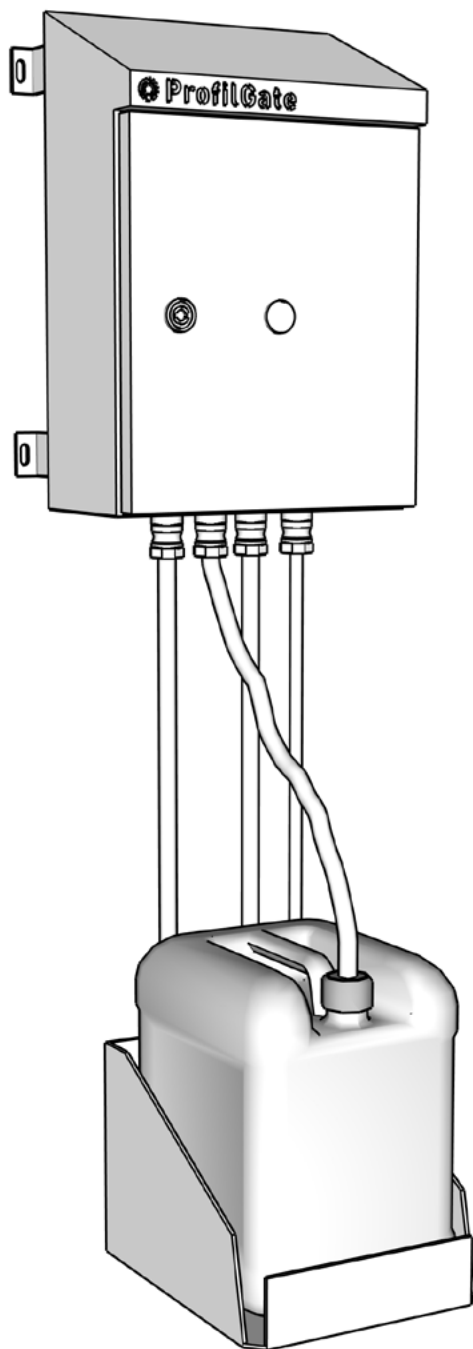


ProfilGate® aqua dosing station

Operating manual



General information

The operating instructions contain important information on how to operate the system safely, properly and economically.

The operating instructions must be available to every person authorised to work on the system and must be observed.

The operating instructions are part of the product and must be passed on to the new operator if the system is sold.

Technical data

ProfilGate® aqua dosing station, art. no. 005-9600F

Dimensions (W x H x D mm)	300 x 380/450 x 200
Weight (kg)	9,8
Material	V2A 1.4301
Min./max. water pressure (bar)	2,5 - 6,0
Max. Water temperature (°C)	70
Power connection	230 V AC, 50 Hz
IP protection class	IP 54
Input fuse (A)	2.5 A mt
Mixing ratio via Venturi valve	min. 0.2% / max. 16.0%
Water inlet	1/2"
Filling	1/2"
Power consumption (kW)	0,1

The system is designed for operation in a frost-free environment. It is not suitable for outdoor operation.

Type plate

Please have all the necessary information, such as system type / system number / year of manufacture, etc. ready for a discussion with the service team. You will find the type plate on the housing of the dosing station.

 ProfilGate®	Dosierstation
HEUTE GmbH & Co. KG	Serien-Nr.: 005-9600F.xxx
Höhscheider Weg 37 D-42699 Solingen / Germany	Baujahr: xx/20xx
Fon: +49-212-38031-0	Anschluss: 1 x 230 V L/N/PE
Fax: +49-212-38031-39	Leistung: 0,1 kW
E-Mail: info@profilgate.com	
Internet: www.profilgate.com	

Scope of delivery

- Dosing station with integrated mains cable
- Canister container for 25 litre containers
- Operating instructions

References to copyrights and industrial property

© HEUTE Maschinenfabrik GmbH & Co. KG

These operating instructions and all illustrations contained in them are protected by copyright. Any use outside the limits of copyright law without the prior written consent of the publisher is prohibited and punishable by law. Reprinting for personal use, e.g. for training or operation, is permitted.

Guarantee

The warranty is provided within the framework of the applicable statutory provisions.

Waste disposal

Disposal of packaging

The packaging materials of your new dosing station are environmentally friendly and recyclable. Please help us and dispose of the packaging in an environmentally friendly manner.

Disposal Product

Old appliances that are no longer used are not worthless waste and do not belong in the residual waste. Valuable raw materials can be recovered through environmentally friendly disposal. Please contact the person responsible at your company or local authority for information on current disposal methods.

EU Declaration of Conformity

The object of the declaration described above complies with the relevant EU harmonisation legislation:

2014/35/EU

OJ L 96, 29.3.2014, S. 357-374
Niederspannungsrichtlinie / LVD

2011/65/EU

OJ L 174, 1.7.2011, S. 88-110
RoHS

The following harmonised standards were used as a basis:

2011/65/EU

EN IEC 63000:2018

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

OJ L 155 - 18/05/2020

2014/35/EU

Low-voltage switchgear and controlgear assemblies - Part 3:
Distribution boards intended to be operated by ordinary persons (DBO)
OJ L 250 - 03/08/2020

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For your safety

General information

The system is built in accordance with the state of the art and recognised safety regulations. Nevertheless, its use may pose a risk to operating personnel or third parties or cause damage to the system and other property.

- The system may only be operated by instructed and trained personnel.
- The system must be used as intended.
- The system must be properly maintained and serviced.
- Work on the water supply may only be carried out by qualified personnel from the sanitary sector.
- Only a qualified electrician may open the internal electrical housing to operate the timer.

General safety instructions

- The system may only be operated when assembled and in a safe operating condition.
- Dismantling, decommissioning and/or bridging of guards (covers, protective panelling, etc.) are prohibited during operation.
- Damaged or missing covers must be repaired or replaced immediately.
- The system must be checked at least once per shift for externally recognisable damage and defects.
- Changes in the operating behavior must be reported immediately to the responsible office/person, the system must be shut down and secured against being switched on again.
- Safety devices may only be unlocked again after a fault has been rectified.

Intended use

The system is intended for the automatic filling and sharpening of disinfection basins in hygiene-sensitive areas. The system is intended exclusively for commercial use. The specifications given in the technical data must be complied with. Any other use or use beyond this is considered improper use. This also includes the following points:

- Expansion of the system
- Modification or removal of system components
- Operation with damaged components
- Operation with dismantled protective devices

The manufacturer/supplier is not liable for any resulting damage. The risk is borne solely by the operator.

