

# Installation Instructions for SIKA flow monitoring switches with microswitch Series VH 0...

Most monitoring and measuring devices function electromechanically. For this reason, the general installation and operating instructions refer to the mechanical and electrical operating data of the individual devices or subassemblies.

## 1. General

Flow monitoring switches of the series VH 0... are special devices with built-in microswitch 250 V / 5 A, AC (max.).

These devices are available with either external or internal thread. The device issues a signal if the flow rate falls below the set switching point.

The wiring diagram is shown on the type plate. The plug is equipped with screw-connection for the leads. Neither soldering is necessary.

Types	
VH 0...I	Brass/Stainless steel design with internal thread G 3/8 to G 2
VH 0...V	Brass/Stainless steel design with brazed hexagon nipple
VH 0...A	Brass/Stainless steel design with external thread G 1/2

## 2. Installation in the pipeline

Please check if the flow monitoring switch is suitable concerning the material for the medium that has to be measured.

The device is sealed into the pipe using Teflon tape. When installing the device, make sure that the flow direction is correct. This is indicated by the flow arrow located on the switching head.

The pipe must be cleaned to remove coarse soiling. The settling section before and after the device must be at least 5 x DN. If the switching point is not set, the device must be adjusted to the desired switch-off point by moving the microswitch.

**IMPORTANT:** When installing the device, make sure under all circumstances that the paddle system is neither damaged nor twisted.

## 3. Adjusting the switching point

Move the coverplate on the switching head and the adjustment-screw is visible.

Turn this screw to adjust the setpoint.

Possible setpoint range acc. to the typeplate.

## 4. Functional description

The contact function of the code number on the plug is: code 1 and 2 is closed if flow is detected and switches 2 and 3 if flow rate falls below the setpoint.

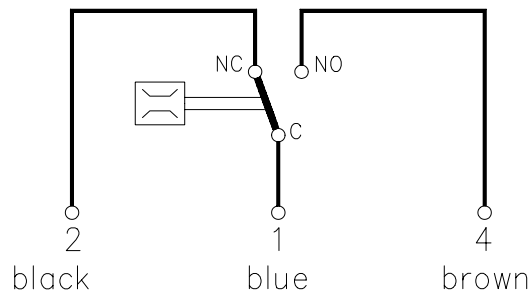
## Mechanical system

- Flush the pipe system before installation
- Fit dirt traps if the media are heavily soiled
- Pay attention to flow direction

## Electrical system

- Use the circuit diagram as a basis for wiring
- Check the control circuit, avoid contact overloading
- In the case of AC avoid long distances between the contact and component to be switched and provide a suppressor circuit if necessary.

## Circuit diagram



Circuit diagram for device connection via built-in flange-mounting socket-outlet and loose plu connector, cable or direct connection for microswitch.

## Functional description

The device is fitted with changeover contact for flow rate measurement. The contact is closed between „C“ and „NO“ (1,4) when the device is functioning properly. This contact opens when the flow rate falls below the set value.

## Flow monitor / indicator / meter

- Pay attention to operating pressure and pressure stage as well as max. temperature.
- If the installation position is defined, perform installation correspondingly.
- Note switching indication tolerance.
- Use device only for the specified medium.
- Determine the maximum flow rate (formula: switching point rate + hysteresis rate = minimum operating flow rate for proper functioning). The hysteresis value is specified in the device description and the difference between the switch-on and switch-off points in the rating plate.
- Vent the system before putting it into operation.
- Avoid pressure surges and swings in the measuring systems.
- The value of the average pressure loss of the respective device must be available as the minimum upstream pressure.
- Pay attention to technical data for special versions and attachments.