

## Product Information

## Sensors and Instrumentation

# Flow switch UR1-...HM / HK



UR1-015HM

UR1-032HM

- Highly reproducible
- Low pressure loss
- Hermetic separation between electrical and hydraulic component
- Stress-fixing of the switching unit by means of plastic head

## Characteristics

The devices function via the principle of a spring-supported paddle, and the magnetic triggering of a reed switch.

## Technical data

Switch	Reed switch	
Nominal width	DN 32..80	
Process connection	brass / stainless steel - Screw-in thread G 1 1/4..G 1 1/2 or G2" ..G3"	
Switching range	23..118 l/min	For details see table "Ranges"
Q <sub>max.</sub>	up to 600 l/min	
Hysteresis	Depending on the switching value, minimum ±0.7 l/min	
Tolerance	±15 % of full scale value	
Pressure resistance	PN 25 bar	
Medium temperature	-20..+110 °C	
Ambient temperature	-20..+70 °C	
Media	Water, oils (gases and aggressive media available on request)	

Wiring	Wiring 0.225	
	normally opened or	'normally closed'
Switching voltage	230 V AC	
Switching current	1 A	
Switch performance	50 VA	
Cable length	1.5 m	
Ingress protection	IP 65	
Protection class	(1PE connection)	
Materials medium-contact	Brass construction: CW614N, 1.4301, 1.4571, 1.4310, Hard ferrite, NBR	Stainless steel construction: 1.4305, 1.4571, 1.4301, 1.4310, Hard ferrite, Viton
Non-medium-contact materials	POM	
Weight	UR1-015HM / HK: 0.18 kg UR1-032HM / HK: 0.38 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

The adjustment range is suitable for horizontally decreasing flows. Measured in DIN 2448 tube with normal wall thickness.

Types	DN	Adjustment range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended
UR1-015HM	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HM	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600
UR1-015HK	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HK	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600

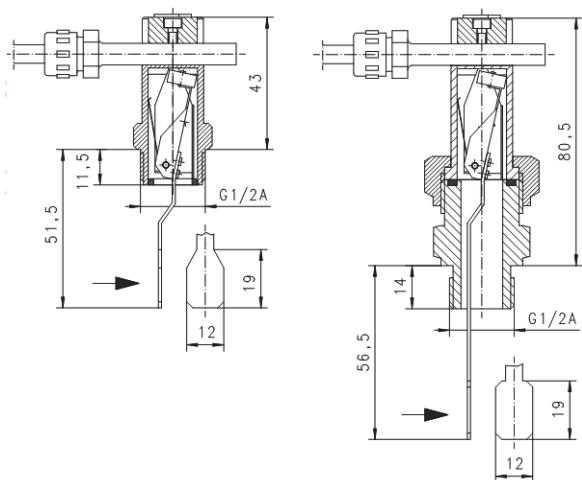
## Product Information

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### Dimensions

UR1-015H.

UR1-032H.



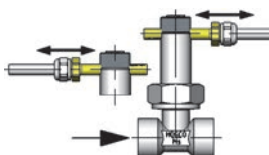
### Handling and operation

#### Note

- Include straight calming section of 5 x DN in inlet and outlet
- Include a filter if the media are dirty (use magnetic filter for ferritic components).
- 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, inductive and lamp loads must be operated using a protective circuit.

#### Adjustment

UR1 - loosen bolts, push the switching current tube into the desired position. Retighten the bolts.  
Normally closed or normally open  
Normally closed



### Ordering code

UR1- 1. 2. 3. 4.  
UR1-

○=Option

1. Nominal widths	
015	DN 32..40
032	DN 50..80
2. Process connection	
H	Screw-in thread
3. Connection material	
M	Brass
K	stainless steel
4. Switching unit options	
A	○ For switching unit ATEX A-U1.1 The switching head is ordered in addition.

### Options

- Switching ranges for oil or gas
- Soldered copper fitting
- Special values
- Adhesive PVC fitting

### 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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (enquire about range).