

## Product Information

# 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

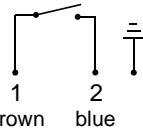
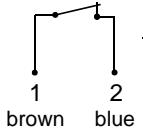
## Characteristics

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

## Technical data

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

## Sensors and Instrumentation

<b>Wiring</b>	Wiring 0.225	
	normally opened or 	
	1 brown (white)	2 blue
	'normally closed' 	
<b>Switching voltage</b>	230 V AC	
<b>Switching current</b>	1 A	
<b>Switch performance</b>	50 VA	
<b>Cable length</b>	1.5 m	
<b>Ingress protection</b>	IP 65	
<b>Protection class</b>	(1PE connection)	
<b>Materials</b> <b>medium-contact</b>	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
<b>Non-medium-contact materials</b>	POM	
<b>Weight</b>	UR1-015HM / HK: 0.18 kg UR1-032HM / HK: 0.38 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

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

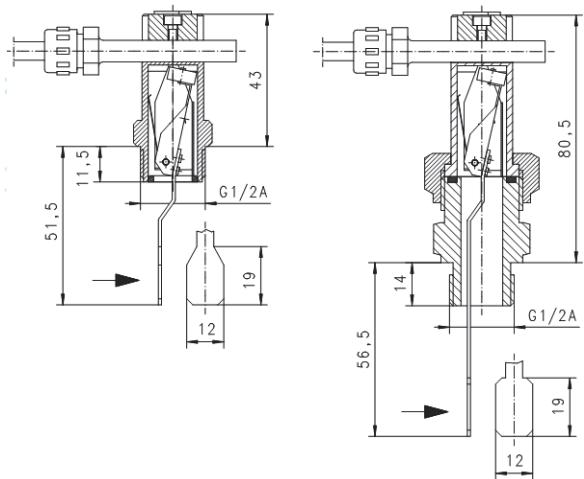
Types	DN	Adjustment range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended
UR1-015HM	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HM	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600
UR1-015HK	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HK	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118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

## Product Information

### Dimensions

UR1-015H.

UR1-032H.



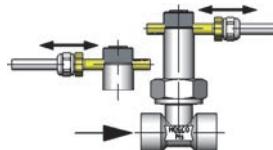
### Handling and operation

#### 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-

○=Option

#### 1. Nominal widths

015	DN 32.40
032	DN 50.80

#### 2. Process connection

H	Screw-in thread
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#### 3. Connection material

M	Brass
K	stainless steel

#### 4. Switching unit options

A	<input type="radio"/> For switching unit ATEX A-U1.1 The switching head is ordered in addition.
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### Options

- Switching ranges for oil or gas
- Special values
- Soldered copper fitting
- 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).