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Product Information
FF-...GR/GM

Flow Switch FF-...GR/GM

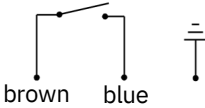
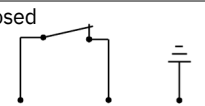


- Adjusted switching value
- Highly reproducible
- Insensitive to dirt

Characteristics

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

Technical data

Switch	reed switch	
Nominal size	DN 8...40 (DN 50...80 available on request)	
Process connection	female thread G 1 ¹ / ₄ ... G 1 ¹ / ₂	
Adjustment range	0.4...90 l/min	for details see table "Ranges"
Q _{max}	to 150 l/min	
Tolerance	±3 % of the switching value, minimum ±0.3 l/min	
Compressive strength	G 1 ¹ / ₄ ...G 1 ¹ / ₂ - PN 200 G 3 ¹ / ₄ ...G 1 - PN 25 G 1 ¹ / ₄ ... G 1 ¹ / ₂ - PN 16	
Media temperature	DN 8...15 ≥DN 20	-20...+110 °C -20...+ 90 °C
Ambient temperature	-20...+70 °C	
Media	water (oils available on request)	
Wiring	normally open (n.o.) no. 0.212  optionally, normally closed no. 0.214 (not all adjustment ranges are possible, please enquire) 	
Switching voltage	max. 230 V AC	
Switching current	max. 1 A	
Switching capacity	max. 50 VA	
Protection class	1 - PE connection	
Ingress protection	IP 65	
Electrical connection	cable 1.8 m	

Wetted materials	Rg 5 nickelled, 1.4310, CW614N nickelled, NBR, hard ferrite
Non-wetted materials	PA, PVC
Weight	see table "Dimensions and weights" Standard:
Installation location	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	DN	Switching point l/minHQ adjustable between	Types	Q _{max} recommended
G 1/4	DN 8	0.4 - 9	FF-008GR009	7
G 3/8	DN 10	0.4 - 10	FF-010 GR	10
G 1/2	DN 15	0.4 - 12	010 FF-015	22
G 3/4	DN 20	0.6 - 25	GR 012 FF-	38
G 1 G	DN 25	1.5 - 40	020 GR 025	60
1 1/4 G	DN 32	2.0 - 60	FF-025 GR	100
1 1/2	DN 40	3.0 - 90	040 FF-032	150

Special ranges are available GR 060 FF-040 GR 090

Dimensions and weights

G	Types	L	H	AF	X	Weight kg
G 1/4	FF-008GR... FF-	68	80	29	12	0.6
G 3/8	010GR... FF-					
G 1/2	015GR/GM... FF-				1	
G 3/4	020GR... FF-	73	90	3	3	0.
G 1 G	025GR... FF-	87		2	1	7
1 1/4 G	032GR... FF-	98	9	4	1	1.
1 1/2	040GR...	11	5	1	1	0
		3	9	5	4	1.
			5	2		5
				5		2.
				9		0

FF-...GR/GM

Ordering code

- | | | | | | |
|-----|----|----|----|----|----|
| | 1. | 2. | 3. | 4. | 5. |
| FF- | | G | R | | |

1. Nominal width					
008	DN 8 - G ^{1/4} / ₄				
010	DN 10 - G ^{3/8} / ₈				
015	DN 15 - G ^{1/2} / ₂				
020	DN 20 - G ^{3/4} / ₄				
025	DN 25 - G 1				
032	DN 32 - G 1 ^{1/4} / ₄				
040	DN 40 - G 1 ^{1/2} / ₂				
2. Process connection					
G	female thread				
3. Connection material					
R	red bronze	☐	☐	☐	☐
M	pressed brass	☐	☐	☐	☐
4. Switch point H_Q adjustable between					
009	0.4 - 9 l/min				☐
010	0.4 - 10				☐
012	l/min 0.4 -				☐
025	12 l/min 0.6			☐	
040	- 25 l/min		☐		
060	1.5 - 40		☐		
090	l/min 2.0 -	☐			
5. Wiring					
	90 l/min 'normally open', no. 0.212				
☐	'normally closed', no. 0.214 (please inquire about range)				

- Adjustment for oil or gas
- Special values

- Specify direction of flow, medium, and switching point.
- For oils, state viscosity, temperature and designation (e.g. ISO VG 68) (inquire about range).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (inquire about range).

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INSTRUFIBER

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