

**Product Information**

**VD-015..050GK**

**Flow Switch  
VD-...GK**



- Highly reproducible
- Precise, stepless adjustment of the switching value
- Insensitive to dirt
- Short installation length

**Characteristics**

The volume flow raises a piston (fitted with a magnet) out from a valve seat against a spring force. The piston actuates a hermetically separated reed switch.

**Technical data**

<b>Switch</b>	reed switch	
<b>Nominal width</b>	DN 15..50	
<b>Process connection</b>	female thread G 1/2..G 1	
<b>Switching range</b>	1..200 l/min	for details see table "Ranges"
<b>Q<sub>max.</sub></b>	to 290 l/min	
<b>Tolerance</b>	±5 % of full scale value	
<b>Pressure resistance</b>	PN 100 bar	
<b>Medium 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>	changeover no. 0.213	
<b>Switching voltage</b>	Max. 175 V DC / 120 V AC	
<b>Switching current</b>	Max. 0.25 A DC / 0.18 A AC	
<b>Switching capacity</b>	Max. 5 W / VA	
<b>Protection class</b>	2 - safety insulation	
<b>Ingress protection</b>	IP 44, optionally IP 65	
<b>Connection</b>	Plug DIN 43650-A / ISO 4400	
<b>Materials medium-contact</b>	1.4305, 1.4571, 1.4310, FKM, hard ferrite PTFE-coated	
<b>Non-medium-contact materials</b>	ABS, PA	
<b>Weight</b>	see table "Dimensions and weights"	

<b>Installation location</b>	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.
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**Ranges**

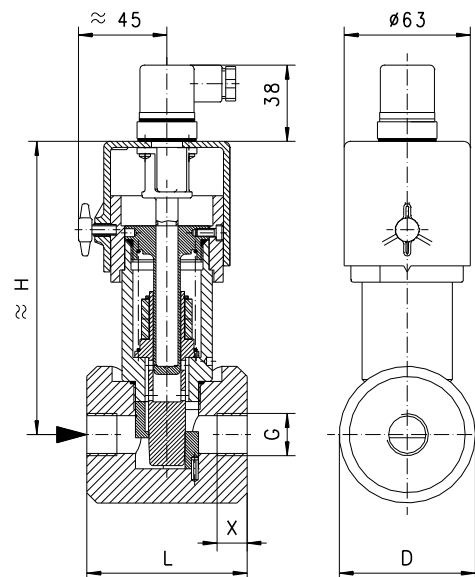
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended	Type
G 1/2	DN 15	1 - 10	20	VD-015GK010
			30	VD-015GK020
G 3/4	DN 20	4 - 20	40	VD-020GK020
				VD-020GK040
G 1	DN 25	10 - 40	60	VD-025GK040
		10 - 60	85	VD-025GK060
G 1 1/4	DN 32	20 - 60	100	VD-032GK060
		20 - 100	145	VD-032GK100
G 1 1/2	DN 40	30 - 100	150	VD-040GK100
			220	VD-040GK150
		50 - 150	250	VD-050GK150
G 2	DN 50	100 - 200	290	VD-050GK200

Special ranges are possible

**Dimensions and weights**

G	Types	H	L	D	X	Weight kg
G 1/2	VD-015GK	176	80	68	15	2.8
	VD-020GK				16	2.6
G 1	VD-025GK				18	2.5
G 1 1/4	VD-032GK	180	95	78	24	3.7
G 1 1/2	VD-040GK	186	105	88	25	4.8
G 2	VD-050GK	194	120	102	27	7.0



**Product Information**

**Handling and operation**

**Note**

- 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.

**Adjustment**

To adjust the switching point, the fixing screw for the switching head must be loosened. The switching head can then be rotated. Turning to the right increases the switching point, and vice-versa. Then retighten the fixing screw.



**Ordering code**

VD -  1.  2.  3.  4.  5.

1. Nominal width						
015	DN 15 - G 1/2					
020	DN 20 - G 3/4					
025	DN 25 - G 1					
032	DN 32 - G 1 1/4					
040	DN 40 - G 1 1/2					
050	DN 50 - G 2					
2. Process connection						
G	female thread					
3. Connection material						
K	stainless steel					
4. Switching range H <sub>2</sub> O for horizontal inwards flow						
010	1 - 10 l/min					●
020	4 - 20 l/min					● ●
040	10 - 40 l/min					● ●
	10 - 60 l/min					●
060	20 - 60 l/min					●
	20 - 100 l/min					●
100	30 - 100 l/min					●
	50 - 150 l/min					● ●
200	100 - 200 l/min					●
5. Optionally for ATEX						
A	for switching head ATEX A-V1 (The switching head is ordered in addition)					Ex

**Options**

- Special plugs, Tuchel / Harting
- Signal lamp red or red / green in the plug DIN 43650-A
- Other signal lamp
- Ingress protection P 65
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Metal cap
- Switch contact SPDT change over 250 V AC 0.35 A 30 VA - increased hysteresis depending on switching value. Only available with fixed switch point.
- 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 switching range).