Flow switch
for low gas- or liquid flows type 41vS

The unit has been developed for long-term operational use and controls liquid flows from 0.1 l/h or gas flows from 20 l/h referred to air with standard conditions. The unit is suitable for horizontal pipes with threaded process G 1/4. The set point is factory set.

Operation
The flow directed upwards lifts a float. When decreasing the set point a permanent magnet contained in the float operates a reed contact. With normal flow the float is situated at the stop. The pressure loss is kept down by means of overflow tubing.

Advantages
- Control of small flow quantities.
- Suitable for pulsing flow from piston or diaphragm pumps.
- Low cost unit for OEM applications.
- Suitable for the use in intrinsically safe circuits.
- Differing material combinations for aggressive media.

Suitability
- Control of gas odorization.
- Control of extraction.
- Leakage control.
- Overflow control.

Technical data (standard model)

<table>
<thead>
<tr>
<th>Installation position</th>
<th>Horizontal</th>
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<tbody>
<tr>
<td>Wetted parts</td>
<td>Housing PVDF, float Corrosion and acid resistant stainless steel, material no. 1.4571 (similar to AISI 316Ti)</td>
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<tr>
<td>Switch contact</td>
<td>Plastics encapsulated reed contact, closing with falling flow</td>
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<td></td>
<td>Switching capacity: max. 300V/50 Hz, max. 0.5 A, max. 10W</td>
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<td>Resistance 0.2 Ω</td>
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**Set points**
Liquids: from 0.1 l/h
Air with standard conditions: from 20 l/h;

**Cable**
2 m two-core litz, 22 AWG (0.324 mm²) PVC isolated and covered with PVC, with litz ends

**Admissible deviation of actual set point**
+/- 5 % of required set point

**Repeatability of adjusted set point**
+/- 2 % of adjusted set point

**Hysteresis**
Between on and off switching 20 % of required set point

**Operating pressure**
Max. 16 bar

**Operating temperature**
Max. 105 °C

**Ambient air temperature**
-25 to +70 °C

**Special models**
⇒ Material of housing material no. 1.4571.
⇒ Unit with inductive proximity sensor according to Namur, also available in self-controlling technique.
⇒ Adjusting ranges of set points according to requirements 1 : 5
⇒ Unit with threaded process G ½ or G1.

**Note**
There is no maintenance required if the unit is used with clean liquids and gases. For slightly contaminated media a suitable filter has to be incorporated.

1. Flow body
2. Reed switch
3. Permanent magnet
4. Float
5. Set point adjustment
6. Bypass

08-2012 Subject to technical changes