



# Manual B&S DIGI Peristaltic pump

*B&S DIGI 10 / 60 / 200 / ECO*



**The specialist in clean, safe pool water**

SEM Waterbehandeling B.V.  
De Run 4420  
5503 LR Veldhoven  
Netherlands

Telephone number: (040) 257 03 40  
[sem@semwaterbehandeling.nl](mailto:sem@semwaterbehandeling.nl)  
[www.semwaterbehandeling.nl](http://www.semwaterbehandeling.nl)

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## **General information**

SEM Waterbehandeling's B&S DIGI peristaltic pumps are universal metering pumps that have been specially designed to dose chemicals for swimming pool applications. B&S peristaltic pumps have also proven their merit in sectors such as agriculture, hospitality, industry and food.

There are four types of B&S peristaltic pumps: B&S DIGI10 ECO, B&S DIGI 10, B&S DIGI 60 and B&S DIGI 200. The B&S DIGI 10 ECO is a simple pump that cannot be controlled externally. The DIGI 10, DIGI 60 and DIGI 200 have a universal brushless motor control system and can be controlled by means of various external signals. Variable dosing is possible using all four types as they can be used with various tube sizes and because the rotational speed of the motor can be adjusted continuously.

B&S peristaltic pumps can be used either as a stand-alone pump or be connected to a measurement and control unit. The pump has a special control input, which can be configured using a set-up menu.

### **B&S peristaltic pumps are supplied without a flow tube, control cable or any other accessories.**

This manual contains all the information you need to commission and maintain a B&S DIGI10, B&S DIGI 60, B&S DIGI 200 or DIGI 10 ECO from 2025 onwards.

Because the control input of the B&S DIGI 10, 60 and 200 pump can be set to different control signals and various parameters (tube size, speed, etc.) are variable, you can determine the ideal control of the pump in your situation yourself.

### **Limited warranty**

This documentation has been provided by SEM Waterbehandeling B.V. SEM Waterbehandeling B.V. accepts no liability whatsoever for any damage resulting directly or indirectly from the use of this documentation. No guarantee is given with regards to the suitability of these products for any special applications or parameter settings. SEM Waterbehandeling B.V. will only replace parts or documentation, and only if malfunctions are not due to improper use.

### **Declaration of CE conformity**

If this peristaltic pump is used as a stand-alone pump, the Machinery Directive 89/392/EEC EN60204-1 for industrial machinery and EN 55011, class A apply.

The peristaltic pump complies with the Low Voltage Directive EN60950 and the Electromagnetic Compatibility Directives EN50081-1, EN50082-1, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN60000-4-4, EN61000-4-5, EN61000-4-11 and ENV50204.

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## 1. Introduction

The peristaltic pump works by creating peristaltic movement in a tube. This movement propels liquid through the tube. When the tube is empty, liquids are sucked in through the creation of negative pressure in the tube.

### Properties of the peristaltic pump:

- It is self-priming and can run dry without any damage to the pump
- It is auto-locking to prevent fluids from flowing back
- It is protected from fluids by isolating them in the flow tube
- It has no valves, gaskets or stops that can fail or cause blockages
- It is easy to maintain and service. Instead of disassembling, cleaning, replacing parts and adjusting the pump, as would be necessary for other metering pumps, all it requires is the replacement of a small piece of flow tube, saving time, effort and money!
- The adjustable rotational speed and compatibility with three tube sizes give each B&S peristaltic pump a wide feed rate range:

Pump type	1,6mm tube	2.4 mm tube	3.2 mm tube	4.8 mm tube
B&S DIGI 10 ECO	8-250 ml/uur	17-510 ml/uur	30-900 ml/uur	65-1900 ml/uur
B&S DIGI 10	8-250 ml/uur	17-510 ml/uur	30-900 ml/uur	65-1900 ml/uur
B&S DIGI 60	30-1000 ml/uur	65-2150 ml/uur	115-3900 ml/uur	240-8000 ml/uur
B&S DIGI 200	225-3600 ml/uur	475-7300 ml/uur	840-1300 ml/uur	3800-27000 ml/uur

- The above capacities are measured with water and unpressurised outlet at approximately 20 °C. Type of injection valve, system pressure and pipework can affect the capacity of the pump.
- It has a minimum pump pressure of 2 bar (max. 4 bar)
- The universal motor control makes it possible to control the B&S DIGI peristaltic pump with any measurement and control unit.



## 2. Installation

The following paragraphs describe the construction and installation of the B&S DIGI Peristaltic Pump.

### 2.1 Wall mounting

The B&S DIGI Peristaltic Pump is delivered fully assembled with pump head. The installation should be carried out according to the (wall) installation example below.



\* peristaltic pump is supplied without flow tube, control cable, wall plate, couplings, transport tube, foot weight and injection valve.

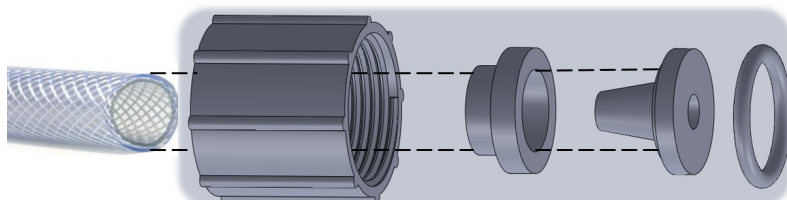
For a schematic layout overview, see Appendix A.



