

## 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

<b>Switch</b>	reed switch		
<b>Nominal width</b>	DN 15..25		
<b>Process connection</b>	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)		
<b>Switching range</b>	1..11 l/min	for details see table "Ranges"	
<b>Pressure loss</b>	0.2..0.8 bar at Q <sub>max.</sub>		
<b>Q<sub>max.</sub></b>	to 30 l/min		
<b>Tolerance</b>	±10 % of full scale value		
<b>Pressure resistance</b>	PN 10 bar		
<b>Media temperature</b>	-20..+90 °C		
<b>Ambient temperature</b>	-20..+70 °C		
<b>Media</b>	water (oil available on request)		
<b>Wiring</b>	normally open (n.o.) No. 0.378		
<b>Switching voltage</b>	max. 230 V AC		
<b>Switching current</b>	max. 0.5 A		
<b>Switching capacity</b>	max. 50 VA		
<b>Protection class</b>	2 - safety insulation		
<b>Ingress protection</b>	IP 67		
<b>Electrical connection</b>	for round plug connector M12x1, 4-pole		
<b>Materials medium-contact</b>	POM GV, POM, 1.4310, hard ferrite		
<b>Non-medium-contact materials</b>	PC, 1.4301, 1.4305		
<b>Weight</b>	see table "Dimensions and weights"		
<b>Installation location</b>	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.

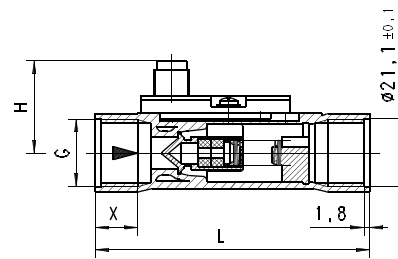
G	DN	Switching range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended	Pressure loss bar at Q <sub>max.</sub> H <sub>2</sub> O
G 1/2	DN 15	1 - 6	20	0.8
G 3/4	DN 20	1 - 11	30	0.2
G 1	DN 25			

Special ranges are available.

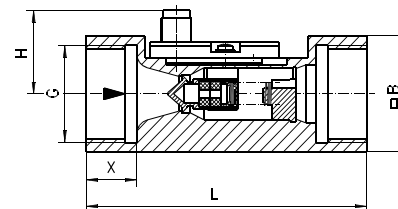
### Dimensions and weights

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	32	36	-	18	0.15
G 1	FW1-025GP		32	40			0.20

FW1-015GP



FW1-020..025GP



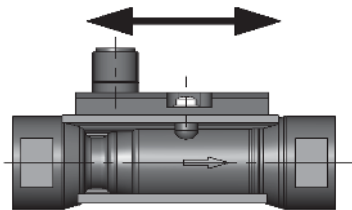
**Handling and Operation**

**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**

FW1 -  1.  2.  3.  4.

<b>1. Nominal width</b>			
015	DN 15 - G 1/2		
020	DN 20 - G 3/4		
025	DN 25 - G 1		
<b>2. Process connection</b>			
G	female thread		
<b>3. Connection material</b>			
P	POM		
<b>4. Switching range H<sub>2</sub>O for horizontal inwards flow</b>			
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).