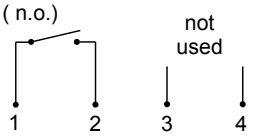
Flow Switch FW1-...GP

- **Economical design**
- **High switching power**
- **Insensitive to dirt**

Characteristics

Mechanical flow switch, for fluid media, with spring-supported piston and magnetic triggering of a reed switch. Robust construction in POM material.

Technical data

Switch	reed switch	
Nominal width	DN 15..25	
Process connection	female thread G $^1/_2$..G 1 (note: for plastic parts it is not possible to guarantee trueness of calibration; further process connections available on request)	
Switching range	1..11 l/min	for details see table "Ranges"
Pressure loss	0.2..0.8 bar at $Q_{max.}$	
$Q_{max.}$	to 30 l/min	
Tolerance	±10 % of full scale value	
Pressure resistance	PN 10 bar	
Media temperature	-20..+90 °C	
Ambient temperature	-20..+70 °C	
Media	water (oil available on request)	
Wiring	normally open (n.o.) No. 0.378 	
Switching voltage	max. 230 V AC	
Switching current	max. 0.5 A	
Switching capacity	max. 50 VA	
Protection class	2 - safety insulation	
Ingress protection	IP 67	
Electrical connection	for round plug connector M12x1, 4-pole	
Materials medium-contact	POM GV, POM, 1.4310, hard ferrite	
Non-medium-contact materials	PC, 1.4301, 1.4305	
Weight	see table "Dimensions and weights"	
Installation location	Standard: horizontal inwards flow; 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.

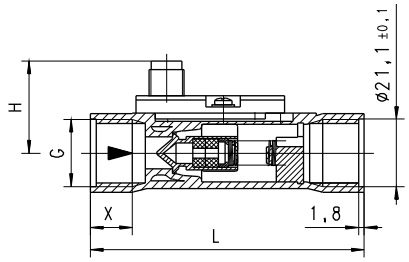
G	DN	Switching range l/min H_2O	$Q_{max.}$ re-com-men-ded	Pressure loss bar at $Q_{max.}$ H_2O
G $^1/_2$	DN 15	1 - 6	20	0.8
G $^3/_4$	DN 20	1 - 11	30	0.2
G 1	DN 25			

Special ranges are available.

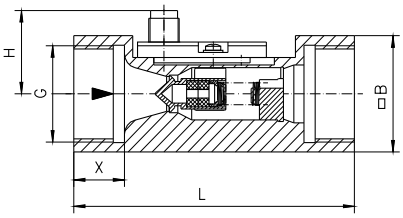
Dimensions and weights

G	Types	L	H	B	SW	X	Weight kg
G $^1/_2$	FW1-015GP	85	30	-	27	12	0.05
G $^3/_4$	FW1-020GP	100	36	36	-	18	0.15
G 1	FW1-025GP		38	40			0.20

FW1-015GP



FW1-020..025GP



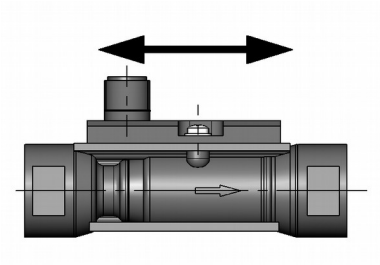
Handling and Operation

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 switch 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

Loosen screw slightly, push the switching head into the desired position, and then retighten the screw.



Ordering code

	1.	2.	3.	4.
FW1 -		**G**	**P**	

1.	**Nominal width**				
	015	DN 15 - G $^1/_2$			
	020	DN 20 - G $^3/_4$			
	025	DN 25 - G 1			
2.	**Process connection**				
	G	female thread			
3.	**Connection material**				
	P	POM			
4.	**Switching range H_2O for horizontal inwards flow**				
	006	1 - 6 l/min			●
	011	1 - 11 l/min	●	●	

Options

- Switching value for oil
- Special values
- Cable outlet 3 m

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).