1. Remove the B&S DIGI Peristaltic Pump from the box. Check the pump for (transport) damage.
2. We recommend mounting the B&S DIGI Peristaltic Pump on a specially designed wall support (see installation example). The PVC wall support with drip tray and removable plate and overflow connection is extremely suitable for the B&S DIGI Peristaltic Pump. There is space under the removable plate for the marprene tube, tube couplings and reinforced transport tube. These tubes can be safely placed in this space. If a leak occurs, this can be returned to the dosing container or jerry can via the overflow connection. Attach the wall plate to the wall and place the Peristaltic Pump on the support

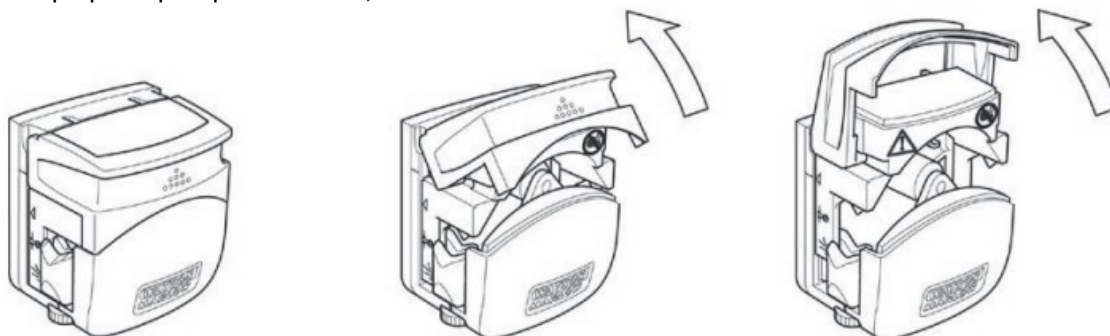
## 2.2 Installing the marprene tube

1. Put the reinforced transport tube into the wall support for both suction and pressure tube. (see setup example).
2. Connect the transport tube to the marprene flow tube. Make sure that this tube is placed under the removable tray.

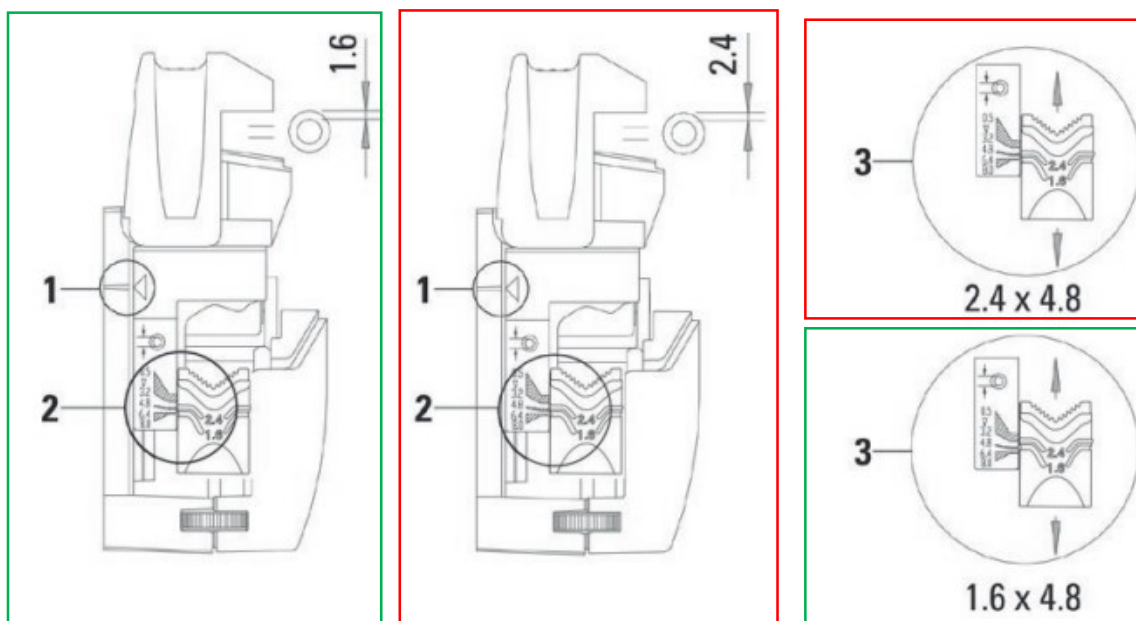


## 2.3 Adjusting the pump head

1. Flip up the pump head cover;



2. Adjust the tube clamp on the suction side to the correct tube diameter so that the tube is not pulled into the pump head or clamped shut. This is done with the white adjustment wheel. A scale is made on the head with the inner diameter of the tube on it. Make sure that the line on the tube clamp corresponds with the scale on the head. The cover of the pump head must be fully opened. The tube clamp on the pressure side must be fully open. (fig. 1.)



**NOTE:** The pump head is suitable for 2 different wall thicknesses of tube. The DIGI Peristaltic Pump is only suitable for 1.6mm wall thickness tube. (OUTLINED IN GREEN)



3. Now place the tube between the rollers and the upper part of the pump head (fig.2), pull the tube slightly and close the pump head so that the rollers press the tube firmly. Make sure that the flow tube is not placed too loosely or with loops in the pump head and that it falls into the tube clamps in the right way. If the flow tube has too much space, it will lie in a loop in the pump head, which shortens the lifespan and no pressure is built up on the discharge side.
4. Close the lid and make sure the tube is in the pump head without loops. (fig.3.);
5. The pump is ready for use (fig. 4.)

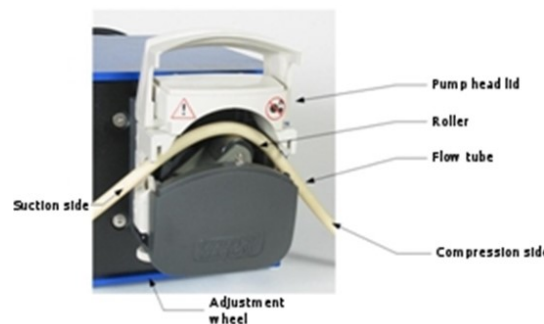
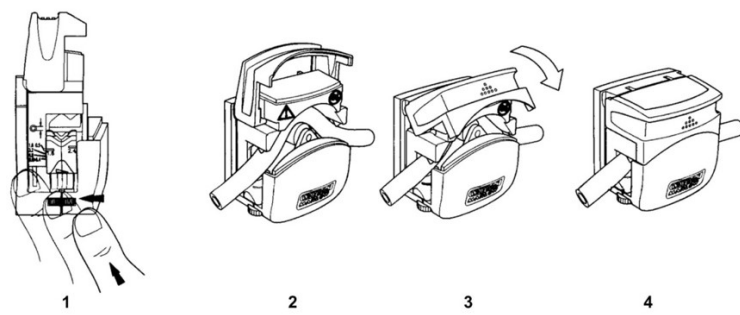