Non-intended use

An unauthorised use of the system is e.g.:

- Operation in the event of damage or signs of wear
- The installation of spare parts that are not authorised by HEUTE Maschinenfabrik

Liability and warranty

The obligations agreed in the delivery contract, the General Terms and Conditions and the delivery conditions of the plant and the statutory regulations valid at the time of conclusion of the contract shall apply.

Explanations of symbols and warnings

The following signal words and symbols are used for notes:



DANGER – DANGER TO LIFE!

„Danger“ indicates a hazardous situation that leads directly to death or serious injury.



WARNING – SERIOUS INJURIES!

„Warning“ indicates a dangerous situation that could lead to death or serious injury.



CAUTION – RISK OF INJURY!

„Caution“ indicates a potentially dangerous situation that can lead to minor to moderate injury.



ATTENTION – DAMAGE TO PROPERTY!

„Caution“ indicates a situation that can lead to damage to property and the environment.



NOTE

„Note“ indicates instructions for use and useful information.

Product description – General information

The system is delivered to the customer fully assembled by HEUTE Maschinenfabrik or by a transport company authorised by HEUTE Maschinenfabrik. The system is packed in protective outer packaging and may be placed on a pallet.

Check scope of delivery

- Check the delivery for transport damage immediately upon receipt.
- Check delivery for completeness using the delivery note.
- In the event of discrepancies, contact the manufacturer/transporter immediately.

Transport

No special measures need to be taken for transporting the dosing unit.



ATTENTION - DAMAGE TO PROPERTY!

Do not drop or throw the dosing device.

Storage

ATTENTION – DAMAGE TO PROPERTY!

Secure the dosing unit adequately against tipping and falling.

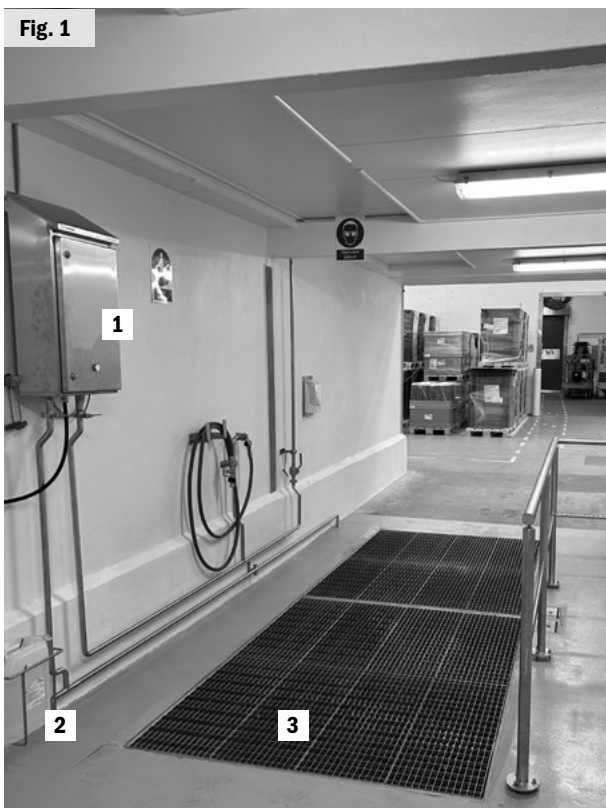
The system must be stored as follows until final assembly:

- in a closed, dry room
- on a stable substrate
- upright and stable
- vibration-free
- at an ambient temperature of +4 °C to +40 °C

System with components

The system enables automatic filling and resharpening of the disinfection tray. The process is monitored via the control unit.

Fig. 1



Dosing station in combination with a ProfilGate® aqua disinfection tray.

1 Dosing station **2** Canister holder **3** Disinfection tray

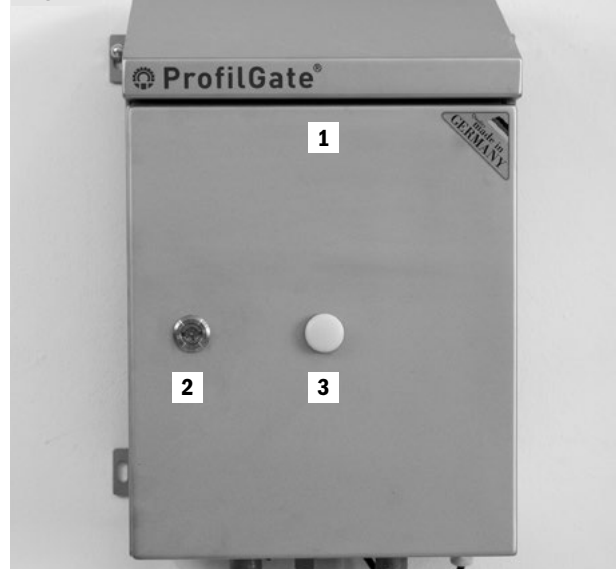
The cleaning agent is extracted from the cleaning agent canister with a suction hose using negative pressure and diluted with water. A holder for the detergent canister, designed for 25 litre containers, is included. The holder can be mounted at a suitable location outside the system

In addition to programmed resharpening, manual operation is also possible using the switch built into the housing (Fig. 3).

Pos auto = Automatic operation via timer

Pos man. = Manual filling

Fig. 2

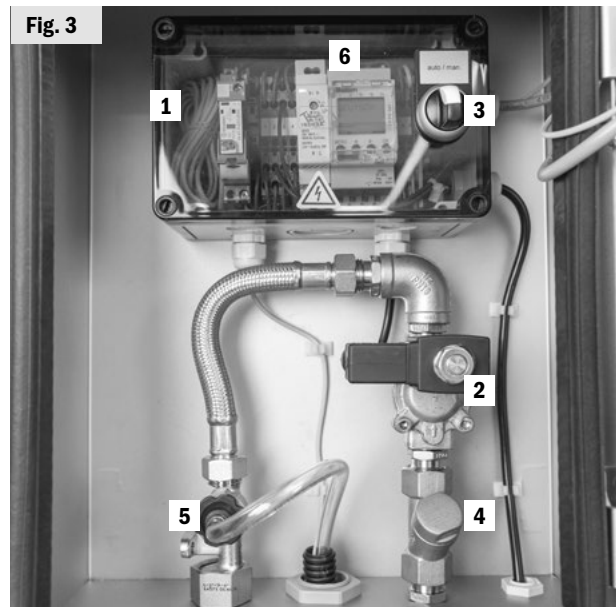


1 Control unit housing **2** Lock **3** LED status light

The housing of the control unit is equipped with a rotary bolt. The rotary bolt can be opened with the enclosed key.

