

**VD, VD- ... GK, VD- ... FR, VD- ... FK, VD- ...
FT, VD- ... FG, A-V1, VM- ... GR, VM- ... GK,
VM- ... FG, VDO- ... GR**

Датчики протока вентиляного типа

GHM MESSTECHNIK



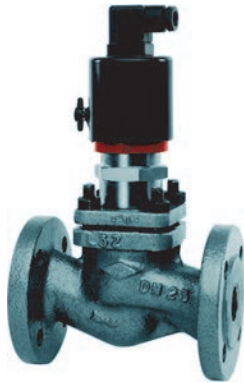
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Flow switch VD-...FG



- 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

Switch	Reed switch	
Nominal width	DN 15 – 100	
Process connection	flange	
Adjustment range	2..1600 l/min	For details see table "Ranges"
Q_{max.}	up to 8000 l/min	
Hysteresis	Depending on the switching value, minimum 0.3 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 40 bar	
Medium temperature	Max. -20..+120 °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. 1.5 A	
Switch performance	max. 50 VA	
Protection class	2 - Safety insulation	
Ingress protection	IP 44, optionally IP 65	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4310, Greyguss GG25, Ms58, POM, Ms58,, NBR, Klingerit, hard ferrite	

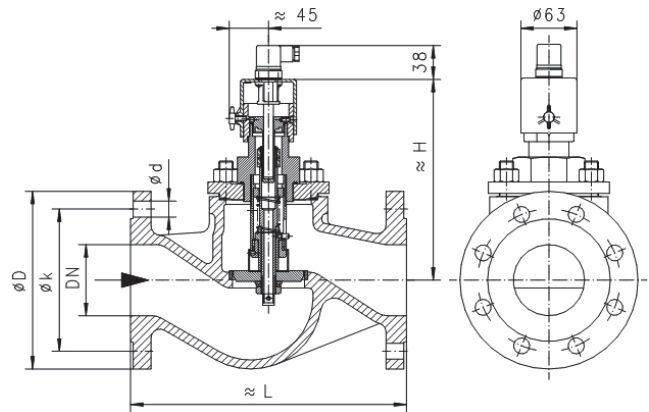
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

Ranges

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

Type	Nominal width	Adjustment range		Q _{max.} recommended	
		l/min H ₂ O			
VD-015FG...	DN 15	2- 8	4- 20	20	30
VD-020FG...	DN 20	4- 20	10- 40	40	55
VD-025FG...	DN 25	10- 40	20- 60	60	80
VD-032FG...	DN 32	20- 60	30- 100	100	135
VD-040FG...	DN 40	30- 100	50- 200	150	270
VD-050FG...	DN 50	50- 200	100- 250	270	340
VD-065FG...	DN 65	100- 250	150- 300	400	
VD-080FG...	DN 80	150- 300	300- 450	600	
VD-100FG...	DN 100	200- 400	350- 500	950	
VD-150FG...	DN 150	600- 750	700- 950	2000	
VD-200FG...	DN 200	850-1050	1050-1250	4000	
VD-250FG...	DN 250	1100-1300	1200-1400	6000	
VD-300FG...	DN 300	1300-1500	1400-1600	8000	

Dimensions and weights



Types	H mm	L mm	D mm	k mm	d mm	Weight 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
VD-200FG...	390	600	340	295	12x22	124,0
VD-250FG...	450	730	405	355	12x26	202,0
VD-300FG...	490	850	460	410	12x26	237,0


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.

Ordering code

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

1. Nennweite	
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
250	DN 250
300	DN 300
2. Anschlussart	
F	Flansch
3. Anschlusswerkstoff	
G	Grauguss
4. Verstellbereich H₂O für horizontale Anströmung	
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
1050	850 - 1050 l/min
1250	1050 - 1250 l/min
1300	1100 - 1300 l/min
1400	1200 - 1400 l/min
1500	1300 - 1500 l/min
1600	1400 - 1600 l/min
5. Optional für ATEX	
A	Für Schaltkopf ATEX A-V1 (Der Schaltkopf wird zusätzlich bestellt) 

Options

- Signal lamp
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Protection class IP 65
- Germanischer Lloyd (Type VR)
- Special values
- Rhodium contact (250 VAC, 0,5 A, 30 VA)

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).