Figure 1

• **Please note:** Marprene tube has the property of increasing in length under mechanical stress in the first half hour. For the longest possible service life, it is therefore recommended to tighten the tube slightly in the pump head after approximately 30 minutes of operation. Do this by gently pulling the tube on the pressure side of the pump. We advise to move the tube frequently, preferably to the suction side. (see page 13 for maintenance timer)



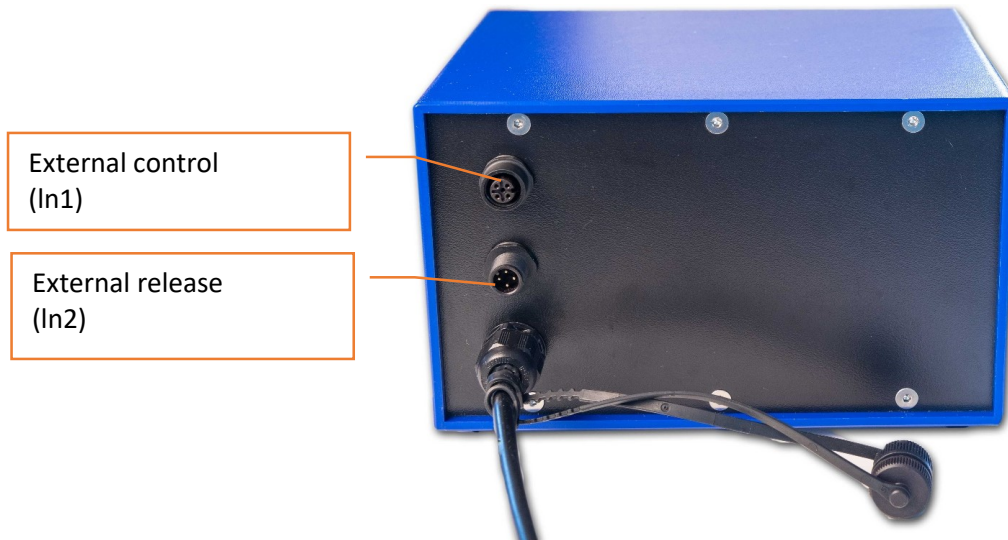
**Observe safety precautions when working with chemicals. Wear gloves, safety glasses etc.**




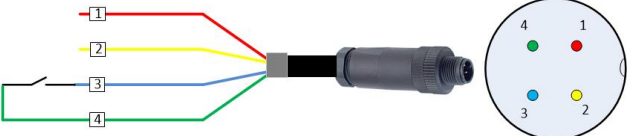
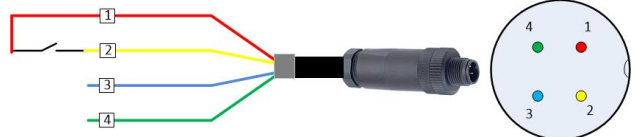
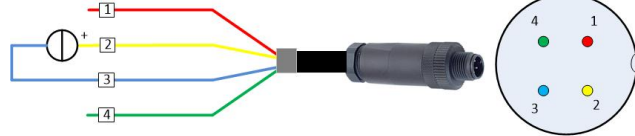


## 2.4 Installing the control cables

1. Install the external control cable to allow the pump to communicate with a measuring and control unit.
2. Place the cable for external release and/or tank empty signal to block and/or release the pump. This cable is also necessary for the connection to a tank empty signal. (float switch in the tank)


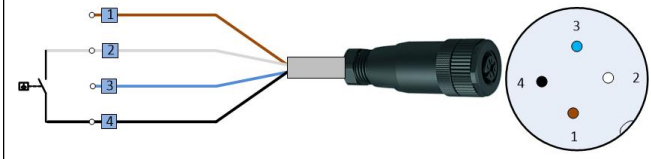
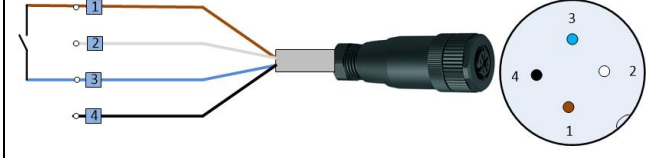


### 2.4.1. Electrical connection diagram external control

	
<ul style="list-style-type: none"> <li>• Pulse control by means of potential-free dosing contact</li> <li>• Batch dosing.</li> <li>• Water meter</li> </ul>	 <p>Control signal between blue and green</p>
<ul style="list-style-type: none"> <li>• Proportional control</li> </ul>	 <p>Control signal between red and yellow</p>
<ul style="list-style-type: none"> <li>• Control 0-10V</li> <li>• Control 0-20 mA</li> </ul>	 <p>Control signal between yellow and blue</p>

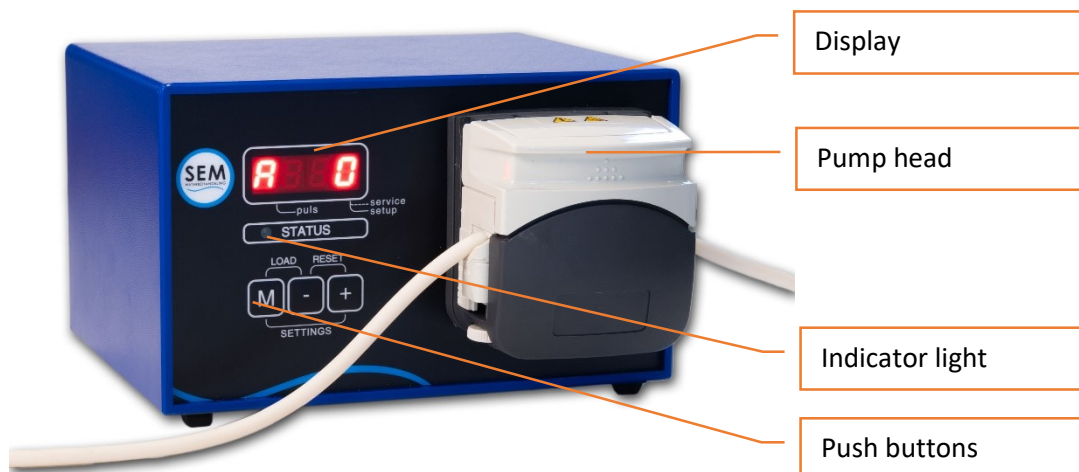


## 2.4.2. Electrical connection diagram external release / tank empty notification

	
<ul style="list-style-type: none"> <li>External release</li> </ul>	 <p><i>Control signal between black and white</i></p>
<ul style="list-style-type: none"> <li>Tank empty notification</li> </ul>	 <p><i>Control signal between blue and brown</i></p>

