



HENNLICH

MERES

# PÁDLOVÝ HLÍDAC PRŮTOKU UB1

## Flow Switch UB1



- Can be used from nominal width DN 25..200
- Micro switch with gold-plating for small currents, and silver-plating for larger currents
- Visual function control through transparent cover
- Suitable for media with ferritic particles.

### Characteristics

The devices function via the principle of a paddle supported by a metal bellows, and the triggering of a microswitch.

### Technical data

<b>Switch</b>	Micro switch																													
<b>Nominal width</b>	DN 25..200																													
<b>Process connection</b>	male thread R 1 " or installation flange DIN 2527 DN 32 PN 16 sealing surface as per DIN 2526 form C																													
<b>Switching range</b>	1.2..34 m <sup>3</sup> /h	for details see table "Ranges"																												
<b>Q<sub>max.</sub></b>	up to 75 m <sup>3</sup> /h																													
<b>Tolerance</b>	±15 % of full scale value																													
<b>Pressure resistance</b>	PN 16 bar																													
<b>Medium temperature</b>	-20..+140 °C (no superheated steam)																													
<b>Ambient temperature</b>	-20..+70 °C																													
<b>Media</b>	water (oils and aggressive media available on request)																													
<b>Wiring</b>	changeover no. 0.371																													
<b>Switching voltage/ Switching current</b>		<table border="1"> <thead> <tr> <th></th> <th></th> <th>A max. ohmic</th> <th>A max. inductive</th> </tr> </thead> <tbody> <tr> <td>max.</td> <td>250 V AC/DC</td> <td>6 A</td> <td>1.5 A</td> </tr> <tr> <td></td> <td>125 V AC/DC</td> <td>6 A</td> <td>2 A</td> </tr> <tr> <td></td> <td>24 V DC</td> <td>6 A</td> <td>5 A</td> </tr> <tr> <td></td> <td>12 V DC</td> <td>6 A</td> <td>6 A</td> </tr> <tr> <td></td> <td></td> <td>A min.</td> <td></td> </tr> <tr> <td>min.</td> <td>4 V</td> <td>1 mA</td> <td></td> </tr> </tbody> </table>			A max. ohmic	A max. inductive	max.	250 V AC/DC	6 A	1.5 A		125 V AC/DC	6 A	2 A		24 V DC	6 A	5 A		12 V DC	6 A	6 A			A min.		min.	4 V	1 mA	
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<b>Protection class</b>	2 - safety insulation																													
<b>Ingress protection</b>	IP 65																													

<b>Electrical connection</b>	plug DIN 43650-A / ISO 4400, optionally for round plug connector M12x1, 4-pole (max. 4A)	
<b>Materials medium-contact</b>	Brass construction: CW614N nickelled, 1.4305, 1.4310, 1.4541, FVMQ	Stainless steel construction: 1.4305, 1.4310, 1.4541, FKM
<b>Non-medium-contact materials</b>	PC, PA	
<b>Weight</b>	Threaded type: 1.3 kg Flanged type: 2.5 kg	
<b>Installation location</b>	Standard: horizontal inwards flow; switching unit not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.	

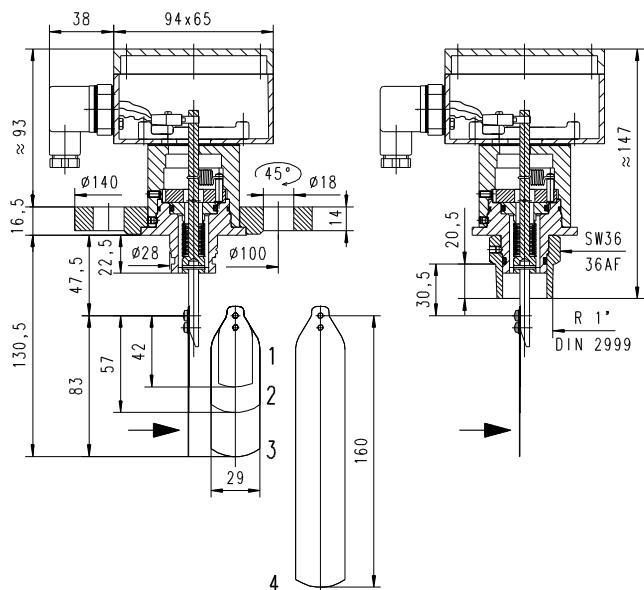
### Ranges

Details in the table correspond to horizontal inwards flow with decreasing flow rate.

DN 25..32 threaded type only. DN 125..200 available on request

DN	Switching range m <sup>3</sup> /h H <sub>2</sub> O			Q <sub>max.</sub> recommended
	Paddle 1	Paddle 1,2	Paddle 1,2,3	
25	2.0 - 2.5			4
32	3.0 - 3.5			8
40	4.0 - 5.0			12
50	8.8 - 10.2	3.5 - 4.3		20
65	16.5 - 20.0	9.2 - 11.0		30
80	25.5 - 31.0	14.0 - 18.0	8.7 - 11.0	45
100	44.0 - 55.0	27.0 - 32.0	17.0 - 22.0	75

### Dimensions



Adapt paddle 1 for DN 25.  
From DN 100, adapt paddle 4:  
DN 100 Paddle length 92  
DN 125 Paddle length 117  
DN 150 Paddle length 143  
from DN 175 unshortened

Attention! Flange seal not included in scope of delivery

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## Handling and operation

### Note

- Attention! Paddle fixing unsecured. For critical conditions (e.g. vibration), fit a bolted fixing.
- Include straight calming section of 10 x DN in inlet and outlet
- If the media are dirty, install a filter.
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- When switched on, a load must be connected in series.
- The electrical details apply to ohmic loads.  
Capacitive and inductive loads must be operated using a protective circuit.

### Loosen adjustment

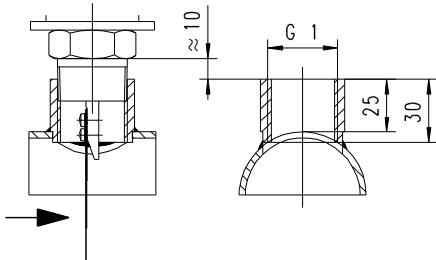
Open cover, loosen the screw slightly on the micro switch fixing. Push the switch into the desired position. Retighten the screw.



## Installation recommendation

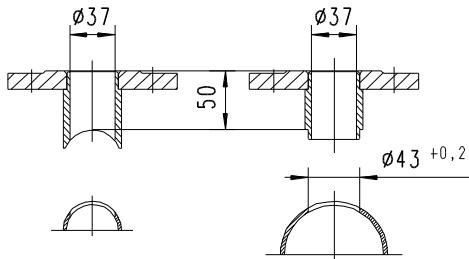
### Threaded type

Use a tube with standard wall thickness as per DIN 2448



### Flanged type

Use a tube with standard wall thickness as per DIN 2448



The type FL installation flanges are available as an accessory.

## Ordering code

1.    2.  
UB1 -

### 1. Process connection

025H	threaded connection DN 25 - R 1 "
032E	flange DN 32

### 2. Connection material

M	brass
K	stainless steel

## Options

- Signal lamp red or red/green in the plug DIN 43650-A
- Double contact
- Aluminium hood with IP 67
- Opaque cover
- Switching ranges for oil
- Special values
- TÜV-certification 0000021402

## Ordering information

- Specify direction of flow, medium, and switching range.
- For oils, state viscosity, temperature and designation (e.g. ISO VG 68) (enquire about range).