

## Operation manual



Peristaltic pump for dosing of flocculant



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## 1. General safety instructions

This operating manual contains basic instructions that must be complied with for installation, commissioning, operation, and maintenance. Consequently this operating manual must always be read by the fitter as well as the responsible owner prior to installation and commissioning, and must be accessible to every user of the device. In addition, all other safety instructions in this document must be strictly complied with. Read and comply with all instructions.

To reduce the danger of injury, do not allow children to use this product.

### Dangers due to failure to comply with the safety instructions

Failure to comply with the safety instructions can result in hazards for personnel as well as for the environment and the device.

Failure to comply with the safety instructions can result in loss of all claims for damage compensation.



#### **DANGER!**

##### **Inadequate qualification of personnel**

Dangers due to inadequate qualification of personnel!

**Possible consequence: Death or severe injury, significant damage to material assets.**

- The system owner must ensure compliance with the required qualifications.
- All activities must only be carried out by personnel who are qualified to perform such activities.
- Access to the system must be prevented for inadequately qualified personnel..



#### **IMPORTANT NOTE!**

Compliance with the applicable accident prevention regulations and the other statutory regulations and the generally acknowledged safety regulations must be ensured by the system owner!



#### **IMPORTANT NOTE!**

Only liquid flocculants from the company BAYROL may be dosed with the Flockmatic. The use of flocculants or other products from other manufacturers results in loss of all damage compensation claims!



#### **DANGER!**

##### **Compliance with the protection rating**

After tasks on the Flockmatic, if the housing or individual cable glands are not properly closed, so that a reliable seal is ensured, moisture can penetrate into the device.

**Possible consequences: Damage or destruction of the Flockmatic, malfunctions.**

- After all tasks performed on the device, ensure a safe seal.

## 2. General

The Flockmatic is a high quality peristaltic pump for dosing of flocculant (Quickflock Automatic Plus) in to the circulation system of a swimming pool.

The pool must be equipped with a properly sized sand/glass filter.

#### **Technical data:**

The Flockmatic is a high quality stepper motor that requires no gears.

With the supplied hose, the capacity is - 0.01 l / (10ml / h).

Max. pressure:	1.5 bar
Flow rate:	0,01 l/h (10ml/h)
Protection class housing:	IP65
Dimension (without wall mounting panel,mm): (BxHxT)	approx. 93x150x130
Electric power supply:	230 V / 50 Hz

## 3. Electrical connection

The Flockmatic pump must be connected in a way that it only works when the circulation pump is running.

The Flockmatic must be isolated when carrying out a backwash of the sand/glass filter. The Flockmatic must be installed in such a way to ensure that it is switched off during Backwashing of the filter.

The Flockmatic can easily be connected to the PoolManager®. Please refer to the operating instructions of the PoolManager®.

## 4. Installation in the circulation system

The Flockmatic is supplied ready for installation on a panel for wall mounting. The pump is preferably mounted at a height of about 1.5 m on the wall. The container with Quickflock Automatic Plus is placed directly under the Flockmatic pump in order to keep the Suction tube as short as possible. Read the safety instructions on the label of the container of Quickflock Automatic Plus. Do not dispense any liquids other than liquid flocculant with this pump!

### Mounting / Commissioning:

Install the injection valve using a saddle clamp if necessary in the pipe section between the circulation pump and the filter inlet. (See diagram).

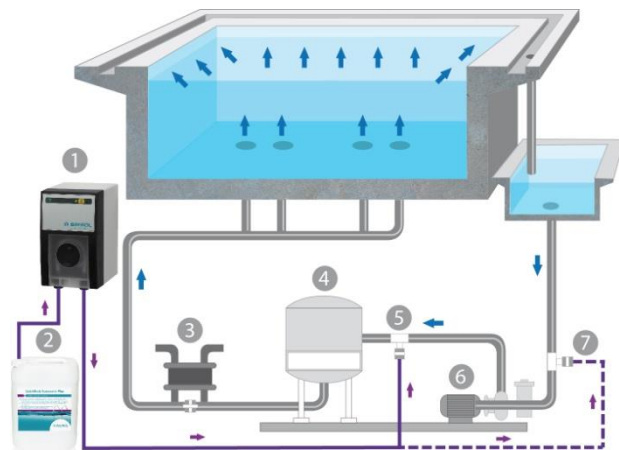
#### Caution:

Place the point of injection as far as possible away from the sand filter (as close as possible to the circulation pump outlet) in order to allow the flocculating agent to build up the flakes. If a measurement, control and metering system is installed make sure to inject the liquid flocculant after the sample water extraction point.

Connect the pressure side of the pump (right hand) with the injection valve by using the provided hose 6 x 4 mm. Connect the hose to the supplied suction lance on the suction side of the Flockmatic (left hand).