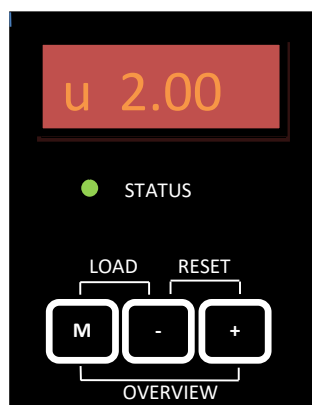


### 3. Start-up



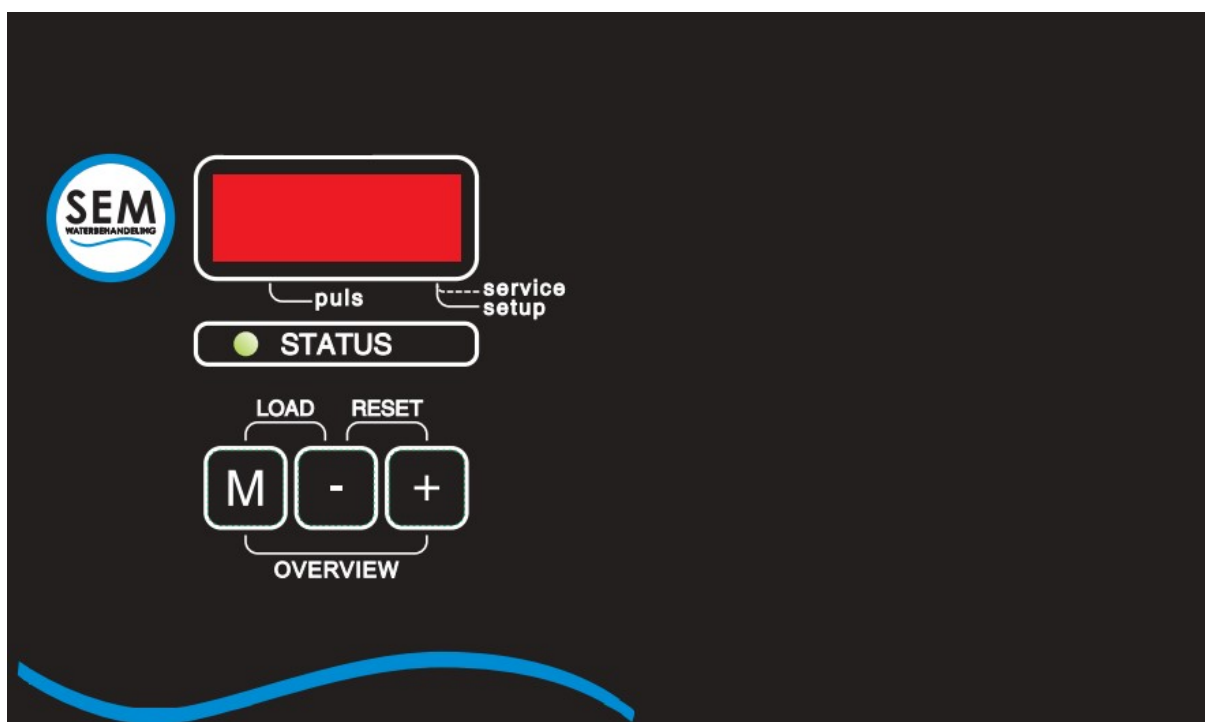
The following actions must be performed to put the B&S DIGI into operation:

1. Make sure the peristaltic pump is clean before putting it into operation. Dust, drilling dust etc. in the pump head can lead to malfunctions. If necessary, rinse the transport tubes before first use
2. Place the foot weight/suction valve on the suction side in a dosing container or jerry can in the medium to be pumped.
3. Place the injection valve on the pressure side of the piping system.
4. Plug the power cord into a wall outlet.
5. The intro screen will then appear on the display. After switching on the mains voltage, the pump will display the software version on the screen for 3 seconds. The pump always starts in the position in which it was switched off.





## 4. Operation



### 4.1 Navigation

All actions can be performed via the keyboard. You can easily follow the choices through the menu structure on the display. (see chapter 7, Menu structure)

Navigating through the menu structure is done with the 3 keys and combinations of keys. A maximum of four digits are shown on the display. The menus often contain more information or options. To display these, you can browse through the menu with the keys below on the front panel of the peristaltic pump.

Key	Description
[M]	Short press: Switch between AUTO and MANUAL Long press 3 sec.: Activate SETUP and SERVICE menu
[ - ]	Decrease value
[ + ]	Increase value
[ - ] and [ + ]	RESET: Alarms / Emergency stop
[ M ] and [ - ]	LOAD: Fast filling level of transport line
[ M ] and [ + ]	OVERVIEW: Quick view of peristaltic pump settings

#### Indicator light:

The indicator light will be green when the pump is running. In the event of a fault, this light will flash red.

- = green, pump in service
- = red flashing, fault, the fault code on the display indicates the nature of the fault.

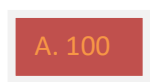


All SEM DIGI peristaltic pumps have a digital display that contains all of the relevant information.





### Standard operation


The display shows the current mode of operation and the pump's rotational speed in %.



A = automatic operation (the rotational speed is determined by an external control signal)



H = manual operation (the rotational speed is determined by pressing the  and  keys)

To switch between automatic and manual mode, briefly press the  key.

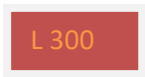
### Emergency stop

If the pump is in manual mode, press the  and  same time to stop the pump immediately.