- The LED status light lights up green when the system is operating smoothly in automatic mode.
- The LED status light lights up blue when the system is dosing (solenoid valve is open).
- The LED status light lights up red when the detergent is exhausted (suction lance indicates lack of liquid).

Fig. 3



1 Control box **2** Solenoid valve
3 Manual filling switch **4** Non-return valve
5 Venturi valve **6** Timer

The box contains the control box, the pipework and the dosing unit for water and disinfectant chemicals.

Only a qualified electrician may open the internal electrical housing to operate the timer.

Assembly

It must be ensured that all supply lines are available (see „General information“ – „Technical data“, page 2).

Installation site

Die Wand für die Anlage muss fest, eben und frei von Vibrationen sein. Der Wand muss wie folgt beschaffen sein:

- Easy to clean
- Suitable for wet cleaning
- Solvent resistant
- Resistant to the cleaning agents used

Set up the system

When setting up the system, ensure that the supply and disposal connections remain freely accessible.

The housing of the control unit is equipped with mounting brackets through which the housing must be screwed to the wall.

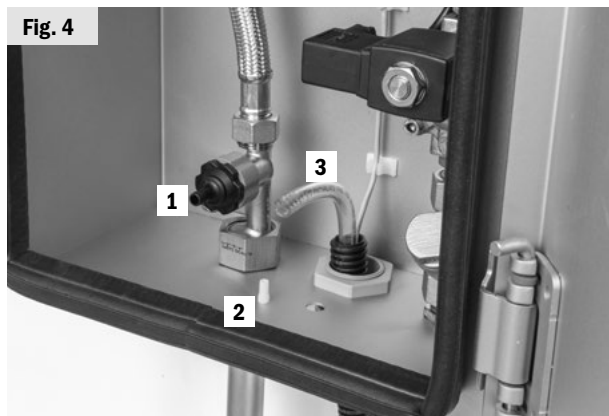
- Drill fixing holes in the wall and insert wall plugs.
- Screw the housing to the wall using suitable screws through the fixing lugs.

When using a canister holder, attach it to the wall in the same way as the dosing station. **Ensure that the canister holder can be easily reached with the permanently mounted suction lance of the dosing station.**

Commissioning

Setting the concentration

- Remove the hose from the venturi valve (see Fig. 1 + 3)
- Insert the correct nozzle into the Venturi valve (see table on page 6).
- Reattach the hose to the venturi valve (see Fig. 5), ensure that the hose is firmly seated.
- Check the concentration as part of commissioning (it may be necessary to change the nozzle if local parameter deviations from the nominal concentration are detected).



- 1** Venturi valve **2** Nozzle for adjusting the concentration
3 Tube Venturi valve

Fig. 5



Venturi valve nozzles / concentrations

Colour	Concentration
“without nozzle”	16,00 %
Grey	15,60 %
Black	14,30 %
Beige	11,70 %
Red	8,60 %
White	6,10 %
Blue	5,00 %
Light brown	3,30 %
Green	2,70 %
Orange	2,00 %
Dark brown	1,50 %
Yellow	1,20 %
Turquoise	0,70 %
Violet	0,50 %
Pink	0,20 %

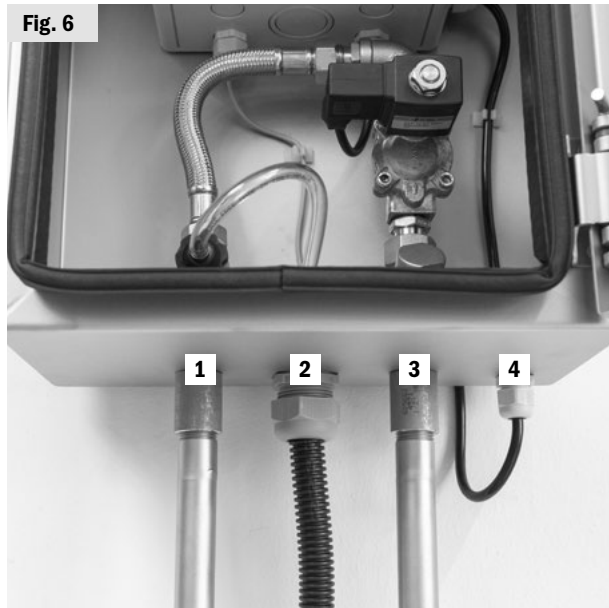


NOTE

The desired concentration in the tank is ensured by selecting the correct nozzle for the Venturi valve.

Electrical connection

The electrical connection of the system is made via a Schuko plug. The cable length is 1.2 m. Insert the earthed plug into the on-site socket.



- 1** Connection to the ProfilGate tray (1/2" Internal thread)
- 2** Suction hose connection Disinfectant
- 3** Cold water connection (1/2" Internal thread)
- 4** Electrical connection

Water connection

Connect the cold water to the screw connection (see Fig. 6, **3**).



CAUTION – RISK OF WATER DAMAGE DUE TO LEAKING WATER!

Work on the water supply may only be carried out by qualified personnel from the sanitary sector.



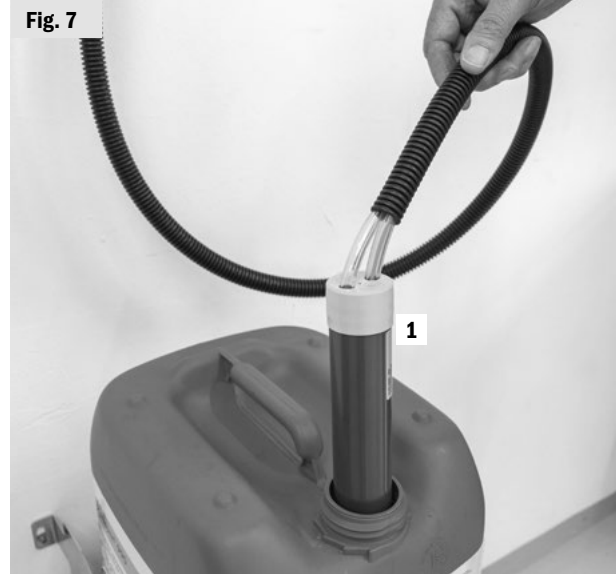
CAUTION – RISK OF WATER DAMAGE DUE TO EXCESSIVE PRESSURE!

