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"
$Q_{max.}$	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  1 2 brown blue (white)	or 'normally closed'  1 2 brown blue (white)
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.	

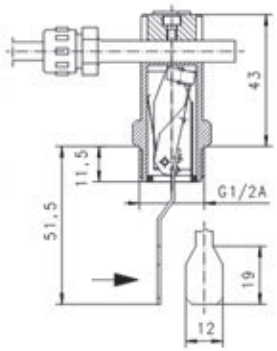
Ranges

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

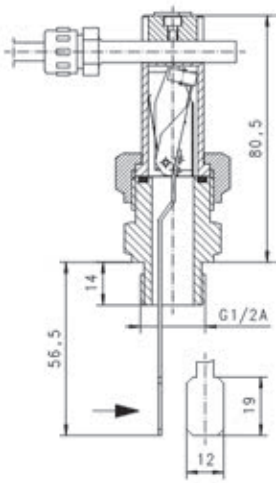
Types	DN	Adjustment range l/min H_2O	$Q_{max.}$ recommended
UR1-015HM	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HM	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600
UR1-015HK	DN 32	23 - 30	100
	DN 40	33 - 44	150
UR1-032HK	DN 50	38 - 48	200
	DN 65	60 - 84	400
	DN 80	81 - 118	600

Dimensions

UR1-015H.



UR1-032H.

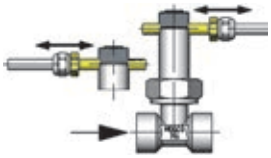


Handling and operation

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

	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
- 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).