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

Switch	Reed switch	
Nominal width	DN 15 – 150	
Process connection	flange	
Adjustment range	2 – 950 l/min	For details see table "Ranges"
Q_{max.}	up to 2000 l/min	
Hysteresis	Depending on the switching value, minimum 0.3 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 40 bar	
Medium temperature	-20 – +120 °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. 1.5 A	
Switch performance	max. 50 VA	
Protection class	2 - Safety insulation	
Ingress protection	IP 44	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4408, 1.4571, POM, 1.4310, 1.4571, Viton, Klingerit, hard ferrite	

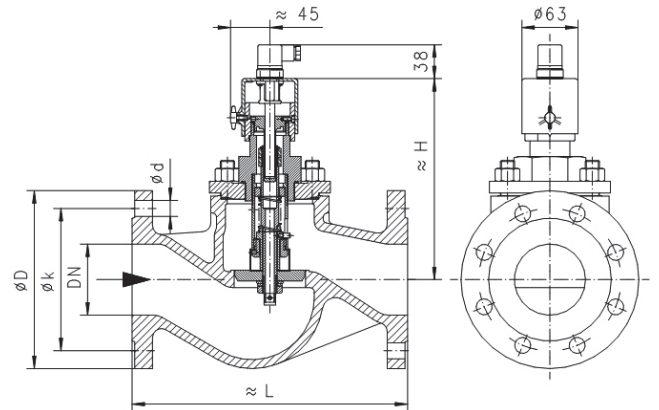
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

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	
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 mm	L mm	D mm	k mm	d mm	Weight 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

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.
F **K**

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 ₂ 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) 

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
- Germanischer Lloyd (Type VR)
- Switching ranges for oil or gas
- Special values
- Selected hysteresis
- Rhodium contact

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).

Flow switch VD-...FR



- 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 or gaseous media, with no-contact triggering of an adjustable Reed contact. Robust construction in gunmetal material.

Technical data

Switch	Reed switch	
Nominal width	DN 15 – 100	
Process connection	flange	
Switching range	1 – 200 l/min	For details see table "Ranges"
Q_{max.}	up to 950 l/min	
Hysteresis	Depending on the switching value, minimum 0.3 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 16 bar	
Medium temperature	-20 – +120 °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. 1.5 A	
Switch performance	max. 50 VA	
Protection class	2 - Safety insulation	
Ingress protection	IP 44	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4310.gunmetal Rg5, POM, CW614N, NBR, hardferrite	

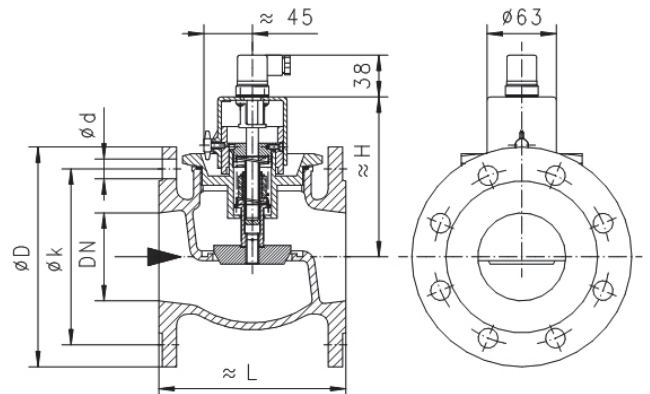
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

Ranges

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

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

Dimensions and weights



Flange size DIN 2501 PN 16
Sealing bar DIN 2526 form C

Types	H	L	D	k	d	Weight
	mm	mm	mm	mm	mm	kg
VD-015FR...	180	65	95	65	4x14	2.0
VD-020FR...	152	80	105	75	4x14	2.5
VD-025FR...	164	90	115	85	4x14	2.8
VD-032FR...	160	95	140	100	4x18	4.1
VD-040FR...	160	110	150	110	4x18	5.0
VD-050FR...	160	125	165	125	4x18	6.5
VD-065FR...	160	150	185	145	4x18	9.1
VD-080FR...	160	170	200	160	8x18	11.6
VD-100FR...	250	205	220	180	8x18	22.0

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. **F** **R**

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
2. Process connection	
F	flange
3. Connection material	
R	Gunmetal
4. Adjustment range H ₂ 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
5. Optionally for ATEX	
A	For ATEX A-V1 switching head (The switching head is ordered in addition) 

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
- Germanischer Lloyd (Type VR)
- Switching ranges for oil or gas
- Special values
- Selected hysteresis
- Rhodium contact

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).