If the on-site line pressure is higher than 6 bar, it must be throttled with a pressure relief valve.

Add disinfectant

The canister for the disinfectant must be inserted into the holder mounted in the appropriate place. The agent is removed from the canister using a suction lance. The fill level is monitored and a low level is indicated by the Signal-LED.

Fig. 7



- 1** Suction lance in canister

- Place the canister with disinfectant in the holder (see Fig. 1, **2**).
- Place the suction lance completely into the canister.



CAUTION - RISK OF INJURY!

Skin irritation due to cleaning agents or disinfectants

Observe the manufacturer's safety data sheets



NOTE

HEUTE Maschinenfabrik recommends the local storage of spare canisters of cleaning agent.

Connect disinfection basin

The disinfection basin must be connected to the corresponding connection of the dosing station (see Fig. 6 **1**) and checked for leaks. The connection is made on site.

Check function

Water and electricity are connected.

Check the system for leaks: Turn the switch on the inner electronics housing to man. Allow to run for approx. 15 seconds, then return to the open position auto.


Determine filling time

The filling time must be determined depending on the size of the disinfection tray and the flow rate. To do this, the time until the tray is filled must be measured.



NOTE

It is important that all brush grids are placed in the disinfection tray during this time.

Start the time measurement and press the switch for manual filling (set to Pos man. - see Fig. 3, ) while observing the fill level of the disinfection tray. As soon as the tray is full, stop the time measurement.

Filling time: _____ min.

Model	Approximate filling quantity (litre)
i45 aqua 1,5x1	22
i45 aqua 2x1	29
i45 aqua 2,5x1	36
i45 aqua 3x1	43
i45 aqua 1x2	29
i45 aqua 1,5x2	43
i45 aqua 2x2	57
i45 aqua 2,5x2	71
i45 aqua 3x2	85
i45 aqua 1,5x3	64
i45 aqua 2x3	85
i45 aqua 2,5x3	106
si45 aqua 1,5x1	21,25
si45 aqua 2x1	28,00
si45 aqua 2,5x1	34,75
si45 aqua 3x1	41,50
si45 aqua 1x2	28,00
si45 aqua 1,5x2	41,50
si45 aqua 2x2	55,00
si45 aqua 2,5x2	68,50
si45 aqua 3x2	82,00
si45 aqua 1,5x3	61,75
si45 aqua 2x3	82,00
si45 aqua 2,5x3	102,25
i55 aqua 1,5x1	31,50
i55 aqua 2x1	41,50
i55 aqua 2,5x1	51,50
i55 aqua 3x1	61,50
i55 aqua 1x2	41,50
i55 aqua 1,5x2	61,50
i55 aqua 2x2	81,50
i55 aqua 2,5x2	101,50
i55 aqua 3x2	121,50
i55 aqua 1,5x3	91,50
i55 aqua 2x3	121,50
i55 aqua 2,5x3	151,50

Model	Approximate filling quantity (litre)
si55 aqua 1,5x1	30,75
si55 aqua 2x1	40,5
si55 aqua 2,5x1	50,25
si55 aqua 3x1	60
si55 aqua 1x2	40,5
si55 aqua 1,5x2	60
si55 aqua 2x2	79,5
si55 aqua 2,5x2	99
si55 aqua 3x2	118,5
si55 aqua 1,5x3	89,25
si55 aqua 2x3	118,5
si55 aqua 2,5x3	147,75

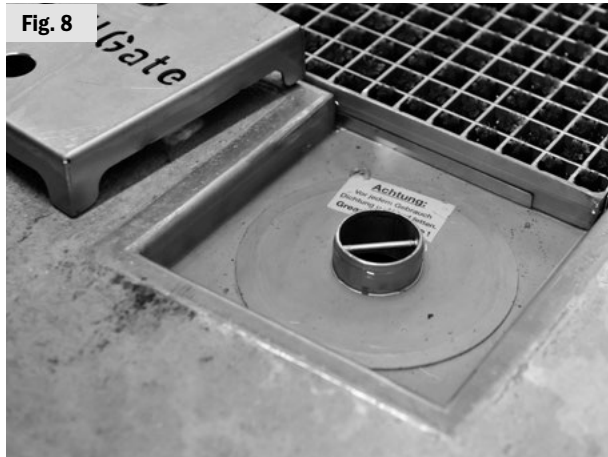


NOTE

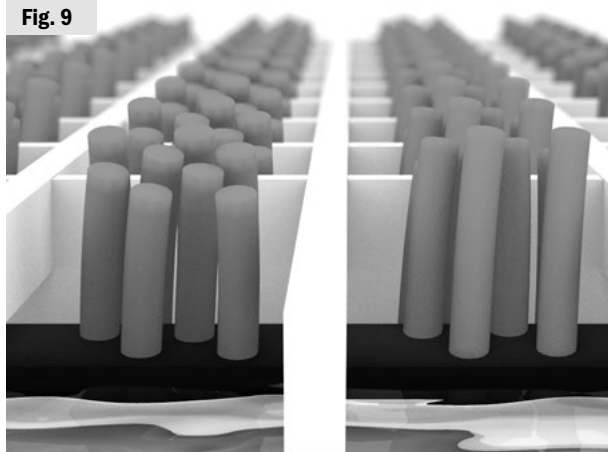
It is possible to fill several trays of the same size using one dosing station.

Setting the fill level with ProfilGate® aqua

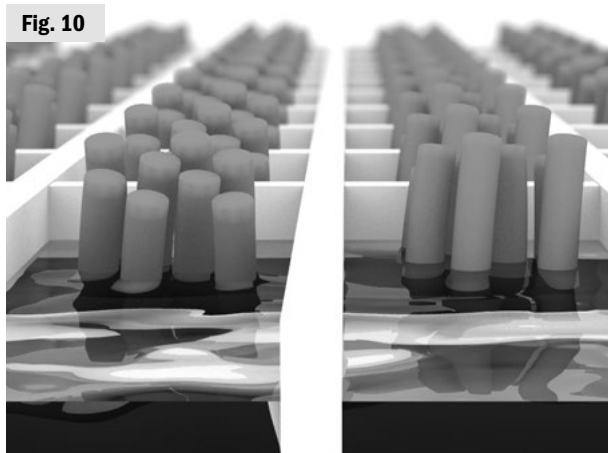
The setting applies to all ProfilGate® aqua models.



