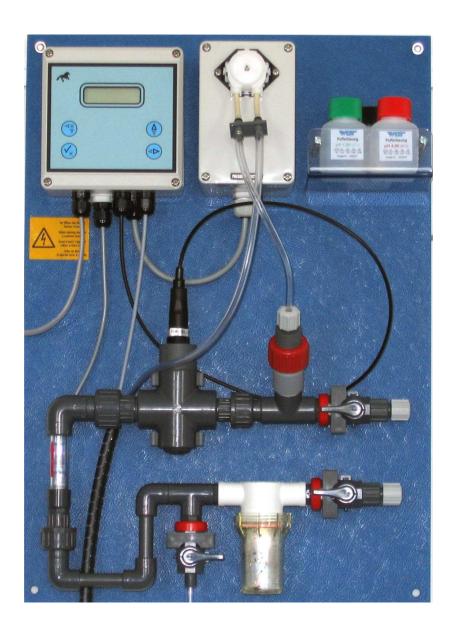


Autocontrol systems pH control smart



Autocontrol systems for pH control smart

Table of contents

		Seite
1.	Description	2
2.	Technical data	2
3.	Scope of delivery	2
4.	Measuring water flow control	3
5.	Dosing technique	3
5.1	Dosing pump	3
5.2	Suction lance	3
6.	Maintenance	4
6.1	Cleaning of the pH electrode	4
6.2	Maintenance of the hose pump	4
6.3	Maintenance of the dosing valve	4
7.	Shut-down and hibernation	4
8.	Spare parts list	5

1. Description

All things, which are essential to control the pH value and to dose the chemical, are pre-mounted on a PE plate. The chemical for the control of the pH value (pH minus) is easily and safely dosed into the pool water which is flown through by the autocontrol systlem. The current measuring value or an incurred failure is shown on the display.

2. Technical data

Materialien: PE, PVC, Measuring cell made out of PMMA

perspex

Measurements: width x height 350 x 500 mm appr. 4 kg

Dosing performance of the hose pumps: appr. 2 1/h

Power supply: AC voltage 230 V / 50 Hz < 0.1 Ampere

Measuring water and dosing connection fittings: PVC ball valve 1/2" with extended dip

tube and hose connection 6x1 mm

3. Scope of delivery

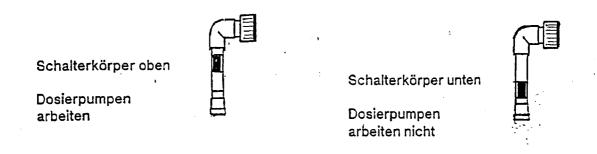
- 1 Autcontrol system
- 1 Operation manual
- 2 Measuring water reduction ball valve ½"

per 1 buffer solution pH4, pH7, electrode cleaner, destilled water

4. Measuring water flow control

An adequate measuring water flow is essential to have an updated pool water for the controller and on the other side, the measuring water is needed as means of transport for the dosed chemical. The measuring water flow control consists of a pole and body switch which is pressed upwards through the drifty water in the transparent switch tube.

If the circulatory is too weak(< 25 l/h), the body switch falls upwards and the dosing is switched-off. The failure **PT. FEHL.** ▶ is shown on the display.



5. Dosing technique

Attention! Please consider the safety regulations for the use of chemicals in terms of your health!

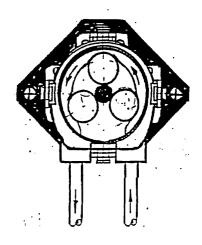
5.1 Dosing pump

For the dosing of the chemical, a hose dosing pump is built up. This dosing pump works according to the displacement body principle:

Rotary rolls are pressing the hose against an housing wall while the fluid in the hose is pressed out in front of the rolls and pulled behind the rolls at the same time.

Because of the simple operating mode, the pumps are working really reliable, they also could draw through bubbles into the suction line. On the other hand, they are very silent which could be an advantage in the private sector.

The dosing pump is mounted ready for operation, only the dosing cassette has to be plugged on the centerline.



5.2 Suction tube

To suction the chemical, a suction set with a level switch is installed. If the container is empty dosed, the dosing pump is shut down; the failure **PT. FEHL.** Ψ is shown on the display.

Please consider the legal regulations for the mounting of the chemicals e.g. water supply law

This law regulates the collecting trays with at least the volume of the chemical canisters.

6. Maintenance

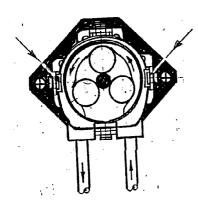
6.1 Cleaning of the pH electrode

- Close the measuring cell inflow and flow, Disconnect the electrode connector by an anti rotation from the pH electrode, screw out the electrode from the measuring cell
- Screw the electrode connector on the electrode
- Roughly clean the electrode pole with watery, softly paper.

Attention: Do not touch the bell diaphragm or the diaphragm range!

- Turn the electrodes 1-2 minutes into the cleaning dissolution
- Properly washing-up the electrode with water
- Set the electrode again and reintegrate it

6.2 Maintenance of the housing pump



Please check monthly if the dosing hoses on the connectors are wet, this means leaky. If yes, please change immediately the dosing cassette and check the dosing valve

Change the dosing cassette once a year in either case.

In order to exchange, pull the pump hoses from the hose clips, grab the cassette on the offset clamp levers, compress them and pull off the cassette. Grab the new cassette like the old one and move it on to the motor shaft until the cassette catches.

Move the pump hoses on to the hose clips.

Please do not mix up siphon pipe and pressure hose

Fix the dosing hoses of the cassette with cable connectors.

6.3 Maintenance of the dosing valve

A maintenance set with o-rings, sealing, spring element etc. is available

7. Shut-down and hibernation

If the device should be shut down for a longer time, we recommend you to wash the suction fittings, the dosing cassette and the dosing valve. Afterwards, the dosing cassette should be pulled off from the dosing pumps.

At an hibernation in frost endangered areas, all water-bearing parts like hoses, measuring water and dosing lines as well as the measuring cell have to be completely emptied.

The pH electrode is not frost endangered. Screw out the pH electrode from the measuring cell and clip on the protection cap which is filled with a little bit electrolyte.

In order to avoid corrosion caused by condensation humidity, the device should be connected to an outlet with continuous rating during the hibernation

8. Spare parts list

Article N°.	Description
Dosiertechnik	
10039	dosing head SR10 shaft 3mm, white rolls
12500	motor for dosing pump Poolklar, 3mm shaft (white rolls) 24VDC
16662	maintenance kit for injection valve 3/8" - 1KFa
16664	dosing valve 3/8" - 1KFa red for acid
12473	suction lance d16/500 NF red mark
Flow rate fitting filter group	
12023	measuring water ball valve PVC 1/4"
	with hose connection 6x1
13034	probe water take off valve
12548	filter 300µm 1/4" for auto controllers complete
10482	filter element 300µm VA
10480	filter cup for fine filter 300µm 1/4"-1/2"
10481	filter 300µm 1/4"-1/2" seal for cap
11978	switch body d11 for flow monitoring
12010	flow switch d8 1m for PR1-2S and POOLKLAR
Electrodes	
10933	pH-electrode 55mm gelous elektrolyte
12006	electrode cable pH with screw-socket head
10383	buffer solution pH 4,00 in 50 ml PE-bottle
10384	buffer solution pH 7,00 in 50 ml PE-bottle
11962	electrode cleaner 50 ml
11963	destillated water 500 ml to clean the electrodes