Flow switch VD-...FT



- 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 cast steel material.

Technical data

Switch	Reed switch	
Nominal width	DN 15 – 300	
Process connection	flange	
Adjustment range	2 – 1600 l/min	For details see table "Ranges"
Q_{max.}	up to 8000 l/min	
Hysteresis	Depending on the switching value, minimum 0.3 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 40 bar	
Medium temperature	-20 – +120 °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. 1.5 A	
Switch performance	max. 50 VA	
Protection class	2 - Safety insulation	
Ingress protection	IP 44	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4310, Cast steel GSC 25, CW614N, POM, NBR, Klingerit, hardferrite	

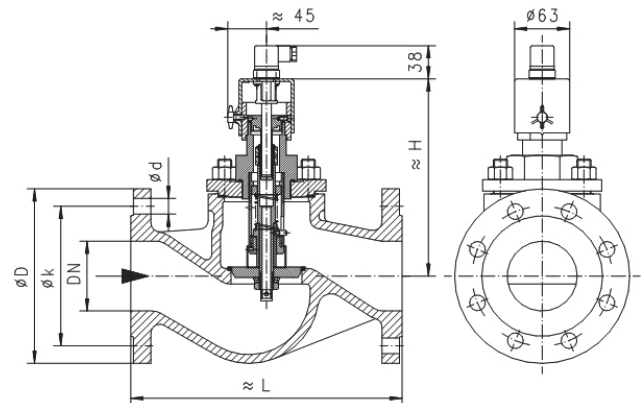
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

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			
		min	max	min	max		
VD-015FT...	DN 15	2 -	8	4 -	20	20	30
VD-020FT...	DN 20	4 -	20	10 -	40	40	55
VD-025FT...	DN 25	10 -	40	20 -	60	60	80
VD-032FT...	DN 32	20 -	60	30 -	100	100	135
VD-040FT...	DN 40	30 -	100	50 -	200	150	270
VD-050FT...	DN 50	50 -	200	100 -	250	270	340
VD-065FT...	DN 65	100 -	250	150 -	300	400	
VD-080FT...	DN 80	150 -	300	300 -	450	600	
VD-100FT...	DN 100	200 -	400	350 -	500	950	
VD-150FT...	DN 150	600 -	750	700 -	950	2000	
VD-200FT...	DN 200	850 -	1050	1050 -	1250	4000	
VD-250FT...	DN 250	1100 -	1300	1200 -	1400	6000	
VD-300FT...	DN 300	1300 -	1500	1400 -	1600	8000	

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 mm	L mm	D mm	k mm	d mm	Weight kg
VD-015FT...	180	130	95	65	4x14	4.0
VD-020FT...	180	150	105	75	4x14	4.4
VD-025FT...	190	160	115	85	4x14	6.3
VD-032FT...	190	180	140	100	4x18	8.2
VD-040FT...	210	200	150	110	4x18	11.1
VD-050FT...	220	230	165	125	4x18	12.8
VD-065FT...	230	290	185	145	8x18	23.5
VD-080FT...	240	310	200	160	8x18	29.0
VD-100FT...	260	350	235	190	8x22	36.0
VD-150FT...	330	480	300	250	8x26	85.0

Product Information

Sensors and Instrumentation

VD-200FT...	390	600	375	320	12x30	152.0
VD-250FT...	450	730	450	385	12x33	212.0
VD-300FT...	490	850	515	450	16x33	309.0

Handling and operation

Note

- Include straight calming section of 5 x DN in inlet and outlet.
- If the media are dirty, install a filter (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.

