

Product Information

VDO-008..080GR

Flow Switch / Indicator VDO-...GR

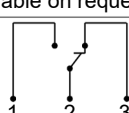


- No glass parts under load from pressure or media
- Monitor and display
- Highly reproducible
- Precise, stepless adjustment of the switching value
- Insensitive to dirt
- Short installation length

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 and a hermetically separated display ring.

Technical data

Switch	reed switch	
Nominal width	DN 8..80	
Process connection	female thread G 1/4..G 3	
Switching range	2..600 l/min	for details see table "Ranges"
Q_{max}	to 720 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	G 1/4..G 1/2 - PN 100 bar G 3/4..G 1 - PN 25 bar G 1 1/4..G 3 - PN 16 bar	
Medium temperature	-20..+120 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils and gases available on request)	
Wiring	changeover no. 0.213	
		
Switching voltage	Max.175 V DC / 120 V AC	
Switching current	Max. 0.25 A DC / 0.18 A AC	
Switching capacity	Max.5 W / VA	
Protection class	2 - safety insulation	
Ingress protection	IP 44, optionally IP 65	
Connection	plug DIN 43650-A / ISO 4400	
Materials medium-contact	Rg 5 / Rg 6 nickelled, POM, 1.4310, CW614N, NBR, hard ferrite	
Non-medium-contact materials	ABS, PA, acrylic XT	
Weight	see table "Dimensions and weights"	

Installation location

Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

Ranges

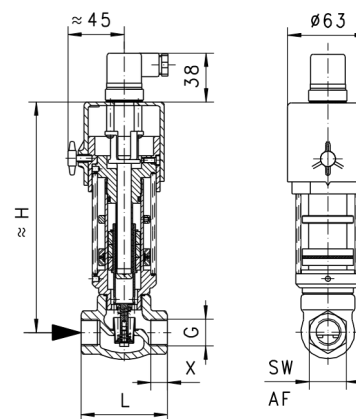
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H ₂ O	Q _{max} rec om me nde d	Type
G 1/4	DN 8	2 - 10	15	V DO- 00 8GR
G	DN 10			010 V DO- 01
G 3/8	DN 15			0GR 010 V DO-
G	DN 20	4 - 20	30	01 5GR 010 V
G 3/4	DN 20			DO- 01 5GR 020
G 1	DN 25			V DO- 02 0GR
G 1 1/4	DN 32	20 - 60	85	020 V DO- 02
G 1 1/2	DN 40			0GR 040 V DO-
G 2	DN 50			02 5GR 040 V
G 3	DN 80	30 - 100	145	DO- 02 5GR 060
				V DO- 03 2GR
				060 V DO- 03
		50 - 150	220	2GR 100 V DO-
				04 0GR 100 V
				DO- 04 0GR 150
		180 - 330	600	V DO- 05 0GR
				100 V DO- 05
				0GR 200 V DO-
		400 - 600	720	08 0GR 330 V

Special ranges are available

Dimensions and weights

G	Types	H	L	SW	X	Weight kg
G 1/4	VD-008GR	183	68	29	12	1.3
G 3/8	VD-010GR				13	1.4
G 1/2	VD-015GR					
G 3/4	VD-020GR	184	73	32	11	1.5
G 1	VD-025GR	188	87	41	12	1.7
G 1 1/4	VD-032GR	190	98	52	13	2.2
G 1 1/2	VD-040GR	195	113	59	14	2.9
G 2	VD-050GR	203	137	72	17	4.2
G 3	VD-080GR	224	148	100	23	7.8



Product Information

VDO-008..080GR

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.
- Remove the transport lock (white plastic screw in acrylic body) before starting operation. Then seal the threaded hole with the sticker (included in the shipment).

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.



Display

- The display is rotatable.



Ordering code

VDO - 1. 2. 3. 4.

1. 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										
032	DN 32 - G 1 1/4										
040	DN 40 - G 1 1/2										
050	DN 50 - G 2										
080	DN 80 - G 3										
2. Process connection											
G	female thread										
3. Connection material											
R	red bronze										
4. Switching range H ₂ O for horizontal inwards flow											
010	1 - 10 l/min	4									
020	- 20 l/min	10									
040	40 l/min	20									
060	60 l/min	30									
100	100 l/min	50									
150	150 l/min	100									
200	200 l/min	180									
330	330 l/min	400									
600	600 l/min										

Options

- Special plugs, Tuchel / Harting
- Signal lamp red or red / green in the plug DIN 43650-A
- Other signal lamp
- Ingress protection IP 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.
- Housing made from stainless steel
- Flange housing made from grey iron, cast steel, or stainless steel
- Switching ranges for oil
- Special values
- Internal parts are brass or stainless steel

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).