The fill level in the tank determines the amount of fluid that is transported to the wheels and tyres via the bristles. A standard fill level is preset at the factory, but this can be individually and precisely readjusted. This is done using the adjustable overflow plug.



When the fill level is low, the “bristle feet” in the center of the brush strip (highest point) only dip into the liquid when driving over it. This ensures wet running surfaces, good disinfection, and low liquid carry- over



When the fill level is high, the “bristle feet” in the center of the brush strip (highest point) are in the water even when not under load. This ensures wetter running surfaces, more intensive disinfection, but also more liquid carry-over.

Fig. 11



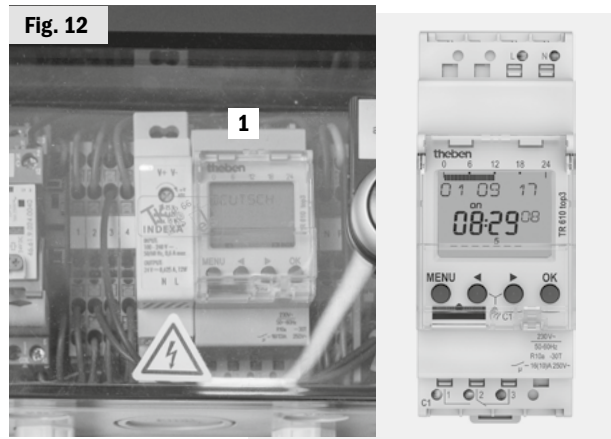
To change the fill level, remove the overflow plug from the drain and twist the protruding pipe against the sealing disc. Turn the pipe anti-clockwise to increase the fill level. Turn the pipe in clockwise to lower the fill level. Test a new setting and make sure that the tray does not overflow.

Timer settings

The times and duration of dosing can be programmed using the attached timer

NOTE

Observe the specified sequence for initial commissioning.



1 Electrical switch box with Theben timer

These operating instructions describe the timer functions required for operation. For additional functions, please refer to the original operating instructions of the timer switch manufacturer, reference enclosed with the station.

Opening the electrical enclosure

The front panel / cover of the electrical housing must be removed. To do this, loosen all 4 screws in the corners of the cover. Carefully move the cover to the side to prevent the cable for the switch in the cover from being torn off.

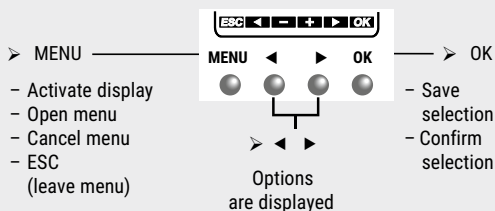
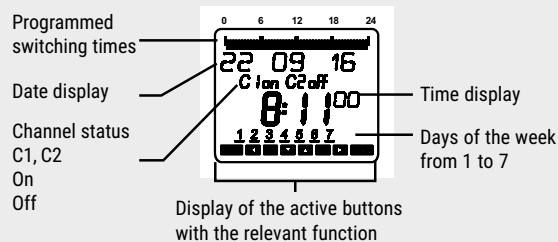
DANGER – DANGER TO LIFE!

Risk of fatal electric shock when working on live components!

Improperly performed work on electrical systems can cause life-threatening injuries.

Only a qualified electrician may open the internal electrical housing to operate the timer.

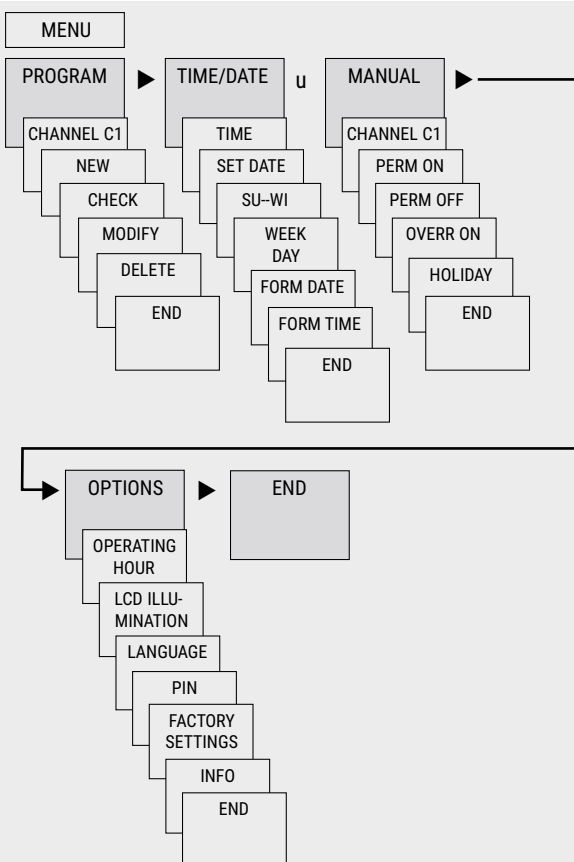
Display and buttons



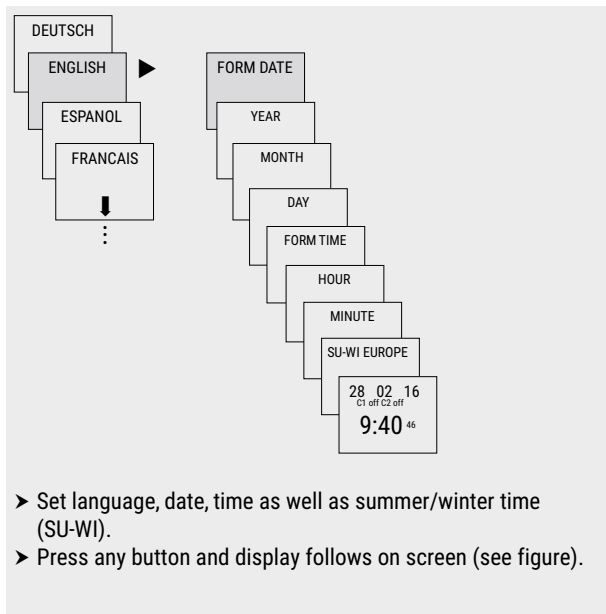
Operating principle

1. Read text line. Text/symbol
2. Make a decision:
 - > YES (confirmation) Press OK
 - > NO (change/switch) Press the left or right arrow symbol

