



# TECHNICAL SPECIFICATIONS

## ■ VKF-621

Flow Switch Type  
Fixed Paddle

### DESCRIPTION

The Fixed Paddle Flow Switch was designed to meet industrial application requirements and address flow detection challenges. Its main function is often to act as a safety and protection device, detecting whether a pipeline has flow or not, or indicating an increase or decrease in flow rate. It can be used in a wide range of industrial applications such as alarms, motor control, compressors, pumps, etc., handling fluids like water (natural or chilled), brine, oils with viscosities similar to water, and others.

### PRINCIPLE OF OPERATION

The flow switch paddle remains inserted in the pipeline, positioned to oppose the fluid flow. When flow is present, or when it increases or decreases beyond the set point, the rod (which is attached to the paddle) is displaced, causing the activation of the electrical contact located inside the enclosure.

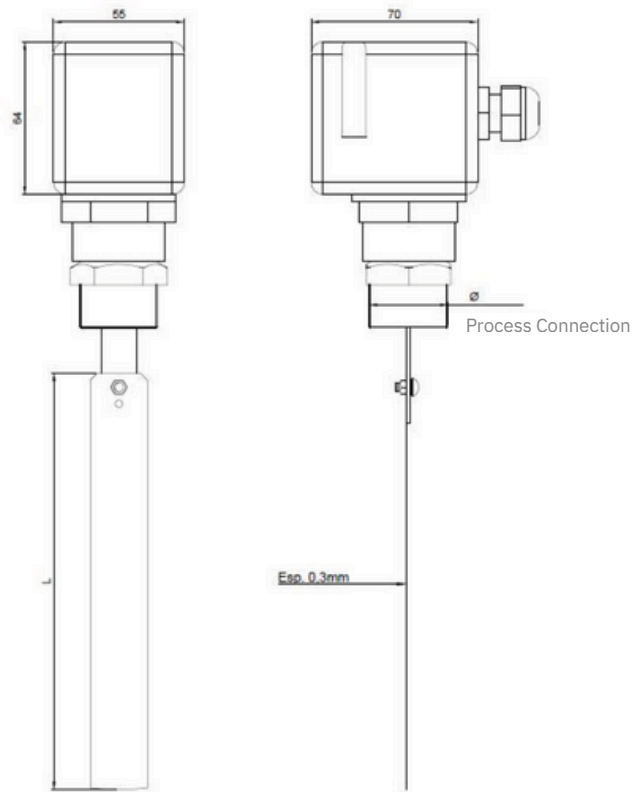
### MAIN APPLICATIONS

- Industrial Process Control
- Testing and Calibration Systems
- Power Generation and Transmission
- Water and Sanitation
- Refrigeration and Ventilation
- Heating and Air Conditioning (HVAC)

### KEY FEATURES

- Easy Installation
- Sensitivity Adjustment
- NO/NC Contact

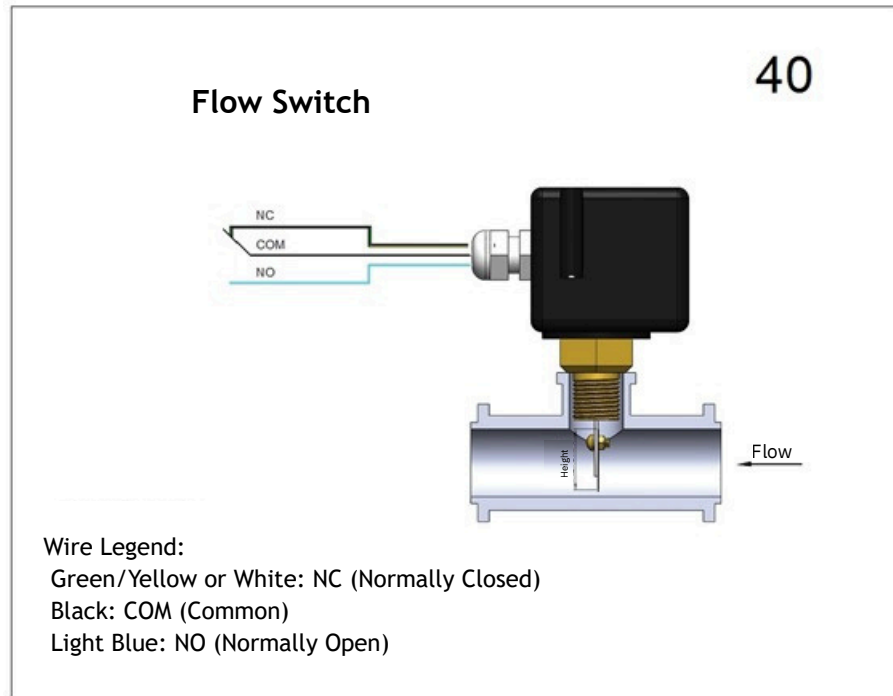
## ■ DIMENSIONAL DATA



## ■ TECHNICAL DATA

<b>Enclosure</b>	Polycarbonate
<b>Protection Rating</b>	IP65
<b>Process Connection</b>	As per the table
<b>Paddle Length</b>	1" to 6" (adjustable)
<b>Connection Material</b>	Brass
<b>Other Parts</b>	Stainless Steel 304
<b>Electrical Connection</b>	Cable Gland
<b>Contact</b>	SPDT
<b>Contact Rating</b>	250VAC / 10A
<b>Operating Temperature</b>	0°...80°C
<b>Process Pressure</b>	Max. 10 kgf/cm <sup>2</sup>
<b>Sealing System</b>	Bellows (nitrile rubber)
<b>Adjustment</b>	Sensitivity (adjustable via nut and locknut)
<b>Flow Rate</b>	Minimum 20 LPM (liters per minute) in 1" piping