### Tube insert stand:

This position is ideal for quickly filling the peristaltic pump and transport tube after replacing the

pump tube or during a new installation. By pushing  and  together the pump will run at 100% for 300 seconds. In the display appears:



The 300 seconds will count down to 0 sec. After 300 seconds the pump will return to the last operating mode.




### Maintenance timer expired / pass tube:





SD = pass tube, maintenance interval expired (message only, peristaltic pump remains in operation)







### Notifications and faults:




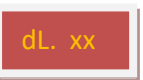
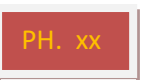

Code	Omschrijving	Uitleg
	Pass tube	Service interval counter has expired (only message, peristaltic pump remains in operation) Timer passes 60 days = DIGI 200 Timer passes 120 days = DIGI 10 / 10E / 60
	ERROR 2	Motor failure, motor overloaded or blocked
	ERROR 1-3-4-5-6-7	Contact SEM Water Treatment

All alarms can be reset by pushing  and  together.

### Overview stand:

This menu displays some settings of the peristaltic pump.


By pushing  and  together an overview of setup settings will be shown on the display. The parameters are shown for 3 seconds at a time. If the overview is shown you can leave this menu by pushing  and  together.


Code	Description	Explanation
	Software version	Softwareversion peristaltic pump
	Pump type	Pump type
	Dosing Size	Size tube in the pumphead
	Dosing Liquid	Dosing medium that is pumped
	Pumphead	Number of pump heads available
	Status	Operating mode for automatic control of dosing pump. The associated parameters of the operating mode are then displayed.


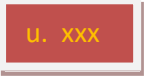




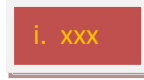
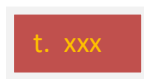
For parameter settings see chapter 6



## 5. Service menu


The service menu is opened by pressing  button >3 seconds . The decimal point on the right of the display will flash to indicate that the service menu is active.


The menu can be scrolled through by briefly pressing  the button. The service menu will close automatically after 10 seconds.


Code	Description	Explanation
	Weeks running	Number of weeks the pump motor has been running
	Hours running	Number of hours the pump motor has been running. Add up B and U to calculate how long the pump has been running (1 week = 168 hours).
	PCB serial number	Serial number of the motor control unit
	Maintenance timer	Number of days the pump has been powered up. After 120 days (3 months), the message "SD" will be displayed, to remind you to reposition the tube. (see page 13)  Press  and  at the same time to reset the counter each time after repositioning or replacing the pump tube.
	Motor current in mA	Motor current absorbed in mA/10. This value should be multiplied by 10 to read out the motor current in mA. Normally between 0-1000mA. This parameter can be useful for fault diagnosis.
	Temperature	Temperature measured internally in housing



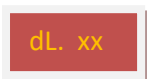




## 6. Set up menu

First the service menu must be opened by pushing  button >3 seconds. The decimal point on the right of the display will flash to indicate that the service menu is active. By immediately pushing

 > 3 seconds the setupmenu is active. The decimal point on the right of the display will light up continuously to indicate that the setup menu is active. The menu can be scrolled through by

pressing the  button. The setup menu will automatically close after 10 seconds.

The menu below can be scrolled through and set:

Code	Description	Explanation	Factory setting
	Dosing Size	Size tube in the pump head, this determines the capacity of the dosing pump -- = no size known (standard setting) 16=1,6mm 24=2,4mm 32=3,2mm 48=4,8mm 64=6,4mm	0
	Dosing Liquid	Dosing medium that is pumped -- = no size known (standard setting) CL= chlorine AC= acid FL= flocculant LO= lye PO= peroxyde Bi= bicarbonate	X
	Status	Operating mode for automatic control of dosing pump <i>See page 8+9 for possibilities</i>	1
	Pump type	Pump type <i>Factory setting can only be changed by SEM Waterbehandeling BV</i>	d.n.a.
	Pump head	Number of pump heads available 1= single pump head 2= double pump head	1
	External release	External release or blocking of the dosing pump	0
	Tank empty notification	Empty notification dosing tank	1





### 6.1. Automatic operation (external control, In1)

The DIGI 10, 60, 200 have 6 pre-programmed operating modes ST 1 to ST 6. In each mode, the control behaviour can still be adjusted to your wishes by changing the associated parameters. If a mode is selected, only the available parameters will be shown in the setup menu, for example, if ST 1 is selected, only parameters **t** and **P** will be shown which can be set. The available operating modes with parameter options are visible in the table on page 8. The external control signal is supplied via the 4-pin plug on the back. The connection data are listed in the table below.

Note: the DIGI 10 ECO has only 1 mode for automatic operation, ST 4 on/off control and is not equipped with a connection for external control

External control (In1)



The following operating modes are possible: (\* = not applicable for B&S DIGI ECO)

mode	description	parameters
St 1	<b>Pulse control by means of a potential-free dosing contact</b> The pump's rotational speed is linearly related to the number of pulses coming in via the control cable. The maximum rotational speed $t$ is reached at maximum pulse frequency $P$ .	$t=0-100\%$ maximum rotational speed (in %) $P=10-600$ pulses/minute  Control signal between blue and green
St 2	<b>Batch dosage.</b> When the pump receives a pulse from a potential-free contact on the control cable, it will run $A$ seconds on adjustable rotational speed $t$ . This mode is ideal when the dosing pump is connected to a pulse water meter. The pump will run for a determined amount of time after each pulse from the water meter.	$t=0-100\%$ maximum rotational speed (in %) $A=1-600$ seconds  Control signal between blue and green
St 3	<b>Control by proportional pulse length</b> As soon as a potential-free make-contact is created on the control cable, the pump will start running with adjustable rotational speed $t$ . As soon as contact is broken, the pump will stop. The pump uses a fixed start-up and run-down time of two seconds.	$t=0-100\%$ maximum rotational speed (in %)  Control signal between red and yellow
St 4	<b>Interval timer</b> No control cable is needed for this mode. The pump starts and stops periodically and both the running time $A$ and the off-time $U$ are adjustable. The rotational speed is set via parameter $t$ .	$t=0-100\%$ maximum rotational speed (in %) $A=1-600$ seconds $U=1-600$ seconds No control signal
St 5	<b>0-20mA</b> The pump's rotational speed is determined by the incoming current (mA) signal on the control cable. 0 mA=0%, 20 mA=100%. No adjustable parameters.	 Control signal between yellow and blue
St 6	<b>0-10V</b> The pump's rotational speed is determined by the voltage. 0 V=0%, 10 V=100%. The maximum rotational speed can be achieved with less control voltage by adjusting the $SP$ parameter. The value of the $SP$ parameter determines at which voltage the pump will run at maximum speed (for example, $SP=5$ means the pump will run at 100% when receiving 5 V).	$SP=1-10$ V (value at which the pump runs at 100%)  Control signal between yellow and blue