VD - **F** **T**

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
250	DN 250
300	DN 300

2. Process connection

F flange

3. Connection material

T Cast steel

4. Adjustment range H₂O 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
1050	850 - 1050 l/min
1250	1050 - 1250 l/min
1300	1100 - 1300 l/min
1400	1200 - 1400 l/min
1500	1300 - 1500 l/min
1600	1400 - 1600 l/min

5. Optionally for ATEX

A For ATEX A-V1 switching head (The switching head is ordered in addition)



Options

- 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
- Germanischer Lloyd (Type VR)
- Switching ranges for oil or gas
- Special values
- Selected hysteresis
- Rhodium contact

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).

Flow Switch VD-...GK

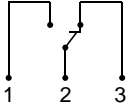


- Highly reproducible
- Precise, stepless adjustment of the switching value
- Insensitive to dirt
- Short installation length

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

Switch	reed switch	
Nominal width	DN 15..50	
Process connection	female thread G 1/2..G 1	
Switching range	1..200 l/min	for details see table "Ranges"
Q_{max.}	to 290 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 100 bar	
Medium temperature	-20..+120 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils, gases and aggressive media available on request)	
Wiring	changeover no. 0.213	
Switching voltage	max. 250 V AC	
Switching current	max. 1.5 A	
Switching capacity	max. 50 VA	
Protection class	2 - safety insulation	
Ingress protection	IP 44, optionally IP 65	
Connection	Plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4305, 1.4571, 1.4310, FKM, hard ferrite	
Non-medium-contact materials	PTFE-coated	
Non-medium-contact materials	ABS, PA	
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.
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Ranges

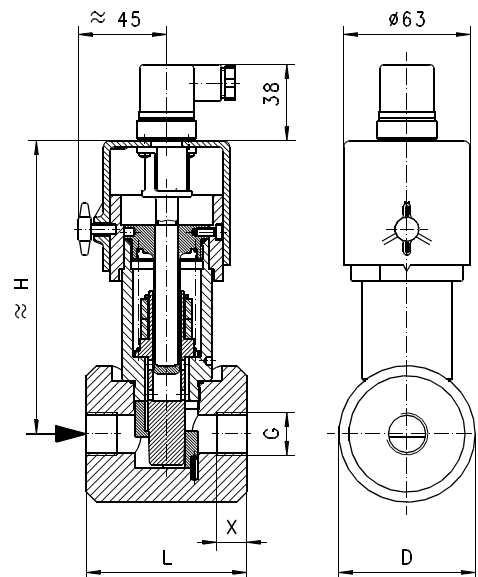
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H ₂ O	Q _{max.} 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
			85	VD-025GK060
G 1 1/4	DN 32	20 - 60	100	VD-032GK060
			145	VD-032GK100
G 1 1/2	DN 40	30 - 100	150	VD-040GK100
			220	VD-040GK150
G 2	DN 50		250	VD-050GK150
		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	166	80	68	15	2.8
G 3/4	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

Sensors and Instrumentation

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.
VD - **G** **K**

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 ₂ 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
150	100 - 200 l/min
200	
5. Optionally for ATEX	
A	for switching head ATEX A-V1 (The switching head is ordered in addition)

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
- Rhodium contact 250 V AC, 0.5 A, 30 VA
- Solid metal – Ms / VA
- GL certified (types VR)
- Switching ranges for oil or gas
- 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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).

Flow Switch VD-...GR

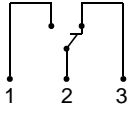


- Highly reproducible
- Precise, stepless adjustment of the switching value
- Insensitive to dirt
- Short installation length