Make sure all hose connections are fitting tightly!

#### Installation diagram:



- 1 - Flockmatic
- 2 - Quickflock Automatic Plus
- 3 - Heat exchanger
- 4 - Filter
- 5 - Injection after the circulation pump
- 6 - Circulation pump
- 7 - Injection before circulation pump (recommended if counter pressure is higher than 0.8 bar)

**PLEASE NOTE:** Sample water extraction must be before injection of liquid flocking agent!

## 5. Maintenance

Some parts of the Flockmatic are subject to wear due to chemical and mechanical stress. Thus regular inspection is required for safe, long-term operation. Regular preventive maintenance of the system protects against unscheduled interruptions of operation.

### 5.1 14-day maintenance

- Visual inspection of all dosing lines and the dosing hose for leaks, replace if necessary

### 5.2 Yearly maintenance

- inspection of all dosing lines, replace if necessary
- Replacement of the hose of the dosing pump

### 5.3 Cleaning

Clean the surfaces of the device with a soft lint-free cloth as needed. To do this only use a little water, if necessary



#### IMPORTANT NOTE

Do not use aggressive cleaners

### 5.4 Hose replacement



#### NOTE

Never grease the hose!



#### NOTE

Only use original spare pump hoses!



#### DANGER!

##### Danger due to chemicals

When pulling off the pump hose, corrosive product residues can escape.

**Possible consequence: Serious health impairment (acid burns) and damage to material assets**

- Always empty the pump hose and supply lines first.
- If necessary wear protective goggles and protective gloves and protect the surroundings against escaping product residues with a cloth.



#### DANGER!

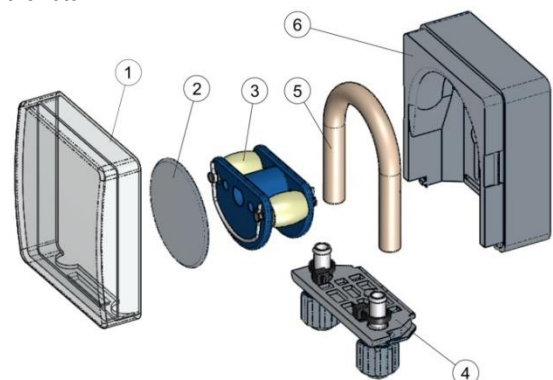
##### Danger due to rotating parts

The rotor of the dosing pump can start-up abruptly.

**Possible consequence: Danger of crushing for fingers!**

Ensure that the dosing pump remains disconnected from the operating voltage while replacing the hose (unplug the mains plug)!

The hose of the dosing pump is replaced without dismantling the rotor.



- Remove the emptied suction and pressure hoses from the hose holder. To do this open the blue clamping screws.
- Take the transparent cover 1 off of the pump.
- Take off the blue cover 2 of the rotor.
- Turn rotor 3 in such a manner that the flat side points to the left and is vertical.
- Pull the hose holder 4 out of its holder and lift it on the left side.

- Now turn the rotor 3 clockwise and follow with the hose lifted until it is completely free.
- Proceed in the reverse sequence for mounting.

The hose only, or the hose together with the hose holder can be replaced.

We recommend replacing the hose together with the hose holder. (Replacement hose set)

Art.-no.	Description
127402	Replacement hose Flockmatic / Vario S
127403	Replacement hose set Flockmatic / Vario S



#### NOTE

If only the hose is replaced, you must strictly ensure the following when mounting the hose

- Firm seat of the hose on the nozzles.
- The hose must not be fitted on twisted under any circumstances.
- You must ensure that the hose connectors are firmly seated..

## 5.5 Winterising

For brief interruption of use (e.g. several days) no special measures are required.

For longer interruptions of operation that extend over several weeks, as in the case of winter care the following tasks must be executed:

- Remove the suction lance from the canister and rinse it with water.
- Seal the delivery container, store it in a cool and dry location and protect against UV radiation.
- Rinse the hose pump with water.
- Take the dosing hose out of the pump.
- Flush all hoses with water and empty them completely.







After the winter season, all components must be examined to determine that they are functional. All dismantled parts must be remounted at their intended position. Check the settings of the Flockmatic.

## 5.6 Decommissioning

If the device will be disposed of after its service life, it must be flushed out and the water drained. The device has been manufactured in accordance with the provisions of the ROHS Directive and the Waste Electrical and Electronic Equipment Directive. It does not belong in domestic waste.

Take the device to a suitable and appropriate collection point.

## 6. Spare parts

Art.-No.	Picture	Description
127 400		Flockmatic
171 212		Suction fitting, rigid
127403		Replacement hose set Flockmatic / Vario S
127402		Pump hose Flockmatic / Vario S
100 509		PE dosing hose 6x4X1 (10 m)
171 207		Injection nozzle, 0.5 bar