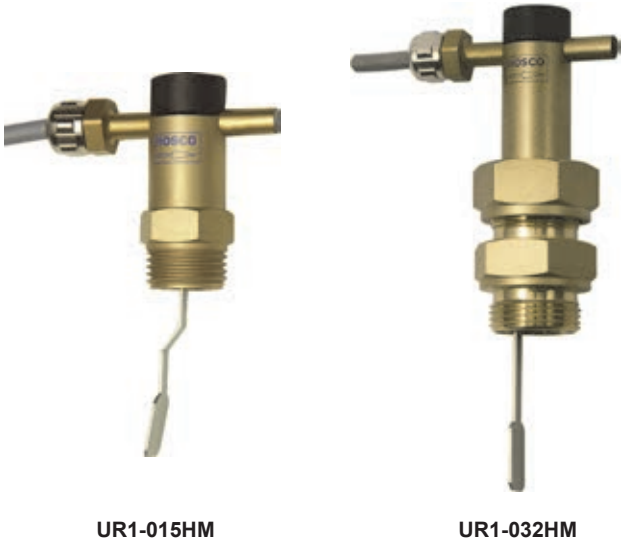


# Flow switch UR1-...HM / HK



- 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 1/4..G 1 1/2 or G2" ..G3"	
<b>Switching range</b>	23..118 l/min	For details see table "Ranges"
<b>Q<sub>max.</sub></b>	up to 600 l/min	
<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)	

<b>Wiring</b>	Wiring 0.225 normally opened or '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 medium-contact</b>	<i>Brass construction:</i> CW614N , 1.4301, 1.4571, 1.4310, Hard ferrite, NBR	<i>Stainless steel construction:</i> 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.	

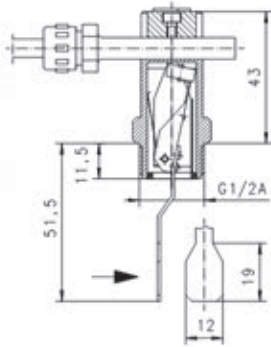
## Ranges

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

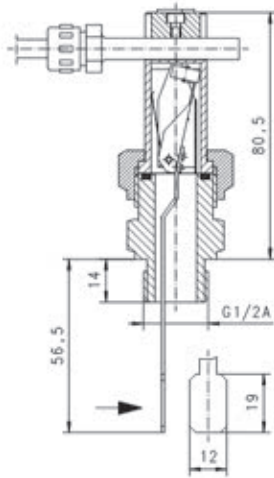
Types	DN	Adjustment range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended
UR1-015HM	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HM	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600
UR1-015HK	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HK	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118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

**Dimensions**

UR1-015H.



UR1-032H.



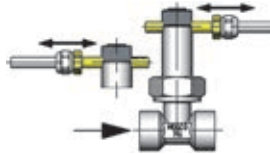
**Handling and operation**

**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.

○=Option

<b>1. Nominal widths</b>	
015	DN 32..40
032	DN 50..80
<b>2. Process connection</b>	
H	Screw-in thread
<b>3. Connection material</b>	
M	Brass
K	stainless steel
<b>4. Switching unit options</b>	
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).