

## Product Information

## CRG-025HM/K

# 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 m³/h                                                                                                                                                                                                             | for details see table "Ranges"             |  |
| Q <sub>max.</sub>            | up to 240 m³/h                                                                                                                                                                                                               |                                            |  |
| Tolerance                    | ±15 % of full scale value                                                                                                                                                                                                    |                                            |  |
| Pressure resistance          | PN 11                                                                                                                                                                                                                        |                                            |  |
| Medium temperature           | -20...+120 °C                                                                                                                                                                                                                |                                            |  |
| Ambient temperature          | -20...+85 °C                                                                                                                                                                                                                 |                                            |  |
| Media                        | water (oils and aggressive media available on request)                                                                                                                                                                       |                                            |  |
| Wiring                       | <div>changeover no. 0.374<div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div>white      red      blue</div><div></div></div> |                                            |  |
| Switching voltage            | 250 V AC                                                                                                                                                                                                                     |                                            |  |
| 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:<br>CW614N, 1.4571,<br>Tombak                                                                                                                                                                             | Stainless steel<br>construction:<br>1.4571 |  |
| Non-medium-contact materials | ABS, PC transparent                                                                                                                                                                                                          |                                            |  |
| Weight                       | Brass construction:<br>Stainless steel<br>construction:                                                                                                                                                                      | 0.95 kg<br>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

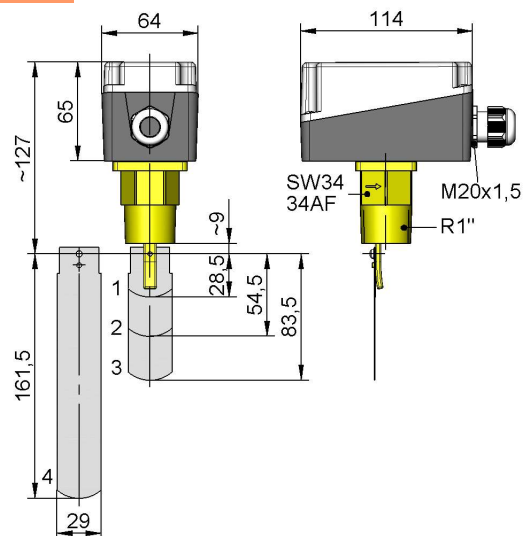
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

● = Standard ○ = Option for reduced switching range

| DN  | Switching range m³/h H <sub>2</sub> O |                        |                             |                            | Q <sub>max.</sub> recommended |
|-----|---------------------------------------|------------------------|-----------------------------|----------------------------|-------------------------------|
|     | Paddle 1                              | Paddle 1,2*            | Paddle 1,2,3*               | Paddle 1,2,3,4*            |                               |
| 25  | ○ 0.20 - 1.0<br>● 0.60 - 2.0          |                        |                             |                            | 3.6                           |
| 32  | ○ 0.25 - 1.4<br>● 0.80 - 2.8          |                        |                             |                            | 6.0                           |
| 40  | ○ 0.50 - 1.6<br>● 1.10 - 3.7          |                        |                             |                            | 9.0                           |
| 50  | ○<br>●                                | 0.9 - 3.6<br>2.2 - 5.7 |                             |                            | 15.0                          |
| 65  | ○<br>●                                | 1.2 - 4.9<br>2.7 - 6.5 |                             |                            | 24.0                          |
| 80  | ○<br>●                                |                        | 2.1 - 7.4<br>4.3 - 10.7     |                            | 36.0                          |
| 100 | ○<br>●                                |                        | 4.9 - 17.1<br>11.4 - 27.7   | 3.3 - 11.6<br>6.1 - 17.3   | 60.0                          |
| 125 | ○<br>●                                |                        | 9.7 - 34.0<br>22.9 - 53.3   | 5.0 - 17.5<br>9.3 - 25.2   | 90.0                          |
| 150 | ○<br>●                                |                        | 13.6 - 47.6<br>35.9 - 81.7  | 6.1 - 21.4<br>12.3 - 30.6  | 120.0                         |
| 200 | ○<br>●                                |                        | 25.7 - 90.1<br>72.6 - 165.7 | 21.7 - 55.3<br>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

## Product Information

**CRG-025HM/K**

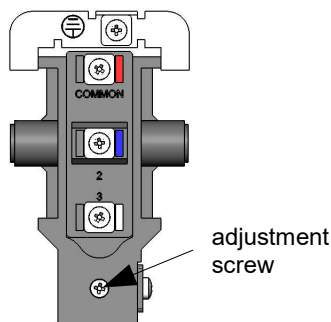
### Handling and operation

#### 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.

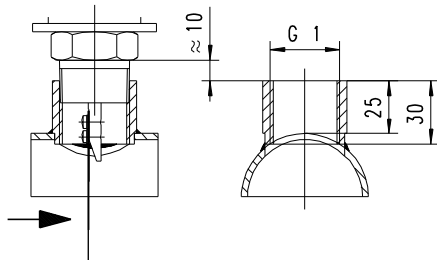
#### Loosen adjustment

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).