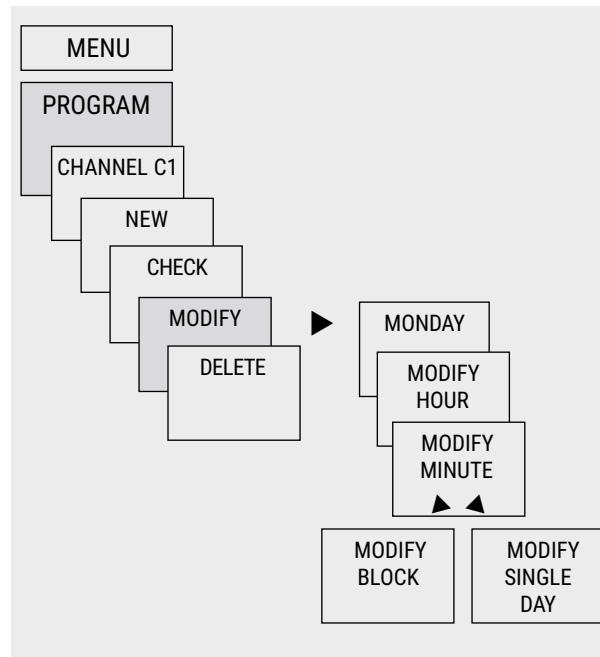
Menu navigation overview



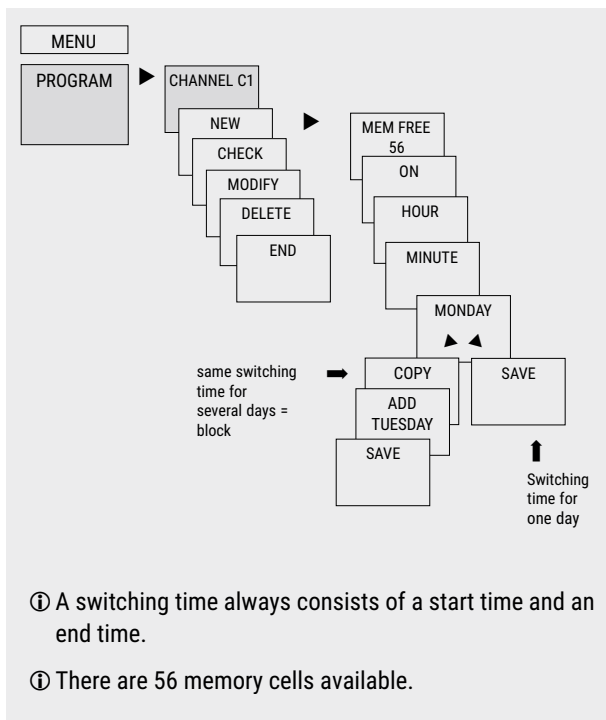
Initial commissioning



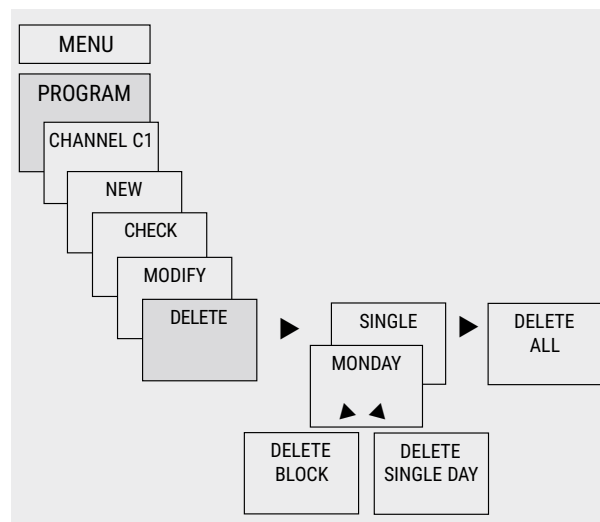
Change switching time



Programming switching time



Delete switching time



Cleaning and maintenance

- Clean the system daily.
- We recommend regularly checking the concentration in the tray (see page 6).
- We recommend using tested and approved disinfectants and cleaning agents when operating and maintaining the dosing station. An overview of these agents can be found in the appendix.



CAUTION!

Environmental pollution due to cleaning agents or disinfectants!

Observe the manufacturer's safety data sheets.

Clean the system

Wipe the outside of the entire system with a damp cloth and cleaning agent.



DANGER – DANGER TO LIFE!

Danger to life due to electric shock when cleaning with a high-pressure cleaner!

Improperly performed cleaning work on electrical systems can cause life-threatening injuries due to water ingress.

Do not use a high-pressure cleaner.

Replacing cleaning agents and disinfectants

- If the cleaning agent and disinfectant are no longer available in sufficient quantities, replace the canister (see chapter „Adding disinfectant“ page 7).
- Check function (see page 7).

Decommission the system



WARNING – SERIOUS INJURIES!

Risk of crushing due to human error

People are in the danger zone of the system during dismantling work.

> Only use instructed and trained personnel.

If the system is to be put back into operation at a later date, cleaning is recommended.

- Clean the system (see page 12).
- Shut off the water supply.
- Dismantle water, suction hose and fabric hose.
- Disconnect the system from the mains.

Repairs

After consultation with HEUTE Maschinenfabrik, repairs to the electrical system may be carried out by qualified specialist personnel. Mechanical repairs may be carried out by qualified specialist personnel. Consultation with HEUTE Maschinenfabrik is recommended.

Contact:

Phone: +49 (0) 212 380 310

E-mail: info@heute-gmbh.de



DANGER - DANGER TO LIFE!

Danger to life due to electric shock when working on live components!

Improperly performed work on electrical systems can cause life-threatening injuries.

- Work on electrical systems may only be carried out by qualified specialist personnel.
- Switch off the system by pulling out the plug before starting work.
- Secure the system against unintentional restarting.
- Put up a warning sign.
- Secure cables against damage.
- Do not put the system back into operation until the protective devices have been installed.

Troubleshooting (qualified personnel)

? System does not start

! No voltage in the supply network (on site)

✓ Check supply network

or

! Schuko plug is not plugged in

✓ Plug in the plug

? No water inflow

! Stopcock (on site) not open

✓ Open stopcock

? Continuous water supply (green LED)

! Solenoid valve defective

✓ Repair by specialised personnel

? Continuous water supply (blue LED)

! System is set to continuous operation (see Fig. 3, **3**) switch is set to man.

