

**Product Information**

**UB1-025HM / K ; UB1-032EM / K**

**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 m³/h	for details see table "Ranges"		
<b>Q<sub>max.</sub></b>	up to 75 m³/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>	max.	250 V AC/DC	A max. ohmic 6 A	A max. inductive 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
	min.	4 V	A min. 1 mA	
<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>	<i>Brass construction:</i> CW614N nickelled, 1.4305, 1.4310, 1.4541, FVMQ	<i>Stainless steel construction:</i> 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.	

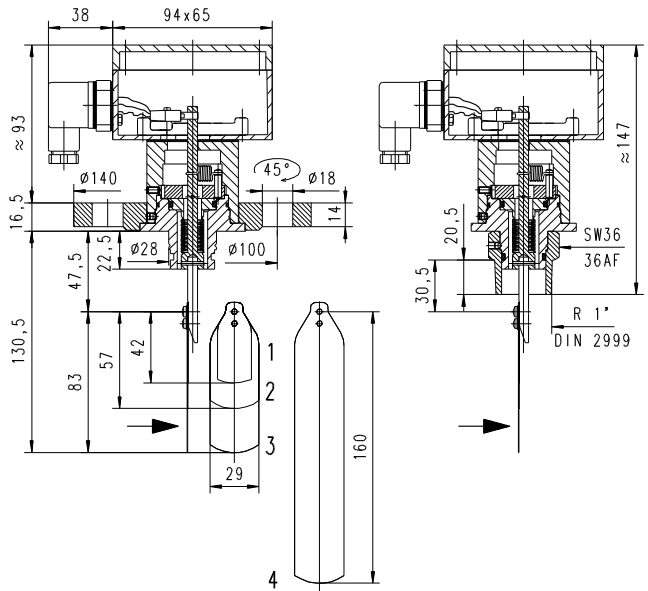
**Ranges**

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 m³/h H <sub>2</sub> O			Q <sub>max. recom- mended</sub>
	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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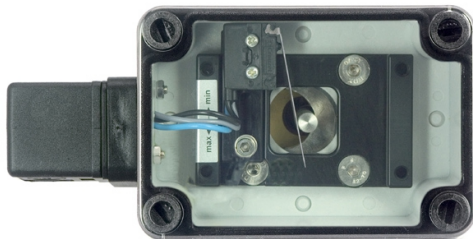
**Handling and operation**

**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**

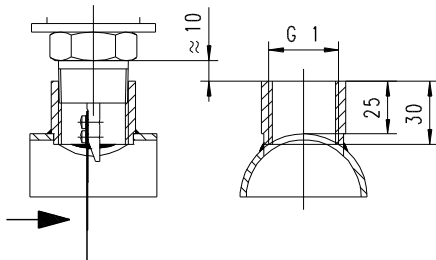
Open cover, loosen the screw slightly on the micro switch fixing. Push the switch into the desired position. Retighten the screw.



**Installation recommendation**

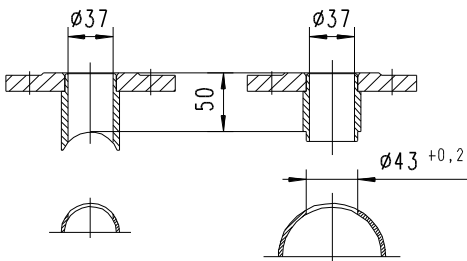
**Threaded type**

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**

UB1 -  <sup>1.</sup>  <sup>2.</sup>

<b>1. Process connection</b>	
025H	threaded connection DN 25 - R 1 "
032E	flange DN 32
<b>2. Connection material</b>	
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).