

Product Information

UBX-032EM / EK

Flow monitor UBX



- Suitable for nominal pipe sizes DN 65, DN 80 und DN 100 (further pipe sizes on request)
- Micro switch with gold contact
- Process connection with oval flange
- For temperature range -40 °C up to +140 °C

Characteristics

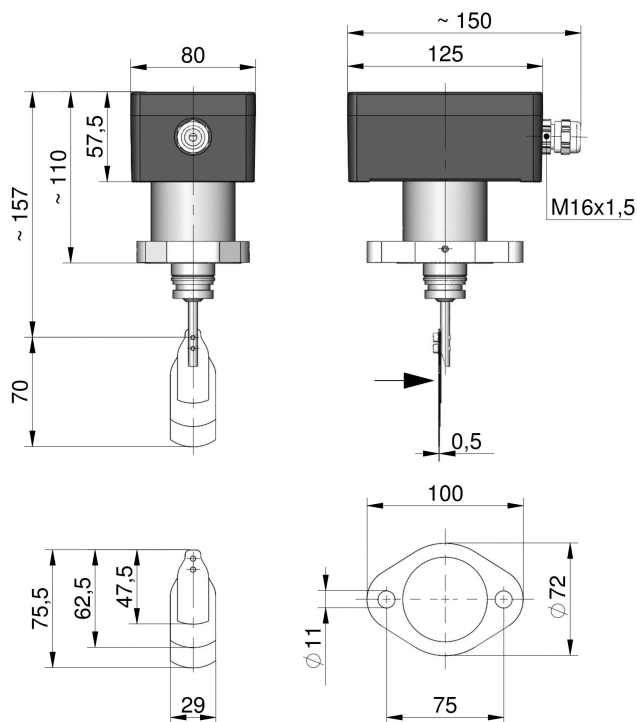
The devices work via the principle of a bellow-supported paddle which triggers directly a microswitch in case of flow or no flow.

Technical Data

Switch	Micro switch
Nominal diameter	DN 65, DN 80, DN 100
Process connection	Oval flange
Adjustment switch values (for decreasing flow)	DN 65: 6.0 m³/h ± 2.0 m³/h with H₂O DN 80: 10.5 m³/h ± 2.5 m³/h with H₂O DN 100: 20.5 m³/h ± 3.0 m³/h with H₂O Further switching values on request
Q_{max} (recommended)	DN 65: 33 m³/h H₂O DN 80: 45 m³/h H₂O DN 100: 75 m³/h H₂O (all values for v = about 2 m/s)
Pressure rate	PN 16
Medium temperature	-40...+140 °C (no superheated steam)
Ambient temperature	-40...+90 °C
Media	Water, mineral oil, silicone oil, ester oil
Wiring diagram	Single changeover contact (wiring 0.371-2) Double changeover contact (wiring 0.409-1)

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 / IP 67 (When using an approved connection cable)			
Electrical connection	Cable gland M16x1,5 (for cable diam. 7... 11 mm)			
Materials with medium contact	Brass version: CW614N vernickelt, 1.4305, 1.4310, 1.4541, FVMQ Oval flange: zinc plated steel		Stainless steel version 1.4305, 1.4310, 1.4541, FVMQ Oval flange: zinc plated steel	
Switch housing material	Die-cast aluminium			
Weight	1,3 kg			
Mounting position	Standard: horizontal flow; switching unit not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.			

Dimensions



Paddle dimension and geometry are identical for DN 65; DN 80 and DN 100

Attention! Process gasket not included in scope of supply

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Handling and operation

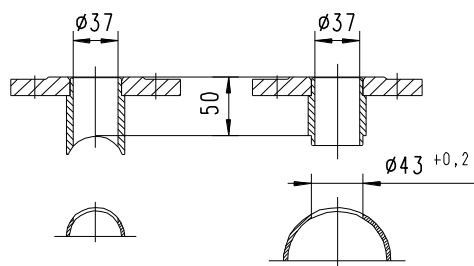
Installation and operating instructions can be found in the separate operating manual.

Notes

- Adjustment: the switching point is set at factory in a defined nominal pipe diameter with the values specified in the „Technical data“ table above. Different switching values on request. Adjustments for silicone oil or ester oil are measured in H₂O due to their low viscosity. Switching values and Q-max.values for mineral oils depend on the viscosity and can deviate from the specified technical data.
- Switching points set at factory are secured by gluing and cannot be changed later.
- Paddle attachment secured by bonding.
- Include straight calming section of 10 x DN in inlet and outlet
- Provide a filter for contaminated media.
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- The electrical details apply to ohmic loads. Capacitive and inductive loads must be operated using a protective circuit..

Installation recommendation

Use a tube with standard wall thickness as per DIN 2448.



Pipe dimensions acc. to Din 2448 used for calibration at factory. Deviating installation conditions have an influence to set adjustment-/switching values.

DN	pipe-outer-diam.	pipe wall thickness
65	76,1 mm	2,9 mm
80	88,9 mm	3,2 mm
100	114,3 mm	3,6 mm

Ordering code

UBX - 1. 2. 3. 4.

1. Process connection	
032E	Flange
2. Body material	
M	Brass
K	Stainless steel
3. Contacts	
S	Single changeover contact
D	Double changeover contact
4. For nominal pipe diameter	
065	DN 65
080	DN 80
100	DN 100
	Further pipe diameters on request

Options

- Electrical connections
 - plug DIN 43650-A
 - Harting plug
 - cable gland M 20 x 1,5 (opposite to flow direction)
- Optional temperature range: on request
- Further process connections on request

Ordering information

- Specify direction of flow, medium, pipe diameter and required switch point
- For oils, state viscosity or oil type and temperature (e.g. ISO VG 68 at 40°C). Possible switching values are determined individually.
- Adjustment of switchpoint is made in defined pipe size.