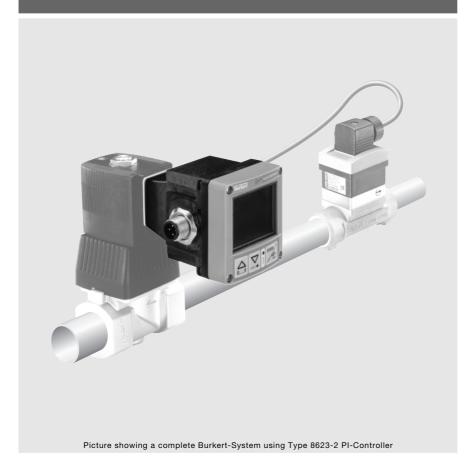
PI-Controller; PA-Plug Housing acc. to DIN 43650 A; 24 VDC



Design / Function

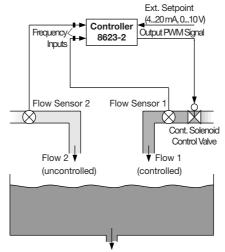
This PI-controller allows to setup a closed loop control for controlling flow or mixing ratios. It can be combined with a solenoid control valve (i.e. 6022, 6023, 6223 and 2832, 2834, 2836) and a flow sensor with frequency signal (i.e. 8020, 8030 or 8040).

The setpoint can be programmed not only manually, but also from an external PLC or other process controller.

The PI-controller can be used to control not only flow, but also the mixing ratios of liquids. In the latter case, the two frequency inputs from the flow sensors of the controlled and uncontrolled flow are constantly compared to the programmable flow ratio and its setpoint.

Flexibility to the process is given by many different features, such as scaling, programming of process control parameters, setting of the external or internal setpoints as well as by monitoring the process value on the display.

Application example: Control of mixing ratio (flow 1 = mixing ratio x flow 2)



Liquid with controlled mixing ratio

Advantages / Benefits



► Up to 80% lower Total Cost of Ownership



► Easy and fast installation, configuration and operation



► Internal and external setpoint for easy networking and easy customizing



► High reliability of process, thanks to decentralized intelligence

Applications

- Control of supply of liquids in chemical process engineering
- Control of flow in water cooling circuits in machines and plants
- Control of mixing ratios of liquids
- Control of liquid supply in water treatment
- Control of damping in paper and textile machineries
- Control of flow in batch machines



Technical Data

Operating voltage	24 V DC		
Power consumption	Max. 1.5 W		

INPUTS

Sensor 2 Frequency inputs

(2 to 1000 Hz)

 $\begin{array}{ll} \mbox{Accuracy} & \pm \ 1\% \\ \mbox{Type of signals} & \mbox{Frequency} \end{array}$

Sinusoidal, square wave, triangular (≥ 300 m V_{ss})

External setpoint Standard signal

4...20 mA or 0...10 V Resolution 10 Bit

Electrical connections to

Sensors 2 Male connectors M8 (3 pins each)

Power supply and

external setpoint 1 Male connector

M12 (4 pins)

Programming -Setting of K-factor

-Setting of control parameter PI-Configuration of setpoint-Monitoring of process values

LCD-display 4 digit numeric display 4 letter text display

OUTPUTS

Outputs to valve

Output signal electr. PWM-signal

(pulse-width-modulation)

Output current max. 1.0 A

Electr. connection Plug-on acc. to DIN 43 650 A to valve (secured with a screw)

(secured with a screw)

Can be mounted in rotational

increments of 90°

Rating (plugged-on) IP 65

Ambient temperature -10 °C ... +60 °C Housing material Polyamide (PA) Weight approx. 130 g

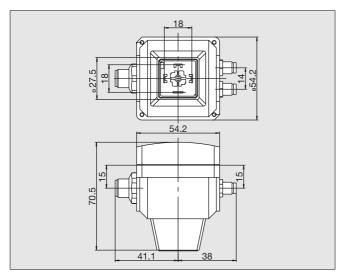
Ordering Chart

Type:	Item-No.:
Flow Controller 8623-2	143 569 B

Ordering Chart Accessories (Cables and Connectors)

Description / Feature:	Connecting PI-Controller with:	Item-No.:
Connector M12 with 5.0 m cable (4 wire)	Power supply / External setpoint	918 038 T
Connector M8 with 2.0 m cable (3 wire)	-	918 039 U

Dimensions [mm]





In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice. 001-GB/ 1-0206