

Product information

VM-...FG

Flow switch VM-...FG

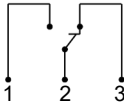


- Highly reproducible
- High switching capacity
- Insensitive to dirt
- DIN flange housing
- Precise setting of the switching valve by means of a 170° scale / setting diagram

Characteristics

Mechanical flow switch, for fluid media, with no-contact triggering of an adjustable microswitch. Robust construction in grey iron material.

Technical data

Switch	Microswitch	
Nominal width	DN 15.0.50	
Process connection	flange	
Adjustment range	5...4000 l/min	For details see table "Ranges"
Q_{max}	up to 5000 l/min	
Hysteresis	Depending on the switching value, minimum 3 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 16 bar	
Medium temperature	-20...+90 °C	
Ambient temperature	-20...+70 °C	
Media	Water, oils (gases and aggressive media available on request)	
Wiring	Transformer No. 0.213	
Switching voltage	max. 250 V AC	
Switching current	max. 5 A	
Protection class	2 - Safety insulation	
Ingress protection	IP 44	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4310, grey iron GG25, CW614N, NBR, Klingerit, hard ferrite	

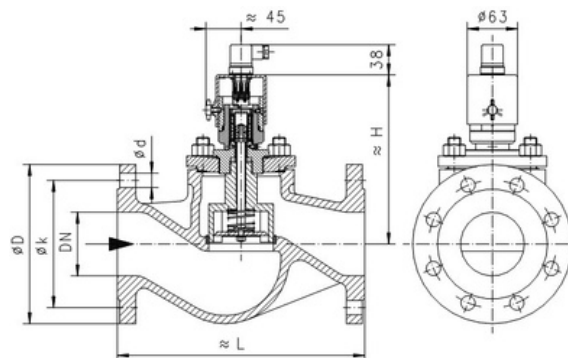
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

Ranges

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

Type	Nominal width	Adjustment range l/min H ₂ O	Q _{max} recommended
VM-015FG020	DN 15	5- 20	30
VM-020FG040	DN 20	10- 40	60
VM-025FG060	DN 25	20- 60	80
VM-032FG100	DN 32	30- 100	135
VM-040FG150	DN 40	50- 150	200
VM-050FG250	DN 50	100- 250	350
VM-065FG400	DN 65	150- 400	500
VM-080FG600	DN 80	200- 600	800
VM-100FG1000	DN 100	350- 1000	1250
VM-150FG2000	DN 150	700- 2000	2500
VM-200FG4000	DN 200	1000- 4000	5000

Dimensions and weights



Overall length DIN 3202, range F1

Flange DIN 2533 PN 16

Flange size DIN 2501 PN 16

Sealing bar DIN 2526 form C

Types	H mm	L mm	D mm	X mm	Weight kg
VM-015FG020	170	130	95	65	3.2
VM-020FG040	170	150	105	75	4.2
VM-025FG060	178	160	115	85	4.7
VM-032FG100	178	180	140	100	6.6
VM-040FG150	189	200	150	110	8.0
VM-050FG250	192	230	165	125	11.2
VM-065FG400	209	290	185	145	13.8
VM-080FG600	224	310	200	160	21.0
VM-100FG1000	241	350	220	180	30.5
VM-150FG2000	302	480	285	240	66.0
VM-200FG4000	360	600	340	295	124.0

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 ferri-ric 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 and inductive loads must be operated using a protective circuit.

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.



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Fibra Óptica Cabo Rede Instrumentação Energia Ferramenta

	1.	2.	3.	4.	5.
VM -		FG			

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				
200	DN 200				
2. Process connection					
F	flange				
3. Connection material					
G	Grey iron				
4. Adjustment range H₂O for horizontal inwards flow					
020	5 - 20 l/min				
040	10 - 40 l/min				
060	20 - 60 l/min				
100	30 - 100 l/min				
150	50 - 150 l/min				
250	100 - 250 l/min				
400	150 - 400 l/min				
600	200 - 600 l/min				
1000	350 - 1000 l/min				
2000	700 - 2000 l/min				
4000	1000 - 4000 l/min				
5. Optionally for ATEX					
A	For switching head ATEX A-V2 or A-V3 (The switching head is ordered in addition)				

- Other signal lamp
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Protection class IP 65
- Metal cap
- Gold contact microswitch 125 V AC / 30 V DC, 100 mA
- Germanischer Lloyd (Type VR)
- Switching ranges for oil or gas
- Special values
- Selected hysteresis

- 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).