

Product Information

Sensors and Instrumentation

Flow Switch CRG



- Can be used from nominal width DN 25..200
- Suitable for media with ferritic particles.

Characteristics

The devices function via the principle of a paddle supported by a metal bellows, and the triggering of a micro switch.

Technical data

| | | |
|-------------------------------------|--|---|
| Switch | micro switch | |
| Nominal width | DN 25..200 | |
| Process connection | male thread R 1 " | |
| Switching range | 0.2..165.7 m ³ /h | for details see table "Ranges" |
| Q_{max.} | up to 240 m ³ /h | |
| Tolerance | ±15 % of full scale value | |
| Pressure resistance | PN 11 bar | |
| Medium temperature | -20..+120 °C | |
| Ambient temperature | -20..+85 °C | |
| Media | water (oils and aggressive media available on request) | |
| Wiring | changeover no. 0.374 | |
| Switching voltage | 250 V DC | |
| Switching current | 15(8) A | |
| Protection class | 1 - PE connection | |
| Ingress protection | IP 65 | |
| Electrical connection | cable screw gland M20x1.5 | |
| Materials medium-contact | Brass construction: CW614N, 1.4571, Tombak | Stainless steel construction: 1.4571 |
| Non-medium-contact materials | ABS, PC transparent | |
| Weight | Brass construction: Stainless steel construction: | 0.95 kg 1.1 kg |

| | |
|------------------------------|---|
| Installation location | Standard: horizontal inwards flow; switching unit not recommended underneath; other installation positions are possible; the installation position affects the switching point and range. |
|------------------------------|---|

Ranges

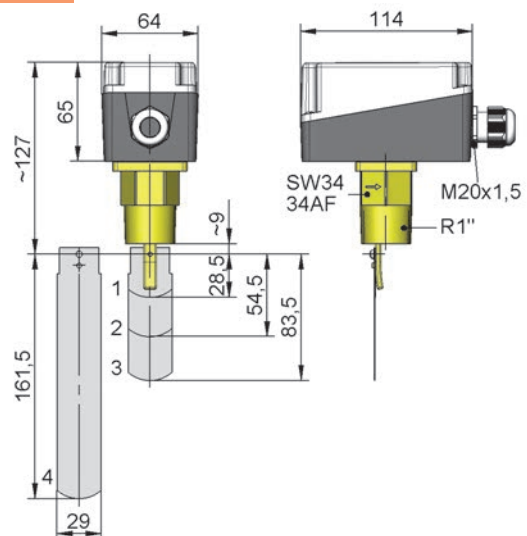
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

● = Standard ○ = Option for reduced switching range

| DN | Switching range m ³ /h H ₂ O | | | | Q _{max. recommended} |
|-----|--|----------------------------|---------------------------------|--------------------------------|-------------------------------|
| | Paddle 1 | Paddle 1,2* | Paddle 1,2,3* | Paddle 1,2,3,4* | |
| 25 | ○ 0.20 - 1.0 ● 0.60 - 2.0 | | | | 3.6 |
| 32 | ○ 0.25 - 1.4 ● 0.80 - 2.8 | | | | 6.0 |
| 40 | ○ 0.50 - 1.6 ● 1.10 - 3.7 | | | | 9.0 |
| 50 | | ○ 0.9 - 3.6 ● 2.2 - 5.7 | | | 15.0 |
| 65 | | ○ 1.2 - 4.9 ● 2.7 - 6.5 | | | 24.0 |
| 80 | | | ○ 2.1 - 7.4 ● 4.3 - 10.7 | | 36.0 |
| 100 | | | ○ 4.9 - 17.1 ● 11.4 - 27.7 | ○ 3.3 - 11.6 ● 6.1 - 17.3 | 60.0 |
| 125 | | | ○ 9.7 - 34.0 ● 22.9 - 53.3 | ○ 5.0 - 17.5 ● 9.3 - 25.2 | 90.0 |
| 150 | | | ○ 13.6 - 47.6 ● 35.9 - 81.7 | ○ 6.1 - 21.4 ● 12.3 - 30.6 | 120.0 |
| 200 | | | ○ 25.7 - 90.1 ● 72.6 - 165.7 | ○ 21.7 - 55.3 ● 38.6 - 90.8 | 240.0 |

*must be used together

Dimensions



Adapt paddle 1 for DN 25.
 From DN 100, adapt paddle 4:
 DN 100 Paddle length 92
 DN 125 Paddle length 117
 DN 150 Paddle length 143

From DN 175 unshortened

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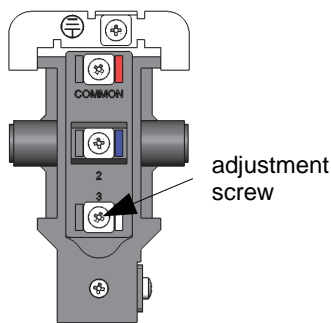
Handling and operation

Note

- Attention! Paddle fixing unsecured. For critical conditions (e.g. vibration), fit a bolted fixing.
- Include straight calming section of 10 x DN in inlet and outlet
- If the media are dirty, install a filter.
- 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.

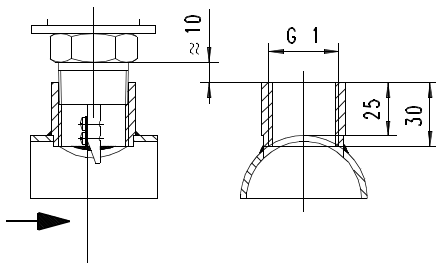
Loosen adjustment

Screws, and remove hood; set the desired switching value using the adjustment screw, and refasten the hood.



Installation recommendation

Use a tube with standard wall thickness as per DIN 2448



Ordering code

CRG - 1. 025H 2. 3. S 4.

○=Option

| | |
|-------------------------------|-----------------------------------|
| 1. Process connection | |
| 025H | threaded connection DN 25 - R 1 " |
| 2. Connection material | |
| M | brass |
| K | stainless steel |
| 3. Cable screw gland | |
| S | to the side |
| 4. Switching range | |
| R | ○ reduced |

Options

- Switching ranges for oil
- 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 range).