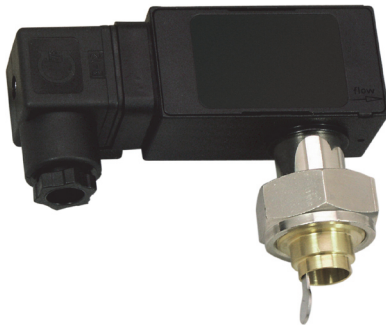


## Flow Switch UM3K-...V

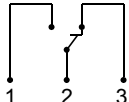
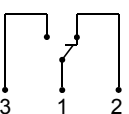


- Soldered/welded connection
- Micro switch
- Low pressure loss
- Compact design
- Threaded connection
- Plug DIN 43650-A / ISO 4400

### Characteristics

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

### Technical data

|                              |  |                                |
|------------------------------|--|--------------------------------|
| <b>Switch</b>                | micro switch   |                                |
| <b>Nominal width</b>         | DN 15..80  |                                |
| <b>Process connection</b>    | soldered/welded nozzle<br>(further process connections available on request)   |                                |
| <b>Switching range</b>       | 10..268 l/min  | for details see table "Ranges" |
| <b>Q<sub>max.</sub></b>      | to 600 l/min   |                                |
| <b>Tolerance</b>             | ±15 % of full scale value  |                                |
| <b>Pressure</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>                | changeover no. 0.371<br><br>optionally changeover No. 0.282<br><br>optionally red or red / green diode in the DIN 43650-A plug |                                |
| <b>Switching voltage</b>     | max. 250 V AC<br>(gold contact max. 125 V AC / 30 V DC)  |                                |
| <b>Switching current</b>     | max. 5 A (round plug connector max. 4A)<br>(gold contact max. 100 mA)  |                                |
| <b>Protection class</b>      | 2 - safety insulation  |                                |
| <b>Ingress protection</b>    | IP 65  |                                |
| <b>Electrical connection</b> | plug DIN 43650-A / ISO 4400,<br>optionally for round plug connector M12x1, 4-pole  |                                |

|                                     |   |   |
|-------------------------------------|---|---|
| <b>Materials medium-contact</b>     | Brass construction: CW617N, CW614N nickelled, 1.4310, 1.4301, hard ferrite, NBR   | Stainless steel construction: 1.4305, 1.4571, 1.4310, 1.4310, Hard ferrite PTFE coated, FKM |
| <b>Non-medium-contact materials</b> | ABS, PA, NBR  |   |
| <b>Weight</b>                       | 0.3 kg  |   |
| <b>Installation location</b>        | Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range. |   |

### Ranges

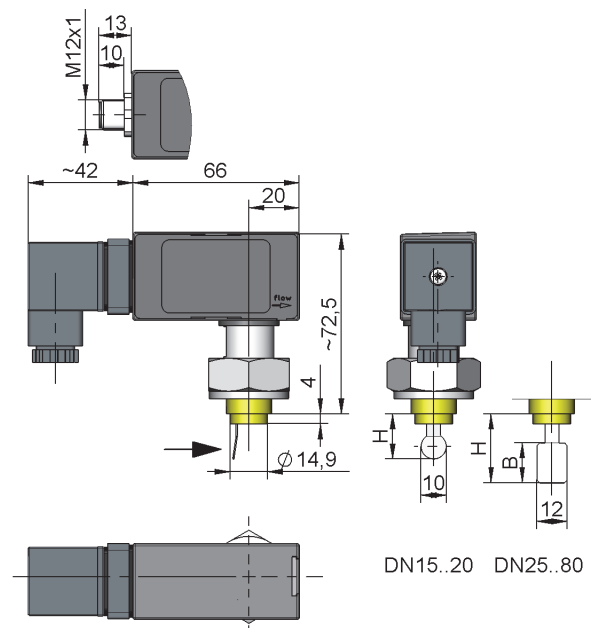
Details in the table correspond to horizontal inwards flow with decreasing flow rate

| DN    | Switching range l/min H <sub>2</sub> O | Types      | Q <sub>max.</sub> recommended |
|-------|--|------------|-------------------------------|
| DN 15 | 10.0 - 13.0                            | UM3K-015V. | 20                            |
| DN 20 | 17.5 - 22.0                            |            | 20                            |
| DN 25 | 18.0 - 22.5                            | UM3K-025V. | 40                            |
| DN 32 | 44.0 - 55.5                            |            | 40                            |
| DN 40 | 55.5 - 72.0                            | UM3K-050V. | 40                            |
| DN 50 | 75.0 - 90.0                            |            | 80                            |
| DN 65 | 151.0 - 186.0                          |            | 80                            |
| DN 80 | 228.0 - 238.0                          |            | 80                            |

Special ranges are available.

### Dimensions

| DN        | Types      | H    | D  | A  | B  |
|-----------|------------|------|----|----|----|
| DN 15..20 | UM3K-015V. | 18.5 | 13 | -  | -  |
| DN 25..40 | UM3K-025V. | 27.0 | -  | 12 | 16 |
| DN 50..80 | UM3K-050V. | 40.5 | -  | -  | 19 |



## Handling and Operation

### Note

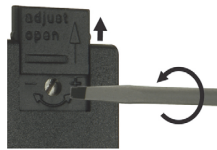
- Include straight calming section of 5 x DN in inlet and outlet
- When tightening the union nut, the connection piece must be countered using an open-ended spanner (SW 19).
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- It must be ensured that the values 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 and inductive loads must be operated using a protective circuit.

### Adjustment

To adjust, open the slider. Adjustment is made using the adjustment screw with a lengthways slot; this is located under the valve.

Turn clockwise for a lower switching point; turn anticlockwise for a higher switching point.

After adjustment, close the slider again.



Example: The adjustment range 20 to 27 l/min corresponds to 7 l/min Adjustment option in 7 revolutions. Adjustment is therefore 1 l/min for each revolution.

## Ordering code

UM3K -  1.  2.  3.  V

○=Option

| 1. Nominal width       |                        |
|------------------------|------------------------|
| 015                    | DN 15..20              |
| 025                    | DN 25..40              |
| 050                    | DN 50..80              |
| 2. Process connection  |                        |
| V                      | soldered/welded nozzle |
| 3. Connection material |                        |
| M                      | brass                  |
| K                      | stainless steel        |

### Options

- Connection for round plug-in connector
- Signal lamp red or red/green in the plug DIN 43650-A
- Gold contact 125 V AC / 30 V DC, 100 mA
- Protective bellows
- Switching ranges for oil or gas
- 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).