The overview below shows the available parameters and the setting range with the standard factory setting for the operating modes:

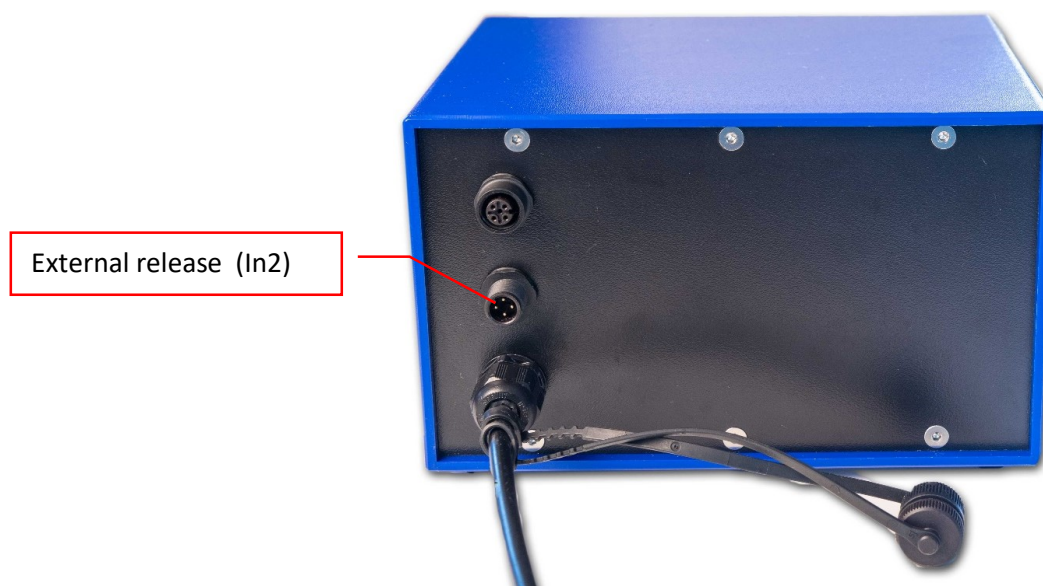
code	description	range of settings	factory setting
St*	1=pulse controlled 2=water meter (starts after pulse) 3=proportional pulse length on/off 4=internal on/off time control 5=current controlled 6=voltage controlled	St=1,2,3,4,5,6	1
t	<b>Maximum rotational speed</b> in automatic mode	0-100%	100
A	<b>On time</b> , of the on/off interval timer (setting 4): running time for the pump. For ST 4 (batch dosage) this is the time it takes to turn the pump on after a pulse on the control input.	1-300 seconds (5 seconds)	5
U	<b>Off time</b> of the on/off interval timer (setting 4): stopping time for the pump.	1-300 seconds (5 seconds)	5
SP*	The value of the <b>SP</b> parameter determines the voltage at which the pump will run at maximum speed (for example, <b>SP</b> =5 means the pump will run at 100% when receiving 5 V).	1-10 Volt (10 Volt)	10
P*	The value of the <b>P</b> parameter determines the pulse frequency at which the pump will run at its maximum speed. For P=100, the pump will run at the maximum rotational speed that has been set ( <b>t</b> ) when 100 pulses per minute are used.	15-600 pulses/minute (100 pulses/minute)	100



## 6.2 Externe vrijgave (In2)

The DIGI 10, 60, 200 have the possibility for an external release or tank empty message. Both possibilities have a different functionality which is described below.

\* Note: The DIGI 10 ECO is not equipped with a connection for external release or tank emptying.

