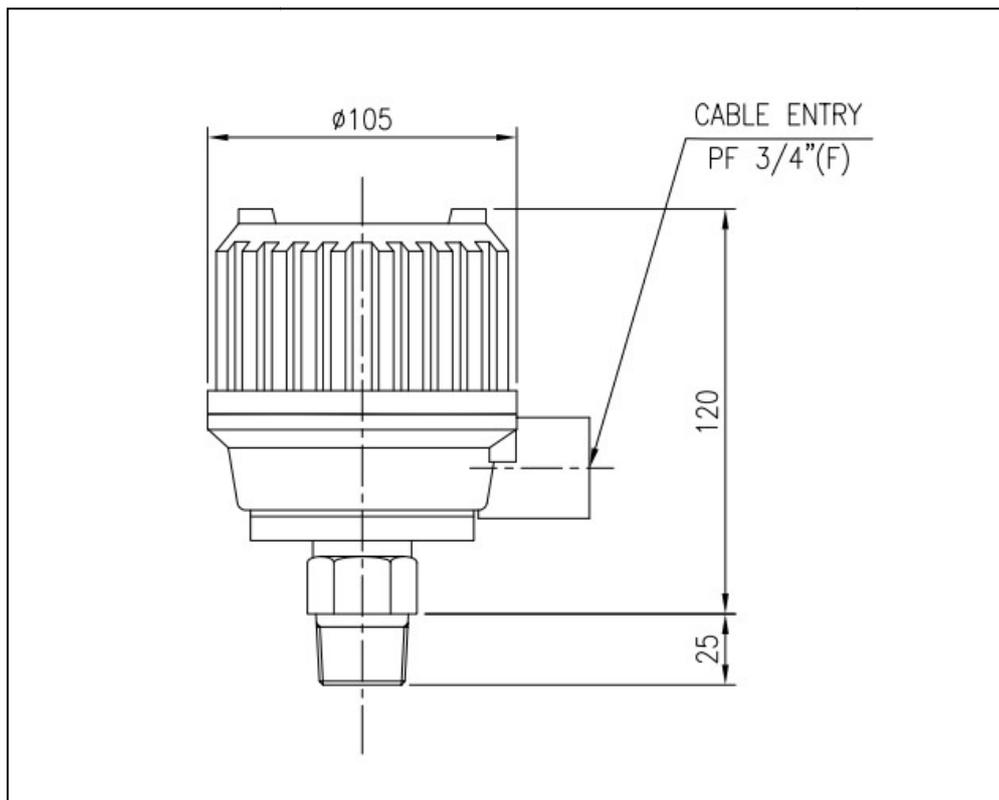
Wiring

The terminal of the product is configured as shown in the figure below according to the contact point, and is connected according to the following.

- Open the product COVER and insert the CABLE through the inlet of the wire.
- Check the contact identification (A, B, COM) on the terminal and connect using the terminal



Product Dimensions



< HP-1A Dimension >

**Precautions
for
Installation**

- It shall be of the same standard when fastening flanges or screws.
- The user shall fasten the washer between bolts and nuts to prevent loosening.
- After the installation is completed and the COVER of the product is assembled, power is applied.

**Precautions
for
Removal**

- The presence and level of the measured material in the container shall be checked before separation.
- Demolition work shall be carried out with the power cut off.
- Be careful not to damage the O-ring or gasket when opening and closing the COVER of the product.



Do not impact the product when moving and transporting the product.

Safety and Environment

- Precautions during use

 - When fastening a product, use tools, etc. to fasten it as much as possible. It should be done.
 - It should not have a big impact on the product.

- Precautions for product run-off

 - The connection shall be made to the terminal suitable for the position of the contact point. (See Line Method)

- disposal of products

 - When disposing of the product because it cannot be used, the terminal and body in the product container
 - You can separate the parts and discard them. There are no accessories that affect the environment.
 - There is no need for caution. (e.g. mercury switch)

- Show product awareness

 - The product recognition mark is attached to the top of the COVER, and the model name, serial number, usage temperature, usage pressure, and output of the product are marked.
 - The serial number is the manufacturing unique number that distinguishes the



< HP-1A용 Name Plate >

User Training ■ Be aware of the above and the measured fluid temperature of the container using the product shall not exceed a maximum of 60°C. In addition, the ambient temperature of the housing should not exceed -20 to +60°C.

Warranty and Contact ■ **Quality Assurance and Services**
The warranty period for this product is two years after the product is shipped, and in case of failure in normal use, free service is available. If the product is not broken, requesting service may result in charges regardless of the warranty period. You can apply for aftersales service through the website or the headquarters.

■ **Contact information of headquarters, factories, and research institutes**

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