

# Flow switches // VH500 // for insertion installation



VH500

## Highlights

- DNV type approval
- Suitable for water, oil, etc.
- Adjustable for pipe size and setpoint by paddle size selection
- Insertion installation into pipes or pipe tees DN 25...DN 50
- High switching currents → Microswitch is used as switching element
- Vibration-resistant up to 4 g

## Technical data

|                                                                                     |                                                                                                                                                               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Switching function</b>                                                           | Change over contact                                                                                                                                           |
| <b>Pressure rating (Test pressure)</b>                                              | Max. 6 bar (10 bar)<br>or max. 10 bar (15 bar)                                                                                                                |
| <b>Temperatures</b>                                                                 |                                                                                                                                                               |
| <b>Medium</b>                                                                       | Max. 100 °C                                                                                                                                                   |
| <b>Ambient</b>                                                                      | Max. 85 °C                                                                                                                                                    |
| <b>Electrical data</b>                                                              |                                                                                                                                                               |
| <b>Max. contact rating</b>                                                          | 24 VDC, 5 A resistive load<br>4 A inductive load<br>60 VDC, 1 A resistive load<br>0.5 A inductive load<br>250 VAC, 10 A resistive load<br>10 A inductive load |
| <b>Degree of protection EN 60529</b>                                                | IP54                                                                                                                                                          |
| <b>Protection class EN 60730-1</b>                                                  | Class I                                                                                                                                                       |
| <b>Approvals</b>                                                                    |                                                                                                                                                               |
|  | DNV type approval<br>Certificate No. <b>TAA000011M</b>                                                                                                        |

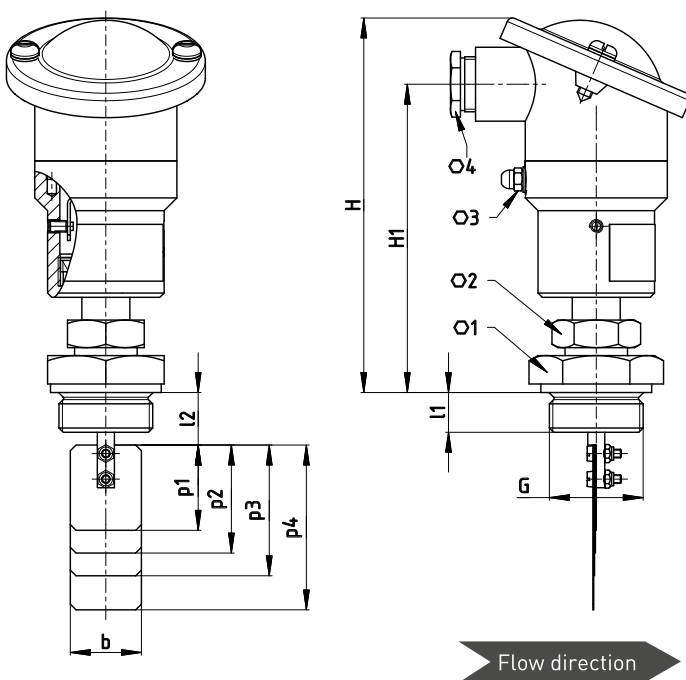
# Set points

| Set points       |                    |                          |                     |
|------------------|--------------------|--------------------------|---------------------|
| Size of pipe tee | Paddle to select** | Set point ranges [m³/h]* |                     |
|                  |                    | Increasing flow ON       | Decreasing flow OFF |
| DN 25            | 25 x 30 mm         | 1.0...1.25               | 1.05...1.2          |
| DN 32            | 25 x 38 mm         | 1.7...2.05               | 1.6...1.95          |
| DN 40            | 25 x 46 mm         | 2.2...2.55               | 2.1...2.45          |
| DN 50            | 25 x 58 mm         | 3.25...3.85              | 3.15...3.75         |

\* Water, 20 °C, horizontal pipe, tolerance ±15 %

\*\* Higher set points selectable by use of smaller paddle sizes  
Set points for bigger pipe sizes on request

## Dimensions // Materials



| Materials in contact with fluid |                        |
|---------------------------------|------------------------|
| Body, process connection        | Brass 2.0401           |
| Bellow system                   | Stainless steel 1.4571 |
| Paddles                         | Stainless steel 1.4310 |
| Flat gasket                     | HD 300                 |
| O-ring                          | NBR                    |

| Dimensions [mm] |     |     |    |      |                |    |               |    |    |    |                    |    |    |    |
|-----------------|-----|-----|----|------|----------------|----|---------------|----|----|----|--------------------|----|----|----|
|                 | H   | H1  | I1 | I2   | G              | b  | Paddle length |    |    |    | Width across flats |    |    |    |
|                 |     |     |    |      |                |    | p1            | p2 | p3 | p4 | Ø1                 | Ø2 | Ø3 | Ø4 |
| VH500           | 135 | 110 | 14 | 18.5 | M33 x 2 or G 1 | 25 | 30            | 38 | 46 | 58 | 41                 | 27 | 7  | 22 |

## Article numbers

| Order code           |          |   |          |
|----------------------|----------|---|----------|
| Type                 |          |   |          |
| VH500                | VH500    |   |          |
| Pressure rating      |          |   |          |
| 6 bar                | N        |   |          |
| 10 bar               | R        |   |          |
| Process connection   |          |   |          |
| G1                   | I3451R41 |   |          |
| M33 x 2              | M3451M41 |   |          |
| Example order number | VH500    | N | I3451R41 |