GHM GROUP - Honsberg | GHM Messtechnik GmbH Tenter Weg 2-8 | 42897 Remscheid | GERMANY Phone +49 2191 9672-0 | Fax +49 2191 9672-40 www.ghm-group.de | info@ghm-group.de

## **Product Information**

## 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

| Occultation            | and and an other to  |                    |  |
|------------------------|--|--------------------|--|
| Switch                 | micro switch   |                    |  |
| Nominal width          | DN 1580  |                    |  |
| Process                | soldered/welded nozzle   |                    |  |
| connection             | (further process connections available on request)                                   |                    |  |
| Switching range        | 10268 l/min for details see  |                    |  |
| Q <sub>max.</sub>      | to 600 l/min   | table "Ranges"     |  |
| Tolerance              | ±15 % of full scale val  | ue                 |  |
| Pressure               | PN 25 bar  |                    |  |
| Medium<br>temperature  | -20+110 °C   |                    |  |
| Ambient<br>temperature | -20+70 °C  |                    |  |
| Media                  | water (oils, gases and aggressive media available on request)                        |                    |  |
| Wiring                 | changeover<br>no. 0.371  |                    |  |
|                        | optionally<br>changeover<br>No. 0.282  |                    |  |
|                        | optionally red or red /<br>DIN 43650-A plug  | green diode in the |  |
| Switching voltage      | max. 250 V AC<br>(gold contact max. 125 V AC / 30 V DC)                              |                    |  |
| Switching current      | max. 5 A (round plug connector max. 4A)<br>(gold contact max. 100 mA)                |                    |  |
| Protection class       | 2 - safety insulation  |                    |  |
| Ingress protection     | IP 65  |                    |  |
| Electrical connection  | plug DIN 43650-A / ISO 4400,<br>optionally for round plug connector M12x1,<br>4-pole |                    |  |

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

### Ranges

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

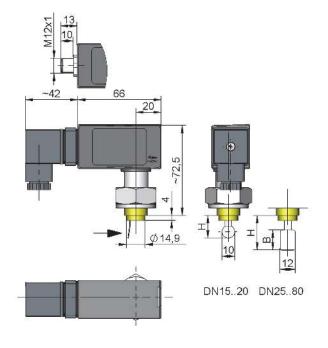
point and range.

| DN    | Switching range<br>I/min H <sub>2</sub> O | Types      | <b>Q</b> <sub>max.</sub><br>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                               |            | 40                                      |
| DN 50 | 75.0 - 90.0                               | UM3K-050V. | 80                                      |
| DN 65 | 151.0 - 186.0                             |            | 80                                      |
| DN 80 | 228.0 - 238.0                             |            | 80                                      |

Special ranges are available.

### Dimensions

| DN      | Types      | Н    | D  | Α  | В  |
|---------|------------|------|----|----|----|
| DN 1520 | UM3K-015V. | 18.5 | 13 | -  | -  |
| DN 2540 | UM3K-025V. | 27.0 | -  | 12 | 16 |
| DN 5080 | UM3K-050V. | 40.5 |    |    | 19 |



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## UM3-015..050V M / K

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## **Product Information**

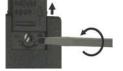
## Handling and Operation

### 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

|        | 1. | 2. | 3. |
|--------|----|----|----|
| UM3K - |    | V  |    |

### O=Option

| 1. | Nominal width       |                        |  |
|----|---------------------|------------------------|--|
|    | 015                 | DN 1520                |  |
|    | 025                 | DN 2540                |  |
|    | 050                 | DN 5080                |  |
| 2. | Process connection  |                        |  |
|    | V                   | soldered/welded nozzle |  |
| 3. | Connection material |                        |  |
|    | М                   | 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).

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