

Product Information

UM3-015..050V M / K

Flow Switch UM3K-...V

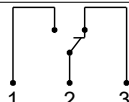
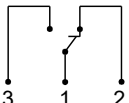


- Soldered/welded connection
- Micro switch
- Low pressure loss
- Compact design
- Threaded connection
- Plug DIN 43650-A / ISO 4400

Characteristics

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

Technical data

| | | |
|-----------------------|---|-----------------------------------|
| Switch | micro switch | |
| Nominal width | DN 15..80 | |
| Process connection | soldered/welded nozzle (further process connections available on request) | |
| Switching range | 10..268 l/min | for details see table "Ranges" |
| Q _{max.} | to 600 l/min | |
| Tolerance | ±15 % of full scale value | |
| Pressure | PN 25 bar | |
| Medium temperature | -20..+110 °C | |
| Ambient temperature | -20..+70 °C | |
| Media | water (oils, gases and aggressive media available on request) | |
| Wiring | <div>changeover no. 0.371</div> <div></div> <div>optionally changeover No. 0.282</div> <div></div> <div>optionally red or red / green diode in the DIN 43650-A plug</div> | |
| Switching voltage | max. 250 V AC (gold contact max. 125 V AC / 30 V DC) | |
| Switching current | max. 5 A (round plug connector max. 4A) (gold contact max. 100 mA) | |
| Protection class | 2 - safety insulation | |
| Ingress protection | IP 65 | |
| Electrical connection | plug DIN 43650-A / ISO 4400, optionally for round plug connector M12x1, 4-pole | |

| | | |
|-------------------------------------|---|---|
| Materials medium-contact | 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 |
| Non-medium-contact materials | ABS, PA, NBR | |
| Weight | 0.3 kg | |
| Installation location | Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range. | |

Ranges

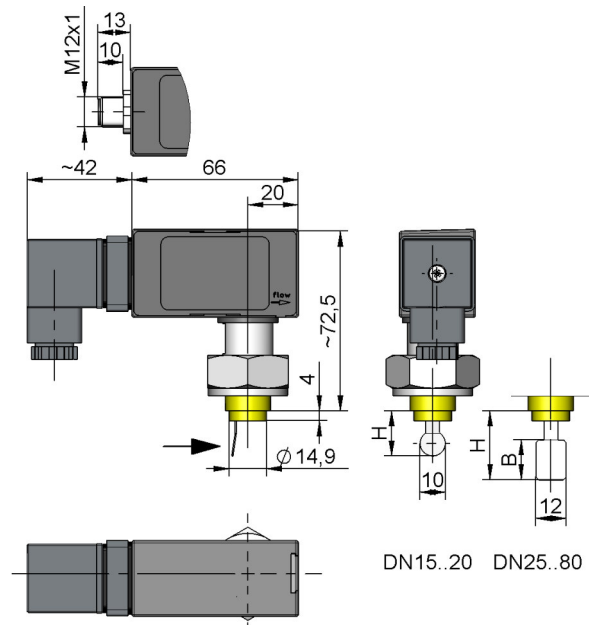
Details in the table correspond to horizontal inwards flow with decreasing flow rate

| DN | Switching range l/min H ₂ O | Types | Q _{max.} 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 | 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 |



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Handling and Operation

Note

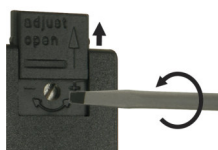
- Include straight calming section of 5 x DN in inlet and outlet
- When tightening the union nut, the connection piece must be countered using an open-ended spanner (SW 19).
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- It must be ensured that the values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

○=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).