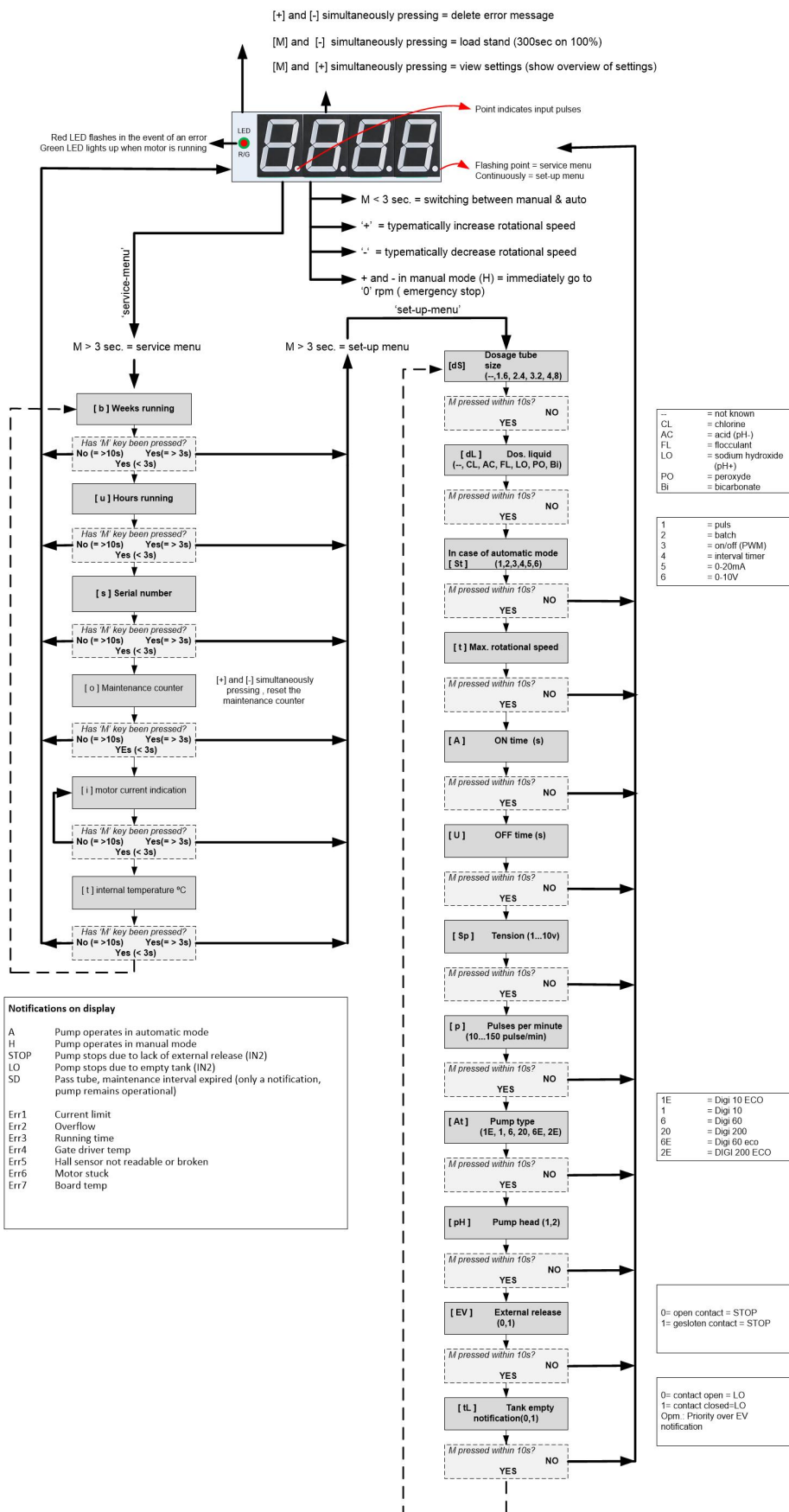


Mode	Description	Parameters	(factory setting)
<div style="border: 1px solid black; padding: 2px; display: inline-block;">EU.xx</div>	<b>External release</b> <b>0</b> = low active (default setting), with an open input the pump is released. If the input is activated (contact closed) the pump stops and <b>"STOP"</b> appears on the display. <b>1</b> = high active, with open input the pump is blocked and the display shows <b>"STOP"</b> , when the input is activated (contact closed) the pump is released (no specific message text on the display)	<p>Control signal between black and white</p>	0
<div style="border: 1px solid black; padding: 2px; display: inline-block;">tL.xx</div>	<b>Tank empty notification</b> <b>0</b> = low active, with open input the display shows <b>"LO"</b> <b>1</b> = high active (default setting), with closed input the display shows <b>"LO"</b>	<p>Control signal between bleu and brown</p>	1