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

Switch	reed switch	
Nominal width	DN 8..80	
Process connection	female thread G 1/4..G 3	
Switching range	1..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 - 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. 250 V AC	
Switching current	max. 1.5 A	
Switching capacity	max. 50 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
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.} recommended	Type
G 1/4	DN 8	1 - 10	15	VD-008GR010
G 3/8	DN 10		VD-010GR010	
G 1/2	DN 15		20	VD-015GR010
G 3/4	DN 20	4 - 20	30	VD-015GR020
			40	VD-020GR020
G 1	DN 25	10 - 40	60	VD-020GR040
			85	VD-025GR060
G 1 1/4	DN 32	20 - 60	100	VD-032GR060
			145	VD-032GR100
G 1 1/2	DN 40	30 - 100	150	VD-040GR100
			220	VD-040GR150
			250	VD-050GR150
G 2	DN 50	50 - 150	290	VD-050GR200
			400	VD-065GR200
G 2 1/2	DN 65	100 - 200	475	VD-065GR330
			600	VD-080GR330
G 3	DN 80	180 - 330	720	VD-080GR600
			300 - 600	VD-080GR600

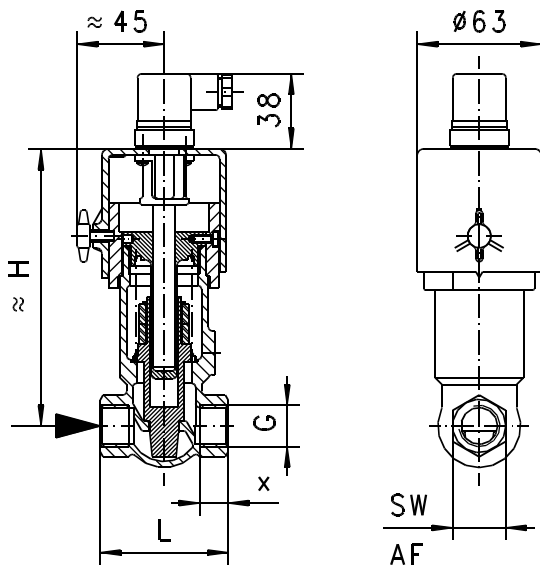
Special ranges are available

Product Information

Sensors and Instrumentation

Dimensions and weights

G	Types	H	L	SW	X	Weight kg		
G 1/4	VD-008GR	150	65	29	12	1.0		
G 3/8	VD-010GR				14			
G 1/2	VD-015GR							
G 3/4	VD-020GR				80		32	16
G 1	VD-025GR	156	98	52	18	1.3		
G 1 1/4	VD-032GR				13	2.1		
G 1 1/2	VD-040GR				113	59	14	2.8
G 2	VD-050GR				137	72	17	4.0
G 2 1/2	VD-065GR				160	85	26	4.0
G 3	VD-080GR				148	100	23	7.0



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

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

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
065	DN 65 - G 2 1/2
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
020	4 - 20 l/min
040	10 - 40 l/min
060	20 - 60 l/min
100	30 - 100 l/min
150	50 - 150 l/min
200	100 - 200 l/min
330	180 - 330 l/min
600	300 - 600 l/min
5. Optionally for ATEX	
A	for switching head ATEX A-V1 (The switching head is ordered in addition)

Options

- Special plugs, Tuchel / Harting
- Signal lamp red or red/green in the plug DIN 43650-A
- Other signal lamp
- Protection class IP 65
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Metal cap
- Rhodium contact 250 V AC, 0.5 A, 30 VA
- Solid metal – Ms / VA
- GL certified (types VR)
- Switching ranges for oil or gas
- 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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).

Flow Switch / Indicator VDO-...GR

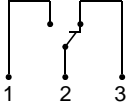


- No glass parts under load from pressure or media
- Monitor and display
- Highly reproducible
- Precise, stepless adjustment of the switching value
- Insensitive to dirt
- Short installation length

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. 250 V AC	
Switching current	max. 1.5 A	
Switching capacity	max. 50 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

