

# Flow Indicator/ Switch VL



- Optionally switching contact

## Characteristics

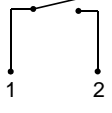
A piston moves in a transparent glass tube, relative to the flow. The position of the float depends on the volume flow (weight force versus resistance to flow), and indicates the flow rate on the scaled glass tube.

## Technical data

### Flow indicator VL

<b>Nominal width</b>	DN 15..25	
<b>Process connection</b>	female thread G 1/2..G 1	
<b>Display range</b>	0.1..50 l/min	for details see table "Ranges"
<b>Q<sub>max.</sub></b>	50 l/min	
<b>Tolerance</b>	±5 % of full scale value	
<b>Pressure resistance</b>	PN 10 bar	
<b>Medium temperature</b>	-20..+100 °C	
<b>Ambient temperature</b>	-20..+70 °C	
<b>Media</b>	water (oils, gases and aggressive media available on request)	
<b>Materials medium-contact</b>	<i>Brass construction:</i> CW614N nickelled, Duran 50, hard ferrite, NBR	<i>Stainless steel construction:</i> 1.4571, Duran 50, hard ferrite, FKM
<b>Weight</b>	see table "Dimensions and weights"	
<b>Installation location</b>	vertical inwards flow from below	

### Switching contact VLR

<b>Switch</b>	reed switch
<b>Switching range</b>	0.1..50 l/min, for details see "Ranges"
<b>Tolerance</b>	±5 % of full scale value
<b>Ambient temperature</b>	-20..+70 °C
<b>Wiring</b>	normally open (n.o.) no. 0.372
	
<b>Switching voltage</b>	max. 230 V AC
<b>Switching current</b>	1 A
<b>Switching capacity</b>	50 VA
<b>Protection class</b>	2 - safety insulation
<b>Ingress protection</b>	IP 65
<b>Connection</b>	plug DIN 43650-A / ISO 4400
<b>Non-medium-contact materials</b>	PC, PA, NBR, nickelled brass
<b>Weight</b>	0.02 kg

## Ranges

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

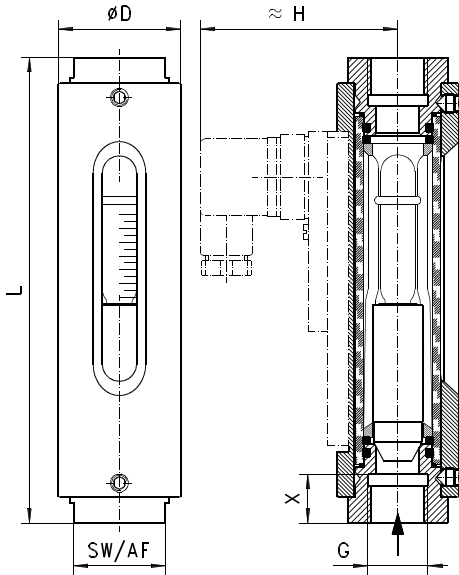
G	Display/ Switching range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended	Types
G 1/2	0.1 - 1.5	1.5	VL.-015G.002
	0.2 - 3.0	3.0	VL.-015G.003
	0.3 - 8.0	8.0	VL.-015G.008
	1.0 - 12.0	12.0	VL.-015G.012
	2.0 - 18.0	18.0	VL.-015G.018
G 1	3.0 - 35.0	35.0	VL.-025G.035
	4.0 - 50.0	50.0	VL.-025G.050

**Product Information**

**Sensors and Instrumentation**

**Dimensions and weights**

G	Types	D	H	L	X	SW	Weight kg
G 1/2	VL-015G.	43	-	135	13	32	0.63
	VLR-015G.		73				0.65
G 1	VL-025G.	50	-	184	17	41	1.00
	VLR-025G.		77				1.02



**Handling and operation**

- Include 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 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**

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

1. Types		
VL	flow indicator	
VLR	flow indicator with switching contact	
2. Nominal width		
015	DN 15 - G 1/2	
025	DN 25 - G 1	
3. Process connection		
G	female thread	
4. Connection material		
M	brass	
K	stainless steel	
5. Display / switching range H <sub>2</sub> O for vertical inwards flow		
002	0.1 - 1.5 l/min	●
003	0.2 - 3 l/min	●
008	0.3 - 8 l/min	●
012	1 - 12 l/min	●
018	2 - 18 l/min	●
035	3 - 35 l/min	●
050	4 - 50 l/min	●

**Options**

- Display and switching ranges for oil or gas
- Special values
- Scale 0..100 %
- Optionally transformer 250 V AC, 1,5 A, 50 VA, Wiring no. 0.282

**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, state pressure (relative or absolute), temperature and medium (e.g. air) (request display range)