# PÁDLOVÝ HLÍDAČ PRŮTOKU UR1-...V 

## MERES

## 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 <br> (further process connections available on request) |  |
| Switching range | $5 . .179 \mathrm{l} / \mathrm{min}$ | for details see table "Ranges" |
| $\mathbf{Q}_{\text {max }}$. | to $600 \mathrm{l} / \mathrm{min}$ |  |
| Tolerance | $\pm 15$ \% of full scale value |  |
| Pressure rating | PN 25 |  |
| Medium temperature | $-20 . .+110{ }^{\circ} \mathrm{C}$ |  |
| Ambient temperature | $-20 . .+70{ }^{\circ} \mathrm{C}$ |  |
| 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 PTFEcoated, FKM |
| Non-mediumcontact 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 | max. 230 V AC |
| :--- | :--- |
| Switching voltage | max. 1 A |
| Switching current | max. 50 VA |
| Switching cap. | 1-PE connection <br> Protection class |
| Ingress protection | IP 65 |
| Electrical <br> connection | cable 1.5 m, <br> optionally for round plug connector <br> M12x1, 4-pole |
| Materials,non- <br> medium-contact | CW614N, nickel plated CW614N, NBR, <br> POM |

## Ranges

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

| DN | Switching range <br> I/min $\mathrm{H}_{2} \mathrm{O}$ | Types | $\mathbf{Q}_{\text {max. }}$ <br> recommended |
| :---: | ---: | :---: | :---: |
| DN 15 | $5.0-\mathrm{F} .5$ | UR.-015V. | 20 |
| DN 20 | $10.0-15.5$ |  | 40 |
| DN 25 | $11.0-13.0$ | UR.-025V. | 80 |
| DN 32 | $26.0-33.0$ |  | 100 |
| DN 40 | $37.0-42.5$ |  | 150 |
| DN 50 | $47.5-60.0$ | UR.-050V. | 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 |

# PÁDLOVÝ HLÍDAČ PRŮTOKU UR1-...V 




UR1



DN15. 20


DN25.. 80

## Handling and operation

## Note

- Include straight calming section of $5 \times \mathrm{DN}$ 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

$\mathrm{O}=$ 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 |  |  |

## Options

- Switching ranges for oil or gas
- Special switch ranges
- Media temperature up to $+150^{\circ} \mathrm{C}$
- 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).

