

Product Information

UR1-015..050VM / VK

Flow Switch UR1-...VM / VK



- Low pressure loss
- Compact design
- Soldered/welded connection

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 15..80	
Process connection	soldered/welded nozzle (further process connections available on request)	
Switching range	5..179 l/min	for details see table "Ranges"
Q _{max.}	to 600 l/min	
Tolerance	±15 % of full scale value	
Pressure rating	PN 25	
Medium temperature	-20..+110 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils, gases and aggressive media available on request)	
Electrical data	see "UR1 Brass switching unit"	
Materials medium-contact	Brass construction: CW617N nickel plated CW614N, 1.4310, 1.4301, hard ferrite, NBR	Stainless steel construction: 1.4305, 1.4571, 1.4310, 1.4310, hard ferrite PTFE-coated, FKM
Non-medium-contact materials	see "UR1 Brass switching unit"	
Weight	see table "Dimensions and weights"	
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.	

UR1 Brass switching unit

Wiring	normally open (n.o.) or normally closed (n.c.), no. 0.225	
Switching voltage	max. 230 V AC	
Switching current	max. 1 A	
Switching cap.	max. 50 VA	
Protection class	1 - PE connection	
Ingress protection	IP 65	
Electrical connection	cable 1.5 m, optionally for round plug connector M12x1, 4-pole	
Materials, non-medium-contact	CW614N, nickel plated CW614N, NBR, POM	

Ranges

Details in the table correspond to horizontal inwards flow with decreasing flow rate.

DN	Switching range l/min H ₂ O	Types	Q _{max.} recommended
DN 15	5.0 - 6.5	UR.-015V.	20
DN 20	10.0 - 15.5	UR.-025V.	40
DN 25	11.0 - 13.0		80
DN 32	26.0 - 33.0		100
DN 40	37.0 - 42.5	UR.-050V.	150
DN 50	47.5 - 60.0		200
DN 65	95.0 - 117.0		400
DN 80	147.0 - 179.0		600

Special ranges are available.

Dimensions and weights

DN	Types	H	D	A	B	Weight kg
DN 15..20	UR.-015V.	18.0	13	-	-	0.25
DN 25..50	UR.-025V.	27.5	-	12	16	0,25
DN 50..80	UR.-050V.	42.0	-	-	19	0,25

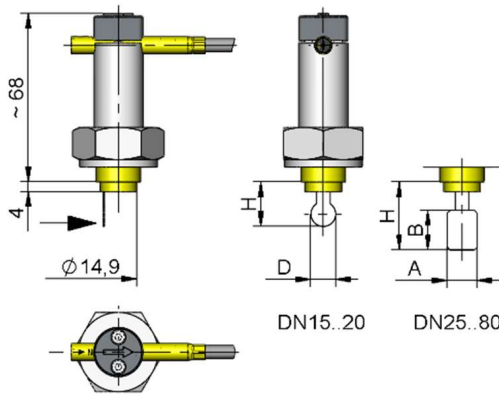
Product Information

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UR1 with plug M12x1

UR1



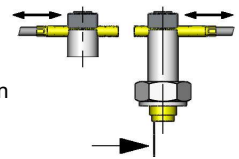
Handling and operation

Note

- Include straight calming section of 5 x DN in inlet and outlet
- If the media are dirty, install a filter (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

Loosen bolts, push the switching current tube into the desired position. Retighten the bolts.
Normally closed (n.c.) or normally open (n.o.) as per table "Technical data"



Ordering code

UR

1.	2.	3.	4.	5.
1		V		

○=Option

1. Switching unit	
1	brass
2. Nominal width	
015	DN 15..25
025	DN 25..40
050	DN 50..80
3. Process connection	
V	soldered/welded nozzle
4. Connection material	
M	brass
K	stainless steel
5. Switching unit options	
A	for switching unit ATEX A-U1.1 The switching head is ordered in addition.
S	○ for round plug connector M12x1, 4-pole

Options

- Switching ranges for oil or gas
- Special switch ranges
- Media temperature up to +150°C
- Electrical connection for round plug connector M12x1, 4-pole

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).