✓ Set switch to starting position auto

or

! Timer is set to continuous operation

✓ Programme timer correctly

? Chemistry empty fault (red LED)

! Cleaning agent exhausted

✓ replace cleaning agent

or

! Leakage in the hose of the dosing hose pump

✓ Repair by specialised personnel

? Concentration of the disinfectant mixture is not right

! Incorrect nozzle on venturi valve

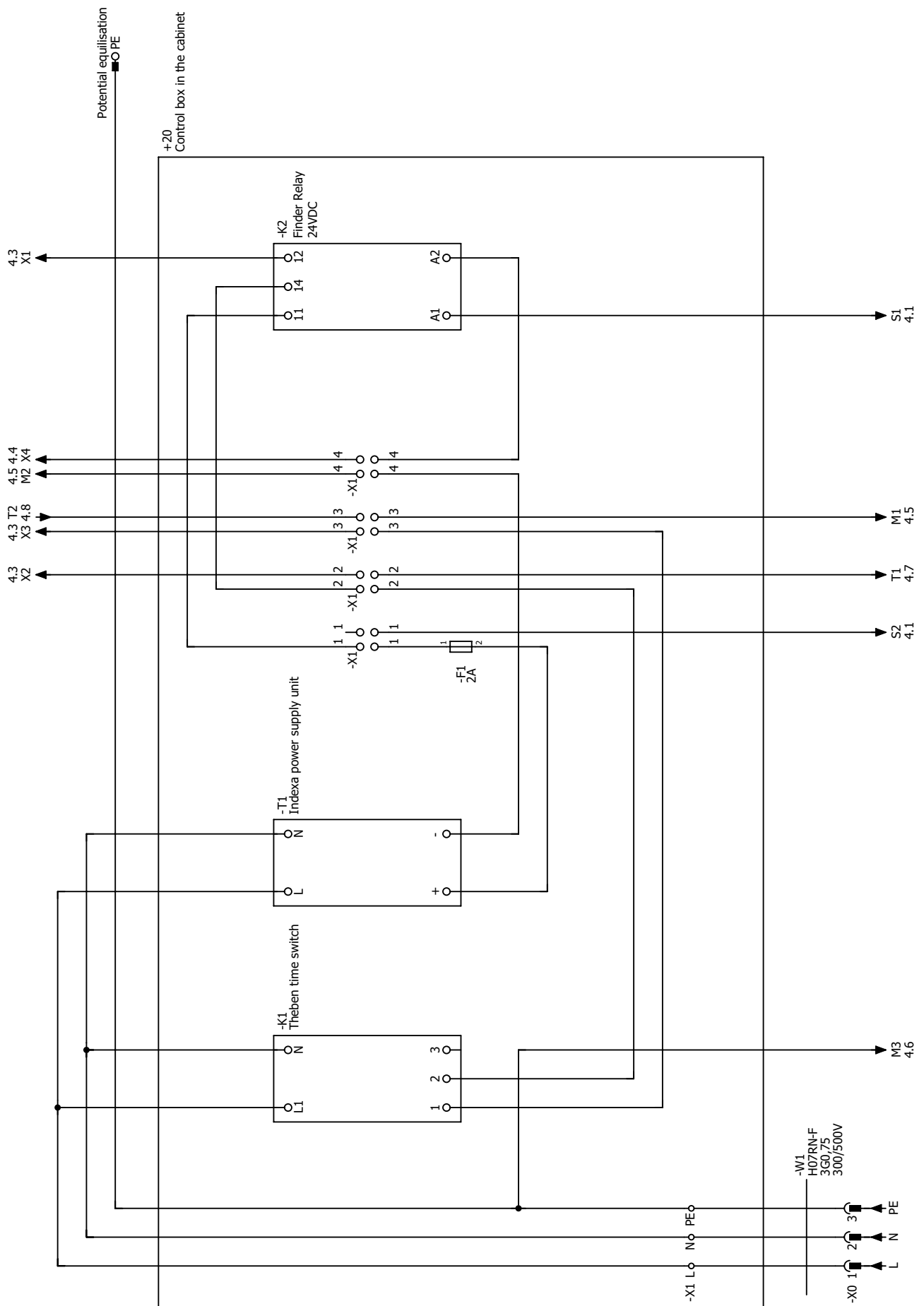
✓ Use of the correct nozzle

Spare parts list

Article	Reference image	Item number
Canister holder	Fig. 1 2	005-9601
Suction lance	Fig. 7 1	005-9603
Venturi valve	Fig. 3 5	005-9604
Solenoid valve	Fig. 3 2	005-9629
Non-return valve	Fig. 3 4	005-9633

