

Product Information

FF-008..040GR

Flow Switch FF-...GR



- Adjusted switching value
- Highly reproducible
- Insensitive to dirt

Characteristics

The volume flow raises a piston (fitted with a magnet) out from a valve seat against a spring force. The piston actuates a hermetically separated reed switch.

Technical data

| | | |
|-----------------------|--|--------------------------------|
| Switch | reed switch | |
| Nominal width | DN 8..40 (DN 50..80 available on request) | |
| Process connection | female thread G 1/4 ..G 1 1/4 | |
| Adjustment range | 0.4..90 l/min | for details see table "Ranges" |
| Q _{max.} | to 150 l/min | |
| Tolerance | ±3 % of the switching value, minimum ±0.3 l/min | |
| Pressure resistance | G 1/4..G 1/2 - PN 200 | |
| | G 3/4..G 1 - PN 25 | |
| | G 1 1/4..G 1 1/2 - PN 16 | |
| Medium temperature | -20..+110 °C | |
| Ambient temperature | -20..+70 °C | |
| Media | water (oils available on request) | |
| Wiring | normally open (n.o.) no. 0.212 | |
| | optionally, normally closed no. 0.214 (not all adjustment ranges are possible, please enquire) | |
| Switching voltage | max. 230 V AC | |
| Switching current | max. 1 A | |
| Switching capacity | max. 50 VA | |
| Protection class | 1 - PE connection | |
| Ingress protection | IP 65 | |
| Electrical connection | cable 1.5 m | |

| | |
|-------------------------------------|---|
| Materials medium-contact | Rg 5 nickelled, 1.4310, CW614N nickelled, NBR, hard ferrite |
| Non-medium-contact materials | PA, PVC |
| 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

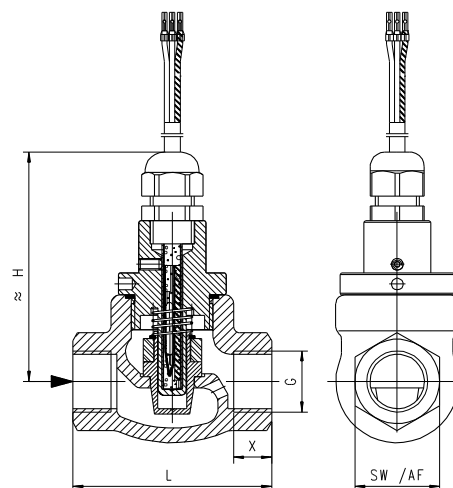
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

| G | DN | Switching point l/min H ₂ O Choose between | Types | Q _{max.} recommended |
|---------|-------|---|-------------|----------------------------------|
| G 1/4 | DN 8 | 0.4 - 9 | FF-008GR009 | 10 |
| G 3/8 | DN 10 | 0.4 - 10 | FF-010GR010 | 15 |
| G 1/2 | DN 15 | 0.4 - 12 | FF-015GR012 | 20 |
| G 3/4 | DN 20 | 0.6 - 25 | FF-020GR025 | 40 |
| G 1 | DN 25 | 1.5 - 40 | FF-025GR040 | 60 |
| G 1 1/4 | DN 32 | 2.0 - 60 | FF-032GR060 | 100 |
| G 1 1/2 | DN 40 | 3.0 - 90 | FF-040GR090 | 150 |

Special ranges are available

Dimensions and weights

| G | Types | H | L | SW | X | Weight kg |
|---------|-------------|-----|----|----|----|--------------|
| G 1/4 | FF-008GR... | 68 | 79 | 29 | 12 | 0.6 |
| G 3/8 | FF-010GR... | | | | 13 | |
| G 1/2 | FF-015GR... | | | | 13 | |
| G 3/4 | FF-020GR... | 73 | 90 | 32 | 11 | 0.7 |
| G 1 | FF-025GR... | 87 | | 41 | 14 | 1.0 |
| G 1 1/4 | FF-032GR... | 98 | | 52 | 14 | 1.5 |
| G 1 1/2 | FF-040GR... | 113 | | 59 | 14 | 2.0 |



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Handling and operation

- Include straight calming section of 5 x 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.

Ordering code

FF - 1. 2. 3. 4. 5.
 FF - **G** **R**

○=Option

| 1. Nominal width | |
|---|---|
| 008 | DN 8 - G 1/4 |
| 010 | DN 10 - G 3/8 |
| 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 |
| 2. Process connection | |
| G | female thread |
| 3. Connection material | |
| R | red bronze |
| 4. Switching point H ₂ O can be set as desired between | |
| 009 | 0.4 - 9 l/min |
| 010 | 0.4 - 10 l/min |
| 012 | 0.4 - 12 l/min |
| 025 | 0.6 - 25 l/min |
| 040 | 1.5 - 40 l/min |
| 060 | 2.0 - 60 l/min |
| 090 | 3.0 - 90 l/min |
| 5. Wiring | |
| S | 'normally open', no. 0.212 |
| O | ○ 'normally closed', no. 0.214 (please enquire about range) |

Options

- Adjustment for oil or gas
- Special values

Ordering information

- Specify direction of flow, medium, and switching point.
- 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).