■ ELECTRICAL DATA / WIRING DIAGRAM



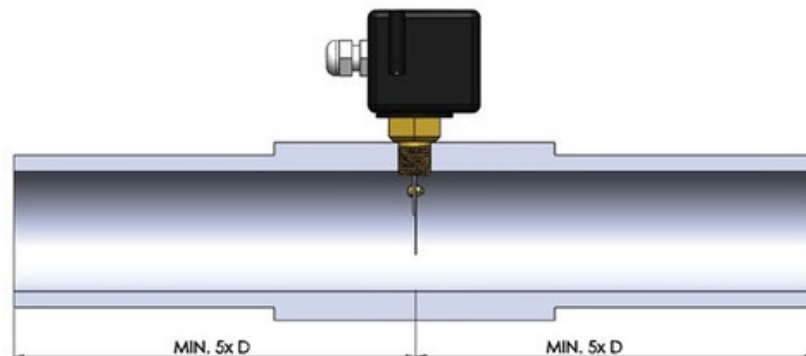
■ INSTALAÇÃO

Not suitable for outdoor use or when exposed to gases, vapors, or dust.

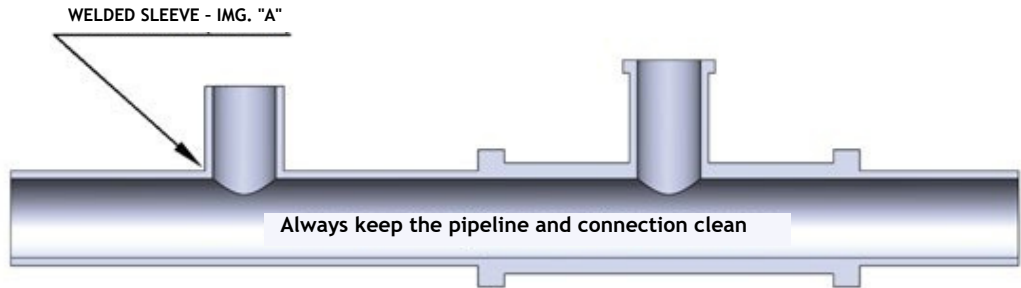
■ INSTALLATION DIAGRAM

Install the flow switch on a straight section of the pipeline with a length of at least 5 times the pipe diameter on each side. Do not position it near valves, bends, reductions, or other obstacles that could disrupt normal fluid flow, as this may cause backflow (preventing proper switch activation) or oscillation (continuous on/off cycling).

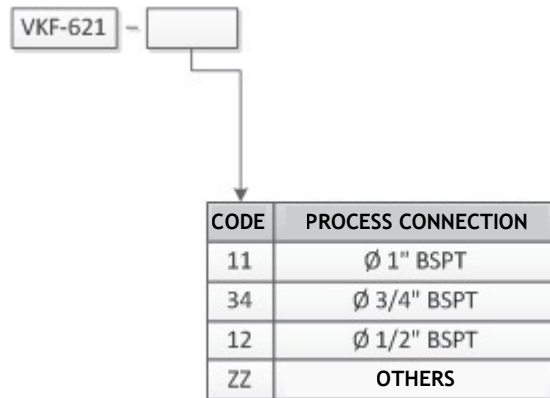
In installations with a pump and check valve, it is recommended to install the flow switch on the pump suction line, where turbulence is minimal.



Clean the pipeline before and after installation, ensuring it is free of debris such as Teflon remnants, glue, etc. When welding a “T” connection to the pipeline (sleeve - fig. a), prevent welding splatter from falling inside the pipe or onto the threads. The fluid must be free of contaminants such as dirt, sand, stones, wood, glue, Teflon, or any foreign objects that are not part of the original or acceptable composition of the fluid. Failure to do so may impair proper operation or damage the flow switch, causing issues such as rod jamming due to debris accumulation, oscillation, or damage to the sealing system. If debris accumulation is unavoidable, it is recommended to install an inline filter.



■ HOW TO SPECIFY



Specification Example: VKF-621-11  
 Description: Fixed Paddle Flow Switch, VKF-621 series, IP65 protection rating, Process Connection: 1" BSPT in brass, suitable for 1" to 6" piping.

## ■ WARRANTY

Due to constant technological advancement, Velki products may be modified without prior notice. Velki is always ready to clarify any doubts. Do not hesitate to contact us.

### Warranty:

Every Velki product is manufactured according to the highest quality standards. All Velki products come with a 1-year warranty from the date of the invoice, provided that:

1. The product is used correctly, within the limits of its technical specifications, and in accordance with the instructions.
2. It has not suffered mechanical or electronic damage caused by accidents or misuse.
3. Its seals have not been tampered with.

Shipping costs for repairs and transportation risks (to and from) are the responsibility of the owner. Free technical support will only be provided by the factory, located at Rua Theolinda Xavier da Silveira, 255 Jd. Oliveira - Itu, SP, CEP 13312-035. Products with broken seals, that have been disassembled, modified, or subjected to mechanical or electrical overload, exceeding catalog values, or damaged due to improper mechanical or electronic installation will lose the right to warranty.

### Technical Support:

Sending instruments for repairs (under warranty or not) or for periodic or eventual calibration must be previously communicated to Velki Technical Support, which will define the shipping conditions and provide instructions. Shipping costs for repairs and transportation risks (to and from) are the responsibility of the customer.

### Important:

All information in this manual specifically refers to the instrument indicated. It aims to help the customer use the product properly. These instructions do not cover all possibilities: specific questions can and should be directed to Velki's Technical Support, who will be happy to assist.

### Attention:

In case of any malfunction, avoid attempting to repair the instrument yourself; immediately contact Velki's Technical Support for the appropriate procedures.



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Shipping within 4 hours



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