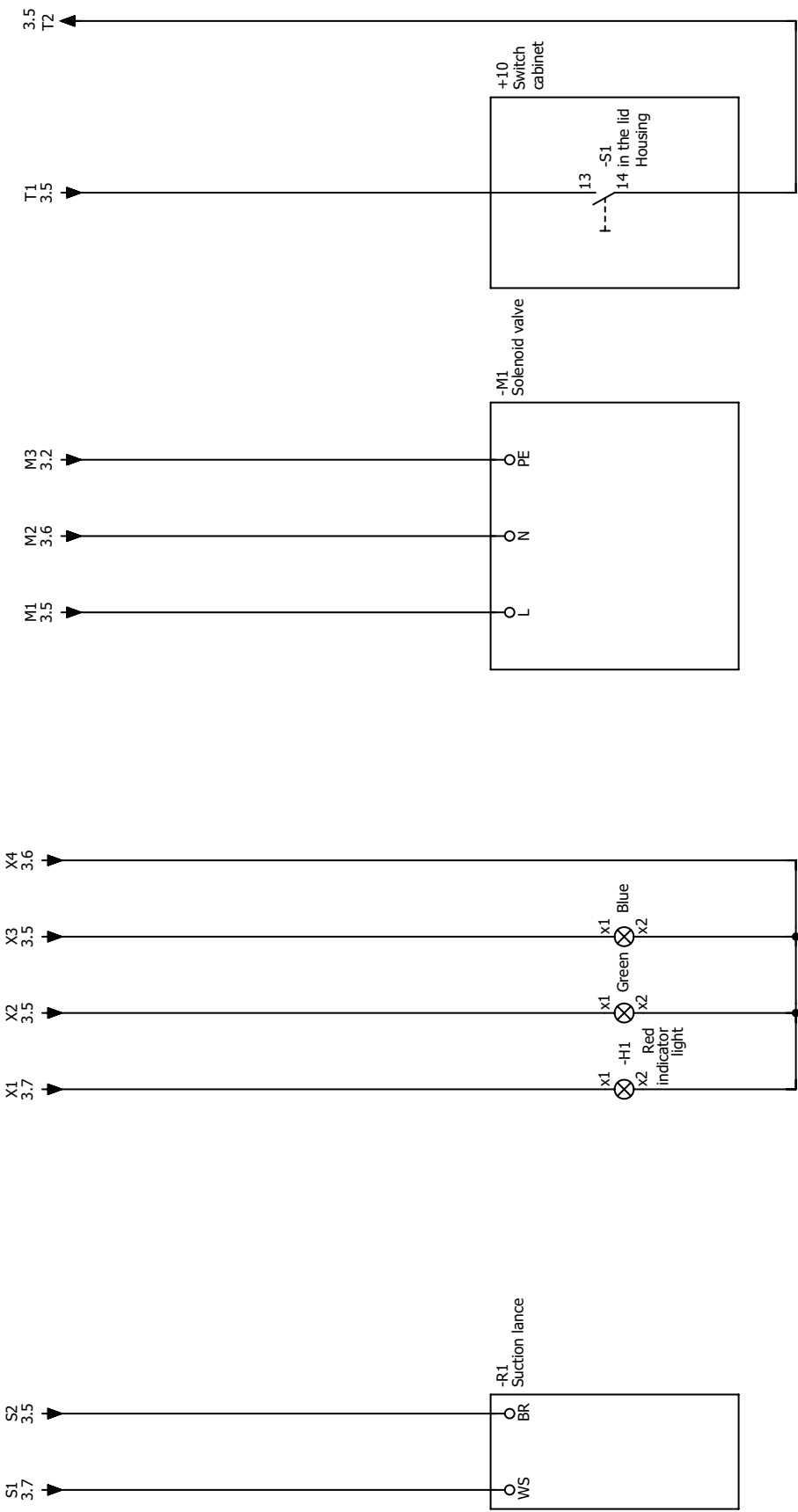
Circuit diagrams

Power supply/terminal box



Circuit diagrams

Components



Appendix:

Tested disinfectants

The manufacturers of the following cleaning and disinfecting agents have carried out material suitability tests and confirmed compatibility with our brush strips. In some cases, the tests were carried out in high doses to simulate compatibility over a long period of time. All disinfectants should be dosed and used according to the manufacturer's recommendations.

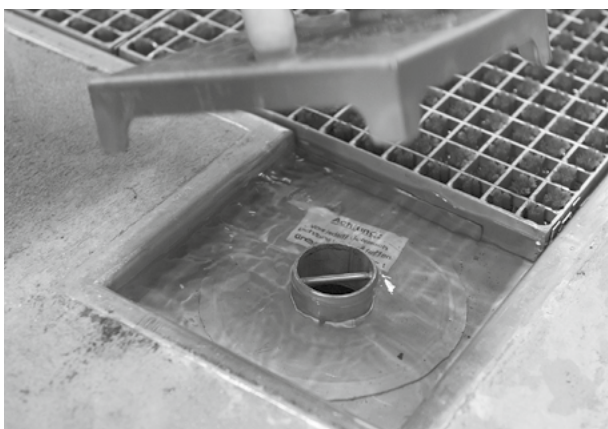
All listed disinfectants must be used in accordance with the manufacturer's dosage and application recommendations.

Long-term use – permanent disinfection













CAUTION!

All listed disinfectants must be used in accordance with the manufacturer's dosage and application recommendations.



Manufacturer	Tested disinfectants	Tested concentration in %	Duration of the test	Approval by manufacturer
	BTS 2001	1,8	90 days	
	Des AM blau			
	Virodex			
	Calgonit DS 683	5	19 days	
	SaniPerfect VS61	2	70 days	
	Suredis VT1			
	neoform K plus	0,4	30 days	
	neoform K dis	0,5		

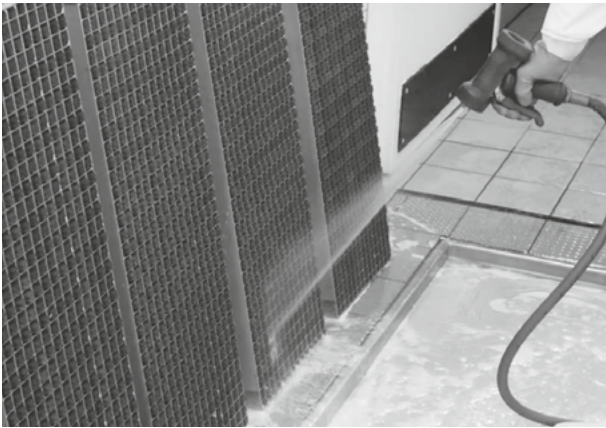
Manufacturer	Tested disinfectants	Tested concentration in %	Duration of the test	Approval by manufacturer
 ECOLAB PROTECTING WHAT'S VITAL™	P3 topax 990	3	28 days	
 kersia INVENTING A FOOD-SAFE WORLD	Deptal AS	2	33 days	
		20		
	1+1 Wofasteril SC super	1	30 days	
 MENNO CHEMIE VERTRIEB GMBH	MENNO® Clean	6 and 8	120 days	
	MENNO® Florades			
	A-QUASAN®			
	Lerasept AC	2	30 days	
	Lerasept SOC	6		
	HT Antisept 14 G forte	2	28 days	

Short-term use – cleaning the brush strips



CAUTION!

The disinfectants listed under 'Short-term use' are not intended for permanent disinfection. They may only be used for short-term cleaning of the brush strips. After use, rinse thoroughly with drinking water to remove any residue.



Manufacturer	Tested disinfectants	Tested concentration in %	Duration of the test	Approval by manufacturer
	ASIRAL SRC	100	10 days	
	Suma San con. D10.1 conc	3	30 days	
	P3 topax 66	5	28 days	
	Lerades Clp 601	2	30 days	
	Lerasept L420	2,5		
	Blaue Sandy	100	4 days	
	Goldene Sandy			

This manual comprises the description of our products, however it does not guarantee certain properties or success in use. Provided nothing to the contrary has been agreed upon, the technical condition at the point of delivery of the product together with the operating manual by HEUTE Maschinenfabrik GmbH & Co. KG is decisive. Design and engineering is subject to continuous further development and improvement. Subject to technical modifications. This manual is protected by copyright. All rights reserved. Copying, reproducing, translating or converting into any electronic medium or machine readable form in whole or in part shall be permitted only with the explicit written approval of HEUTE Maschinenfabrik GmbH & Co. KG.



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