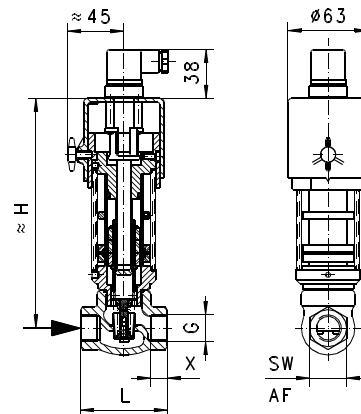
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H ₂ O	Q _{max.} recommended	Type	
G 1/4	DN 8	2 - 10	15	VDO-008GR010	
G 3/8	DN 10			VDO-010GR010	
G 1/2	DN 15			VDO-015GR010	
G 3/4	DN 20	4 - 20	30	VDO-015GR020	
		10 - 40	40	VDO-020GR020	
			60	VDO-020GR040	
G 1	DN 25	20 - 60	85	VDO-025GR040	
G 1 1/4	DN 32			100	VDO-025GR060
				145	VDO-032GR100
G 1 1/2	DN 40		150	VDO-040GR100	
		50 - 150	220	VDO-040GR150	
		30 - 100	250	VDO-050GR100	
G 2	DN 50	100 - 200	290	VDO-050GR200	
			400	VDO-065GR200	
G 2 1/2	DN 65	180 - 330	475	VDO-065GR330	
			600	VDO-080GR330	
G 3	DN 80		720	VDO-080GR600	
		400 - 600			

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					
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 2 1/2	VD-065GR	224	160	85	26	5.8
G 3	VD-080GR		148	100	23	7.8



Product Information

Sensors and Instrumentation

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.
VDO - **G** **R**

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
065	DN 65 - G 2 1/2
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
020	4 - 20 l/min
040	10 - 40 l/min
060	20 - 60 l/min
100	30 - 100 l/min
150	50 - 150 l/min
200	100 - 200 l/min
330	180 - 330 l/min
600	400 - 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
- Rhodium contact 250 V AC, 0.5 A, 30 VA
- Housing made from stainless steel
- Flange housing made from grey iron, gun metal, cast steel, or stainless steel
- Switching ranges for oil or gas
- Special values
- Internal parts are brass or stainless steel
- Damping for gas monitoring

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).

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. 6 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	

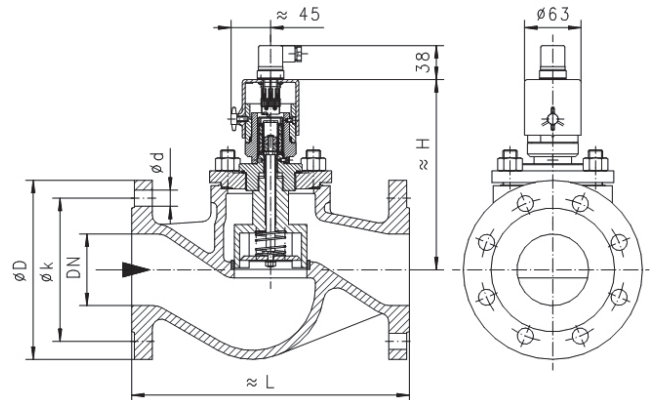
Non-medium-contact materials	ABS
Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.

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

Product Information

Sensors and Instrumentation

VM-200FG4000	360	600	340	295	124.0
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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 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 and inductive 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

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

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 H ₂ O 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 heat ATEX A-V2 or A-V3 (The switching head is ordered in addition)

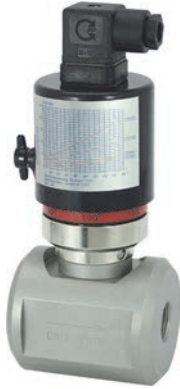
Options

- 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

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).

Flow Rate Monitor VM-...GK

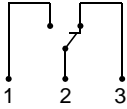


- Highly reproducible
- Precise, stepless adjustment of the switching value
- High switching power
- Insensitive to dirt
- Short installation length

Characteristics

Mechanical flow switch, for fluid or gaseous media, with no-contact triggering of an adjustable micro switch.

