

**Product Information**

**MR-008..025GM / K**

**Flow Switch MR**



- High switching power
- Compact design

**Characteristics**

Mechanical flow switch, for fluid or gaseous media, with spring-supported piston and magnetic triggering of a reed switch. Robust construction in brass or stainless steel.

**Technical data**

<b>Switch</b>	reed switch	
<b>Nominal width</b>	DN 8.0.25	
<b>Process connection</b>	female thread G 1/4..G 1 (further process connections available on request)	
<b>Switching range</b>	0.4..60 l/min	for details see table "Ranges"
<b>Pressure loss</b>	0.4..1.9 bar at Q <sub>max.</sub>	
<b>Q<sub>max.</sub></b>	to 80 l/min	
<b>Tolerance</b>	±5 % of full scale value	
<b>Pressure resistance</b>	PN 200 bar (with optional display O1 G 1/4..G 3/4 PN 90)	
<b>Media temperature</b>	-20..+120 °C	
<b>Ambient temperature</b>	-20..+70 °C	
<b>Media</b>	water (oils, gases and aggressive media available on request)	
<b>Wiring</b>	transformer no. 0.213	
<b>Switching voltage</b>	max. 250 V AC	
<b>Switching current</b>	max. 1.5 A	
<b>Switching capacity</b>	max. 50 VA	
<b>Protection class</b>	2 - safety insulation	
<b>Ingress protection</b>	IP 65	
<b>Electrical connection</b>	cable 2.5 m (others cable lengths available on request)	
<b>Materials medium-contact</b>	Brass construction: CW614N nickelled, 1.4301, 1.4310, hard ferrite, NBR	Stainless steel construction: 1.4305, 1.4571, 1.4301, 1.4310, hard ferrite PTFE-coated, FKM
<b>Non-medium-contact materials</b>	PA, PVC	
<b>Weight</b>	see table "Dimensions and weights"	
<b>Installation location</b>	Standard: horizontal inwards flow from the left; other installation positions are possible; the installation position affects the switching point and range.	

**Ranges**

For switching ranges, the details in the table correspond to horizontal inwards flow and decreasing flow rate; for display ranges they correspond to horizontal inwards flow and increasing flow rate.

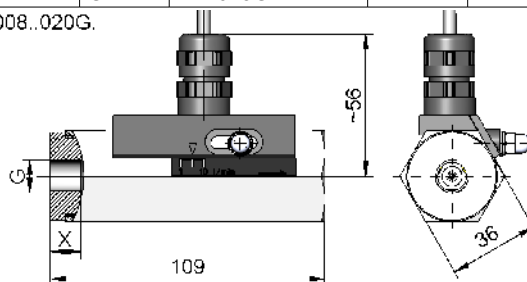
Switching range l/min H <sub>2</sub> O	Optionally Display range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended	Pressure loss bar at Q <sub>max.</sub> H <sub>2</sub> O
0.4 - 4	0.5 - 5	10	0.4
1.0 - 10	1.0 - 12	20	0.9
5.0 - 20	5.0 - 25	30	0.7
10.0 - 40	5.0 - 40	60	1.9
20.0 - 60	20.0 - 60	80	1.6

Special ranges are available.

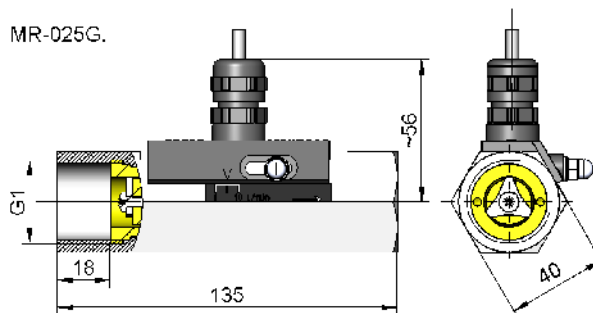
**Dimensions and weights**

	G	Types	X	Weight kg
<b>Brass</b>	G 1/4	MR-008GM	12	0.9
	G 3/8	MR-010GM		
	G 1/2	MR-015GM		
	G 3/4	MR-020GM	18	1.2
	G 1	MR-025GM		
<b>Stainless steel</b>	G 1/4	MR-008GK	12	0.9
	G 3/8	MR-010GK		
	G 1/2	MR-015GK		
	G 3/4	MR-020GK	18	0.8
	G 1	MR-025GK		

MR-008..020G.



MR-025G.



**additional weights for options**

Display O1 / Z1      0.04 kg

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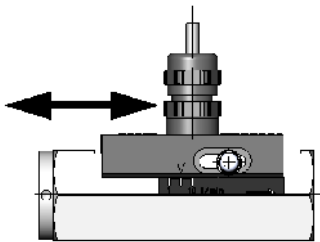
**Handling and Operation**

**Note**

- Install 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 switch 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.

**Adjustment**

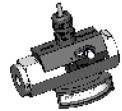
If it is necessary to set the switching value, the switching head can be adjusted lengthways. When the switching value is reached, the switching unit is fixed in place by fastening bolts.



**Ordering code**

MR  1.  2.  3. **G** 4.  5.

<b>1. Display options</b>	
-	no mechanical display
O1-	with measurement display at side O1
<b>2. Nominal width</b>	
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
<b>3. Process connection</b>	
G	female thread
<b>4. Connection material</b>	
M	brass
K	stainless steel
<b>5. Switching range H<sub>2</sub>O for horizontal inwards flow</b>	
004	0.4 - 4 l/min
010	1.0 - 10 l/min
020	5.0 - 20 l/min
040	10.0 - 40 l/min
060	20.0 - 60 l/min



MR101-

**Options**

- Switching values for oil or gas
- Special values
- Connection for round plug connector M12x1
- Additional switching head
- Damping for gas monitoring
- Rhodium contact 250 V AC, 0.5 A, 30 VA

**Ordering information**

- Specify direction of flow, medium, and switching range.
- For viscous media specify viscosity, temperature, and medium (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).