

**Product information**

**VD-...FK**

**Flow switch VD-...FK**



- Highly reproducible
- Insensitive to dirt
- DIN flange housing
- Precise setting of the switching valve by means of a 180° scale / setting diagram

**Characteristics**

Mechanical flow switch, for fluid media, with no-contact triggering of an adjustable Reed contact. Robust construction in stainless steel material.

**Technical data**

<b>Switch</b>	Reed switch	
<b>Nominal width</b>	DN 15..150	
<b>Process connection</b>	flange	
<b>Adjustment range</b>	2 ..950 l/min	For details see table "Ranges"
<b>Q<sub>max.</sub></b>	up to 2000 l/min	
<b>Hysteresis</b>	Depending on the switching value, minimum 0.3 l/min	
<b>Tolerance</b>	±5 % of full scale value	
<b>Pressure resistance</b>	PN 40 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>	Transformer 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>Switch performance</b>	Max. 5 W / VA	
<b>Protection class</b>	2 - Safety insulation	
<b>Ingress protection</b>	IP 44	
<b>Connection</b>	Plug DIN 43650-A / ISO 4400	

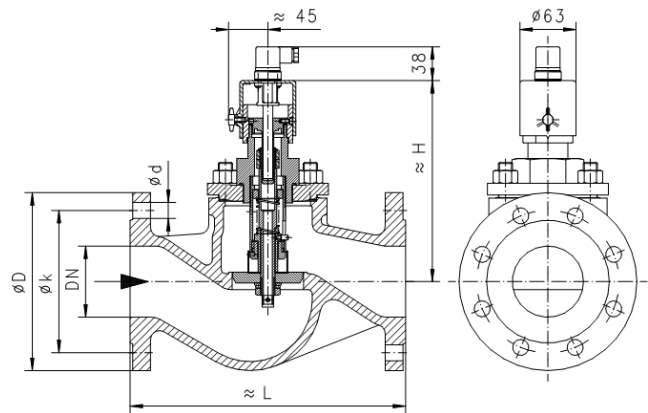
<b>Materials medium-contact</b>	1.4408, Stainless steel, 1.4571, POM, 1.4310, 1.4571, Viton, Klingerit, hard ferrite
<b>Non-medium-contact materials</b>	ABS
<b>Weight</b>	see table "Dimensions and weights"
<b>Installation location</b>	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

**Ranges**

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

Type	Nominal width	Adjustment range		Q <sub>max.</sub> recommended	
		l/min H <sub>2</sub> O			
VD-015FK...	DN 15	2 - 8	4 - 20	20	30
VD-020FK...	DN 20	4 - 20	10 - 40	40	55
VD-025FK...	DN 25	10 - 40	20 - 60	60	80
VD-032FK...	DN 32	20 - 60	30 - 100	100	135
VD-040FK...	DN 40	30 - 100	50 - 200	150	270
VD-050FK...	DN 50	50 - 200	100 - 250	270	340
VD-065FK...	DN 65	100 - 250	150 - 300	400	
VD-080FK...	DN 80	150 - 300	300 - 450	600	
VD-100FK...	DN 100	200 - 400	350 - 500	950	
VD-150FK...	DN 150	600 - 750	700 - 950	2000	

**Dimensions and weights**



Overall length DIN 3202, range F1  
Flange DIN 2545 PN 40  
Flange size DIN 2501 PN 40  
Sealing bar DIN 2526 form C

Types	H	L	D	k	d	Weight
	mm	mm	mm	mm	mm	kg
VD-015FK...	180	130	95	65	4x14	3.3
VD-020FK...	180	150	105	75	4x14	5.4
VD-025FK...	190	160	115	85	4x14	5.8
VD-032FK...	190	180	140	100	4x18	7.2
VD-040FK...	210	200	150	110	4x18	8.8
VD-050FK...	220	230	165	125	4x18	10.4
VD-065FK...	230	290	185	145	8x18	16.5
VD-080FK...	240	310	200	160	8x18	19.7
VD-100FK...	260	350	235	190	8x22	26.0
VD-150FK...	330	480	300	250	8x26	57.0

**Product information**

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**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 ferrous 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.  F  3.  K  4.  5.

1. Nominal width											
015	DN 15										
020	DN 20										
025	DN 25										
032	DN 32										
040	DN 40										
050	DN 50										
065	DN 65										
080	DN 80										
100	DN 100										
150	DN 150										
2. Process connection											
F	flange										
3. Connection material											
K	stainless steel										
4. Adjustment range H <sub>2</sub> O for horizontal inwards flow											
008	2 - 8 l/min										●
020	4 - 20 l/min										● ●
040	10 - 40 l/min										● ●
060	20 - 60 l/min										● ●
100	30 - 100 l/min										● ●
200	50 - 200 l/min										● ●
250	100 - 250 l/min										● ●
300	150 - 300 l/min										● ●
400	200 - 400 l/min										● ●
450	300 - 450 l/min										● ●
500	350 - 500 l/min										● ●
750	600 - 750 l/min										● ●
950	700 - 950 l/min										● ●
5. Optionally for ATEX											
A	For ATEX A-V1 switching head (The switching head is ordered in addition)										Ex

**Options**

- Signal lamp
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Protection class IP 65
- Metal cap
- Switching ranges for oil
- Special values
- Switch contact SPDT change over 250 VAC 0.35 A 30 VA - increased hysteresis depending on switching value

**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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).