

## Flow Indicator H1O / H2O



- No electrical supply required
- Individually calibrated display
- Compact design

### Characteristics

A piston fitted with a magnet is pushed through the medium against the force of a spring. This activates the pointer of the measuring device by means of a magnetic coupling. Because of the hermetic separation from the medium, the display unit cannot be soiled by the medium.

### Technical data

<b>Switch</b>	without	
<b>Nominal width</b>	DN 8..25	
<b>Process connection</b>	female thread G 1/4..G 1 (further process connections available on request)	
<b>Display range</b>	0.1..85 l/min	for details see table "Ranges"
<b>Pressure loss</b>	0.4..3.5 bar at Q <sub>max.</sub>	
<b>Q<sub>max.</sub></b>	To 100 l/min	
<b>Tolerance</b>	±5 % of full scale value	
<b>Pressure resistance</b>	PN 200 bar optionally PN 500 bar	
<b>Media temperature</b>	-20..+120 °C	
<b>Ambient temperature</b>	-20..+70 °C	
<b>Media</b>	water, oil (gases and aggressive media available on request)	
<b>Electrical data</b>	none	
<b>Materials medium-contact</b>	<i>Brass construction:</i> CW614N nickelled, CW614N, 1.4310, hard ferrite, NBR	<i>Stainless steel construction:</i> 1.4571, 1.4404, 1.4310, hard ferrite PTFE-coated, FKM
<b>Non-medium-contact materials</b>	CW614N nickelled, PC	
<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 display range.	

### Ranges

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

#### Standard type H1O

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
0.1 - 1.2	6	0.4
0.5 - 6.0	10	0.5
1.0 - 12.0	20	0.6
2.0 - 23.0	30	0.4
3.0 - 34.0	40	
4.0 - 45.0	60	0.8
6.0 - 65.0	80	1.4
20.0 - 85.0	100	1.6

Special ranges are available.

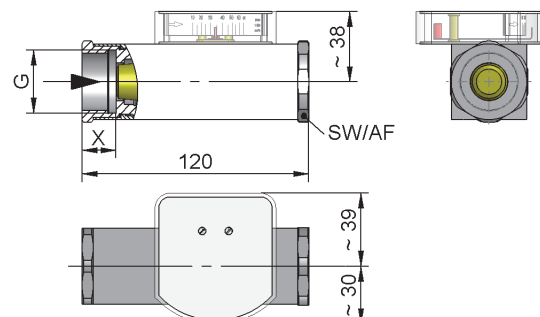
#### Viscosity compensated type H2O

Display range l/min oil 30..330 mm <sup>2</sup> /s	Q <sub>max.</sub> recomm ended	Pressure loss bar at Q <sub>max.</sub> oil mm <sup>2</sup> /s						Viscosity stability ±8 %, min.
		30	60	100	20 5	330	330	
0.5 - 10	12	1.1	1.4	1.6	2.8	3.5	±0.3 l/min	
1.5 - 20	22	2.2	2.3	2.4			±0.5 l/min	
2.5 - 30	35	1.9	2.0	2.1	2.3	2.9	±0.8 l/min	
6.0 - 45	60					2.6	±2.7 l/min	
12.0 - 65	80	2.1	2.3	2.4	2.6	2.8	±3.0 l/min	

Special ranges are available.

### Dimensions and weights

	G	Types	SW	X	Weight kg
<b>Brass</b>	G 1/4	H.O-008GM	40	15	1.4
	G 3/8	H.O-010GM			
	G 1/2	H.O-015GM			1.3
	G 3/4	H.O-020GM			
	G 1	H.O-025GM			
<b>Stainless steel</b>	G 1/4	H.O-008GK	41	15	1.3
	G 3/8	H.O-010GK			
	G 1/2	H.O-015GK			1.2
	G 3/4	H.O-020GK			
	G 1	H.O-025GK			



### 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)

### Ordering code

H   -

1. Construction		
1	standard	
2	viscosity compensated	
2. Display		
O	with measurement display at side O	
3. 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	
4. Process connection		
G	female thread	
5. Connection material		
M	brass	
K	stainless steel	
6. H1 - Display range H <sub>2</sub> O for horizontal inwards flow		
001	0.1 - 1.2 l/min	●
005	0.5 - 6.0 l/min	●
010	1.0 - 12.0 l/min	●
020	2.0 - 23.0 l/min	●
030	3.0 - 34.0 l/min	●
040	4.0 - 45.0 l/min	●
060	6.0 - 65.0 l/min	●
080	20.0 - 85.0 l/min	●
H2 - display range oil 30..330 mm <sup>2</sup> /s for horizontal inwards flow		
008	0.5 - 10 l/min	●
015	1.5 - 20 l/min	●
025	2.5 - 30 l/min	●
040	6.0 - 45 l/min	●
060	12.0 - 65 l/min	●

### Options

- Special ranges/special scaling
- Pressure resistance PN 500
- Temperature display 0..120 °C
- reinforced piston

### Ordering information

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