Technical data

Switch	micro switch	
Nominal width	DN 15..50	
Process connection	female thread G 1/2..G 2	
Switching range	2..250 l/min	for details see table "Ranges"
Q_{max.}	to 300 l/min	
Tolerance	±5 % of full scale value	
Pressure resistance	PN 100 bar	
Medium temperature	-20..+90 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils, gases and aggressive media available on request)	
Wiring	changeover no. 0.213	
Switching voltage	max. 250 V AC	
Switching current	max. 6 A	
Protection class	2 - safety insulation	
Ingress protection	IP 65	
Connection	plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4305, 1.4571, 1.4310, FKM, hard ferrite	
Non-medium-contact materials	PTFE-coated	
Non-medium-contact materials	ABS, PA	
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.
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Ranges

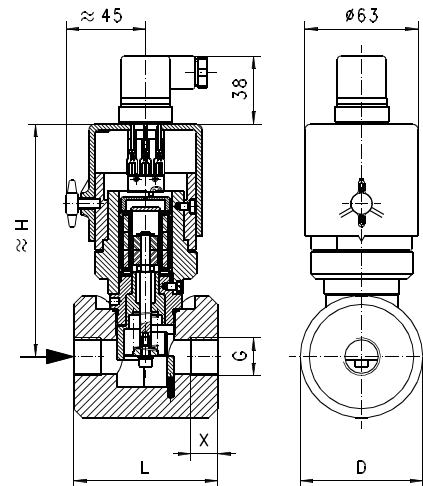
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H ₂ O	Q _{max.} recomb ended	Type
G 1/2	DN 15	2 - 6	15	VM-015GK006
		4 - 20	30	VM-015GK020
G 3/4	DN 20	4 - 12	40	VM-020GK012
		10 - 40	50	VM-020GK040
G 1	DN 25	10 - 60	70	VM-025GK060
G 1 1/4	DN 32	20 - 100	120	VM-032GK100
G 1 1/2	DN 40	30 - 150	180	VM-040GK150
G 2	DN 50	50 - 250	300	VM-050GK250

Special ranges are available

Dimensions and weights

G	Types	H	L	D	X	Weight kg
G 1/2	VM-015GK	139	80	68	15	2.8
	G 3/4				VM-020GK	16
G 1	VM-025GK				18	2.5
G 1 1/4	VM-032GK	141	95	78	24	3.5
G 1 1/2	VM-040GK	152	105	88	25	4.5
G 2	VM-050GK	154	120	102	27	6.7



Product Information

Sensors and Instrumentation

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 and inductive 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

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

VM - **G** **K**

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 ₂ O for horizontal inwards flow	
006	2 - 6 l/min
012	4 - 12 l/min
020	4 - 20 l/min
040	10 - 40 l/min
060	10 - 60 l/min
100	20 - 100 l/min
150	30 - 150 l/min
250	50 - 250 l/min
5. Optionally for ATEX	
A	for switching head ATEX A-V2 or A-V3 (The switching head is ordered in addition)

Options

- Special plugs, Tuchel / Harting
- Signal lamp red or red / green in the plug DIN 43650-A
- Other signal lamp
- Temperature display 0..120 °C
- Temperature monitoring 40..90 °C
- Temperature resistant up to 150 °C
- Metal cap
- Gold contact microswitch 125 V AC / 30 V DC, 100 mA
- Germanischer Lloyd
- Switching ranges for oil or gas
- 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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).

Flow Switch VM-...GR



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

Characteristics

The volume flow raises a disc unit with magnet against a spring force. A magnetic coupling actuates a hermetically separated micro switch.

Technical data

Switch	micro switch	
Nominal width	DN 8..80	
Process connection	female thread G 1/4..G 3	
Switching range	1..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..+90 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils and gases available on request)	
Wiring	changeover no. 0.213	
Switching voltage	max. 250 V AC	
Switching current	max. 6 A	
Protection class	2 - safety insulation	
Ingress protection	IP 65 (optional IP 44)	
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	
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.
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Ranges

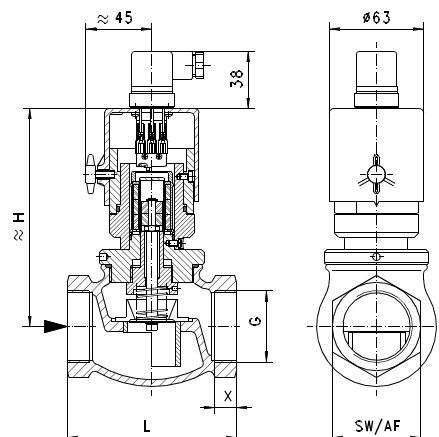
Details in the table correspond to horizontal inwards flow with decreasing flow rate.

