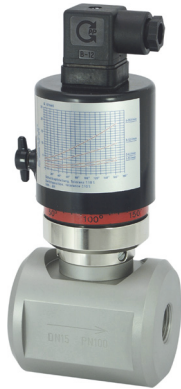


Flow Rate Monitor VM-...GK

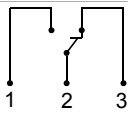


- Highly reproducible
- Precise, stepless adjustment of the switching value
- High switching power
- Insensitive to dirt
- Short installation length

Characteristics

Mechanical flow switch, for fluid or gaseous media, with no-contact triggering of an adjustable micro switch.

Technical data

| | | |
|-------------------------------------|---|---|
| Switch | micro switch | |
| Nominal width | DN 15..50 | |
| Process connection | female thread G 1/2..G 2 | |
| Switching range | 2..250 l/min | for details see table "Ranges" |
| Q_{max.} | to 300 l/min | |
| Tolerance | ±5 % of full scale value | |
| Pressure resistance | PN 100 bar | |
| Medium temperature | -20..+90 °C | |
| Ambient temperature | -20..+70 °C | |
| Media | water (oils, gases and aggressive media available on request) | |
| Wiring | changeover no. 0.213 |  |
| Switching voltage | max. 250 V AC | |
| Switching current | max. 6 A | |
| Protection class | 2 - safety insulation | |
| Ingress protection | IP 65 | |
| Connection | plug DIN 43650-A / ISO 4400 | |
| Materials medium-contact | 1.4305, 1.4571, 1.4310, FKM, hard ferrite | |
| Non-medium-contact materials | PTFE-coated | |
| Weight | see table "Dimensions and weights" | |

| | |
|------------------------------|---|
| 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

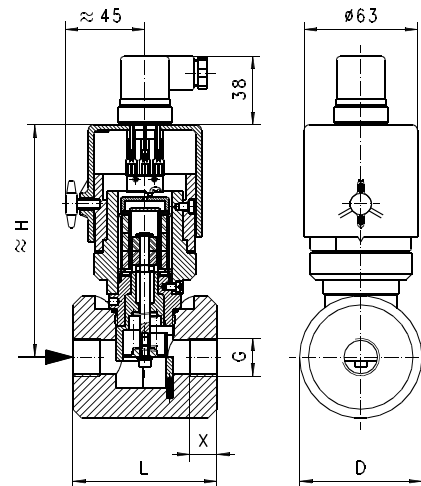
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

| G | Nominal width | Switching range l/min H ₂ O | Q _{max.} recom- mended | Type |
|---------|---------------|---|---------------------------------------|-------------|
| G 1/2 | DN 15 | 2 - 6 | 15 | VM-015GK006 |
| | | 4 - 20 | 30 | VM-015GK020 |
| G 3/4 | DN 20 | 4 - 12 | 40 | VM-020GK012 |
| | | 10 - 40 | 50 | VM-020GK040 |
| G 1 | DN 25 | 10 - 60 | 70 | VM-025GK060 |
| G 1 1/4 | DN 32 | 20 - 100 | 120 | VM-032GK100 |
| G 1 1/2 | DN 40 | 30 - 150 | 180 | VM-040GK150 |
| G 2 | DN 50 | 50 - 250 | 300 | VM-050GK250 |

Special ranges are available

Dimensions and weights

| G | Types | H | L | D | X | Weight kg |
|---------|----------|-----|-----|-----|----|--------------|
| G 1/2 | VM-015GK | 139 | 80 | 68 | 15 | 2.8 |
| G 3/4 | VM-020GK | | | | 16 | 2.6 |
| G 1 | VM-025GK | | | | 18 | 2.5 |
| G 1 1/4 | VM-032GK | 141 | 95 | 78 | 24 | 3.5 |
| G 1 1/2 | VM-040GK | 152 | 105 | 88 | 25 | 4.5 |
| G 2 | VM-050GK | 154 | 120 | 102 | 27 | 6.7 |



Handling and operation

Note

- Include straight calming section of 5 x DN in inlet and outlet
- Include a filter if the media are dirty (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 the switching point, the fixing screw for the switching head must be loosened. The switching head can then be rotated. Turning to the right increases the switching point, and vice-versa. Then retighten the fixing screw.



Ordering code

VM - 1. 2. 3. 4. 5.

VM - G K

| 1. Nominal width | |
|---|--|
| 015 | DN 15 - G 1/2 |
| 020 | DN 20 - G 3/4 |
| 025 | DN 25 - G 1 |
| 032 | DN 32 - G 1 1/4 |
| 040 | DN 40 - G 1 1/2 |
| 050 | DN 50 - G 2 |
| 2. Process connection | |
| G | female thread |
| 3. Connection material | |
| K | stainless steel |
| 4. Switching range H ₂ O for horizontal inwards flow | |
| 006 | 2 - 6 l/min |
| 012 | 4 - 12 l/min |
| 020 | 4 - 20 l/min |
| 040 | 10 - 40 l/min |
| 060 | 10 - 60 l/min |
| 100 | 20 - 100 l/min |
| 150 | 30 - 150 l/min |
| 250 | 50 - 250 l/min |
| 5. Optionally for ATEX | |
| A | for switching head ATEX A-V2 or A-V3 (The switching head is ordered in addition) |

Options

- Special plugs, Tichel / Harting
- Signal lamp red or red / green in the plug DIN 43650-A
- Other signal lamp
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Metal cap
- Gold contact microswitch 125 V AC / 30 V DC, 100 mA
- Germanischer Lloyd
- Switching ranges for oil or gas
- Special values

Ordering information

- Specify direction of flow, medium, and switching range.
- For oils. State viscosity, temperature and designation (e.g. ISO VG 68) (enquire about switching range).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).