

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

Switch	Micro switch		
Nominal width	DN 25..200		
Process connection	male thread R 1" or installation flange DIN 2527 DN 32 PN 16 sealing surface as per DIN 2526 form C		
Switching range	1.2..34 m³/h	for details see table "Ranges"	
Q_{max.}	up to 75 m³/h		
Tolerance	±15 % of full scale value		
Pressure resistance	PN 16 bar		
Medium temperature	-20..+140 °C		
Ambient temperature	-20..+70 °C		
Media	water (oils and aggressive media available on request)		
Wiring	changeover no. 0.371		
Switching voltage/ Switching current		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	
Protection class	2 - safety insulation		
Ingress protection	IP 65		

Electrical connection	plug DIN 43650-A / ISO 4400, optionally for round plug connector M12x1, 4-pole (max. 4A)	
Materials medium-contact	Brass construction: CW614N nickelled, 1.4305, 1.4310, 1.4541, NBR for flange type Rg 5	Stainless steel construction: 1.4305, 1.4310, 1.4541, FKM
Non-medium-contact materials	PC, PA	
Weight	Threaded type: 1.3 kg	Flanged type: 2.5 kg
Installation location	Standard: horizontal inwards flow; switching unit not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.	

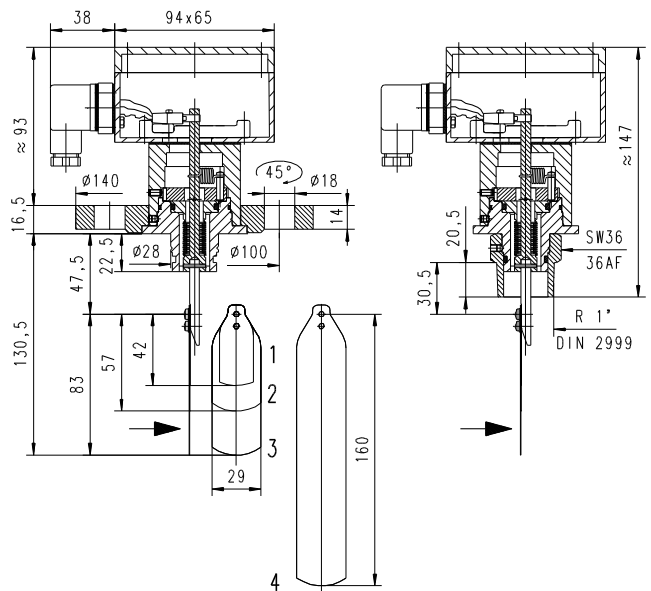
Ranges

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 ₂ O			Q _{max.} 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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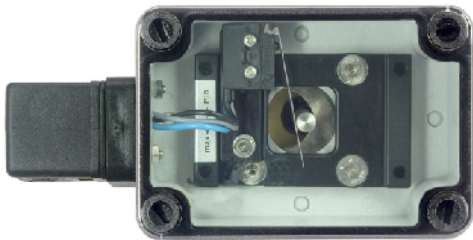
Handling and operation

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

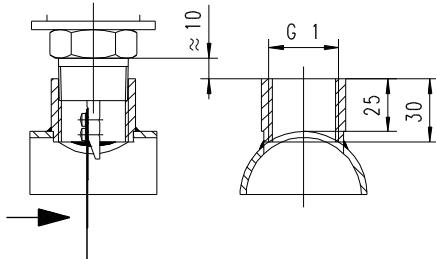
Open cover, loosen the screw slightly on the micro switch fixing. Push the switch into the desired position. Retighten the screw.



Installation recommendation

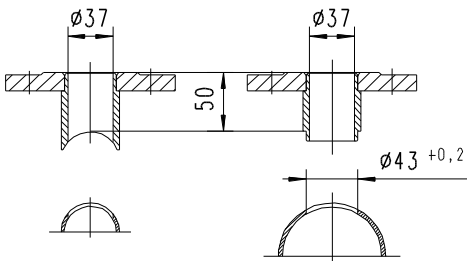
Threaded type

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

UB1 - 1. 2.

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).