G	Nominal width	Switching range l/min H ₂ O	Q _{max.} recomm ended	Types
G 1/4	DN 8	1 - 5	8	VM-008GR005
		3 - 12	15	VM-008GR012
G 3/8	DN 10	2 - 6	10	VM-010GR006
		3 - 12	15	VM-010GR012
G 1/2	DN 15	2 - 6		VM-015GR006
		4 - 20	30	VM-015GR020
G 3/4	DN 20	4 - 12	20	VM-020GR012
		10 - 40	50	VM-020GR040
G 1	DN 25	10 - 60	70	VM-025GR060
G 1 1/4	DN 32	20 - 100	120	VM-032GR100
G 1 1/2	DN 40	30 - 150	180	VM-040GR150
G 2	DN 50	50 - 250	300	VM-050GR250
G 2 1/2	DN 65	50 - 400	480	VM-065GR400
G 3	DN 80	100 - 600	720	VM-080GR600

Special ranges are available

Dimensions and weights

G	Types	H	L	SW	X	Weight kg
G 1/4	VM-008GR	144	68	29	12	1.2
	G 3/8 VM-010GR					1.3
	G 1/2 VM-015GR				13	1.4
G 3/4 VM-020GR		73	32	11	1.5	
G 1 VM-025GR		87	41	12	1.7	
G 1 1/4 VM-032GR	155	98	52	13	2.3	
G 1 1/2 VM-040GR	156	113	59	14	3.0	
G 2 VM-050GR	164	137	72	17	4.3	
G 2 1/2 VM-065GR	195	160	85	26	5.8	
G 3 VM-080GR		148	100	23	7.0	



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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

VM - 1. 2. G R 3. 4. 5.

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
065	DN 65 - G 2 1/2
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	
005	1 - 5 l/min
006	2 - 6 l/min
012	3 - 12 l/min
	4 - 12 l/min
020	3 - 20 l/min
	4 - 20 l/min
040	10 - 40 l/min
060	10 - 60 l/min
100	20 - 100 l/min
150	30 - 150 l/min
250	50 - 250 l/min
400	50 - 400 l/min
600	100 - 600 l/min
5. Optional for ATEX	
A	for switching head ATEX A-V2 or A-V3 (The switching head is ordered in addition)

Options

- Special plugs, Tuchel / Harting
- Signal lamp red or red / green in the plug DIN 43650-A
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- Temperature display 0..120 °C
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- Metal cap
- Gold contact microswitch 125 V AC / 30 V DC, 100 mA
- Germanischer Lloyd
- Switching ranges for oil or gas
- 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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).

Архангельск (8182)63-90-72	Иваново (4932)77-34-06	Липецк (4742)52-20-81	Пенза (8412)22-31-16	Ставрополь (8652)20-65-13
Астана (7172)727-132	Ижевск (3412)26-03-58	Магнитогорск (3519)55-03-13	Пермь (342)205-81-47	Сургут (3462)77-98-35
Астрахань (8512)99-46-04	Иркутск (395)279-98-46	Москва (495)268-04-70	Ростов-на-Дону (863)308-18-15	Тверь (4822)63-31-35
Барнаул (3852)73-04-60	Казань (843)206-01-48	Мурманск (8152)59-64-93	Рязань (4912)46-61-64	Томск (3822)98-41-53
Белгород (4722)40-23-64	Калининград (4012)72-03-81	Набережные Челны (8552)20-53-41	Самара (846)206-03-16	Тула (4872)74-02-29
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Владивосток (423)249-28-31	Кемерово (3842)65-04-62	Новокузнецк (3843)20-46-81	Саратов (845)249-38-78	Ульяновск (8422)24-23-59
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Воронеж (473)204-51-73	Красноярск (391)204-63-61	Орел (4862)44-53-42	Смоленск (4812)29-41-54	Челябинск (351)202-03-61
Екатеринбург (343)384-55-89	Курск (4712)77-13-04	Оренбург (3532)37-68-04	Сочи (862)225-72-31	Череповец (8202)49-02-64
				Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47 Казахстан (772)734-952-31 Таджикистан (992)427-82-92-69