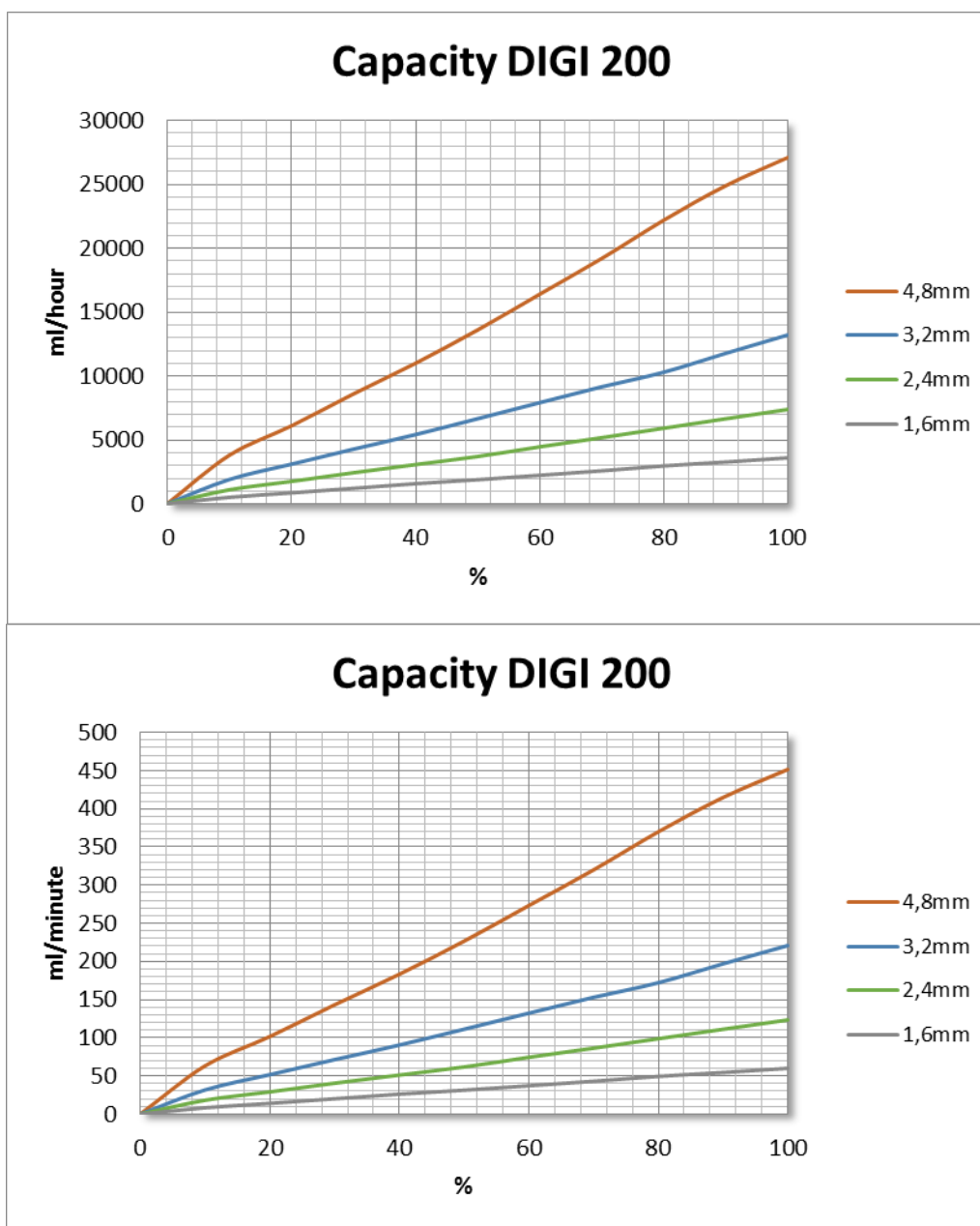
## 7. Schematic overview of the menus

Softwareversion Gen2\_V10



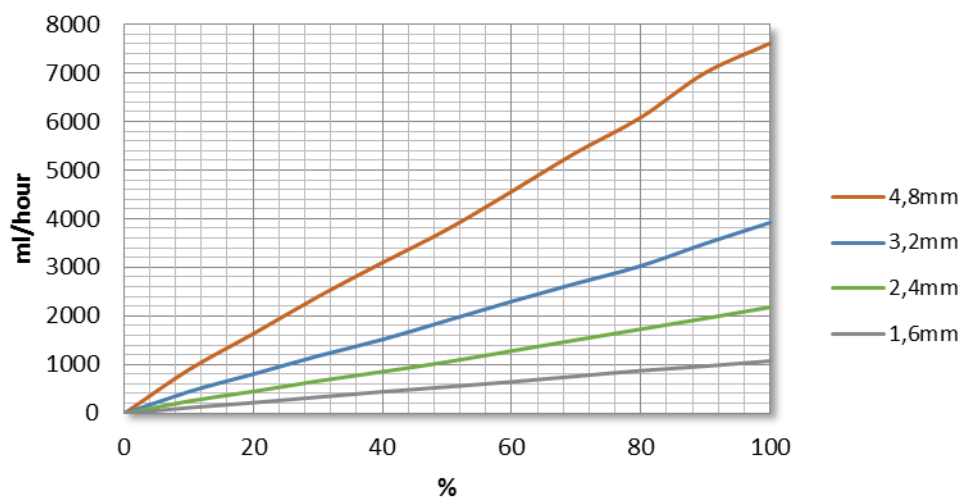


## 8. Capacity graphics

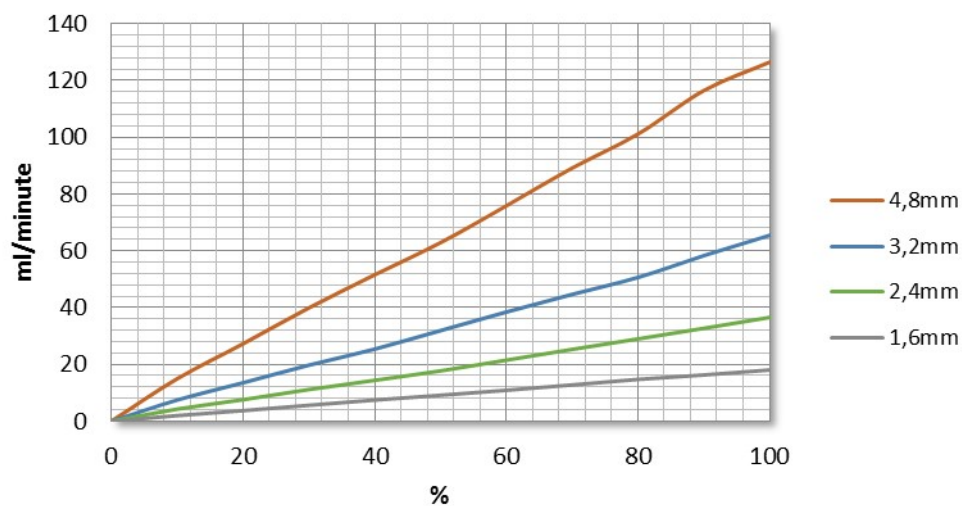




## Capacity DIGI 60



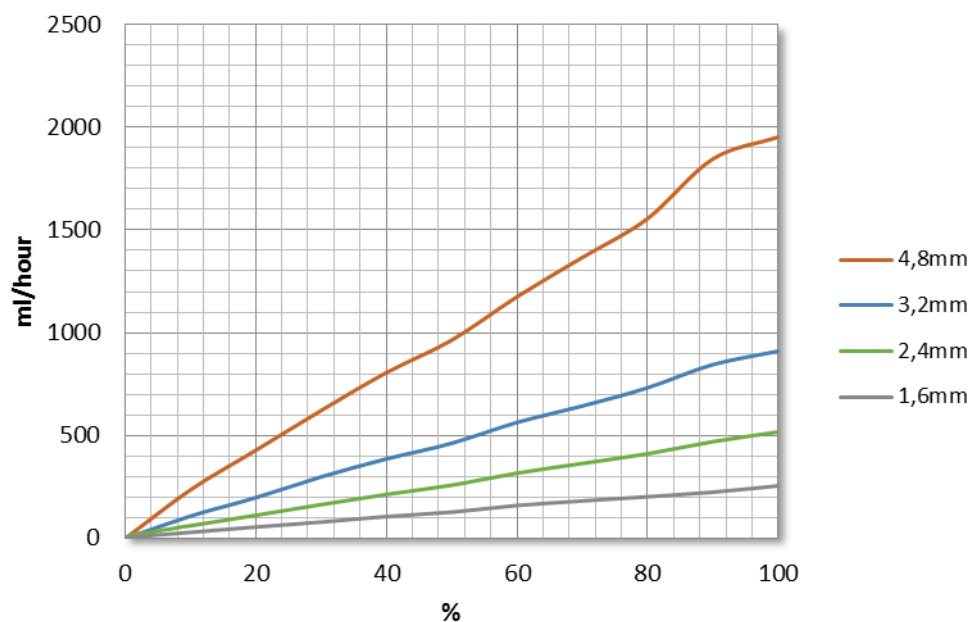
## Capacity DIGI 60



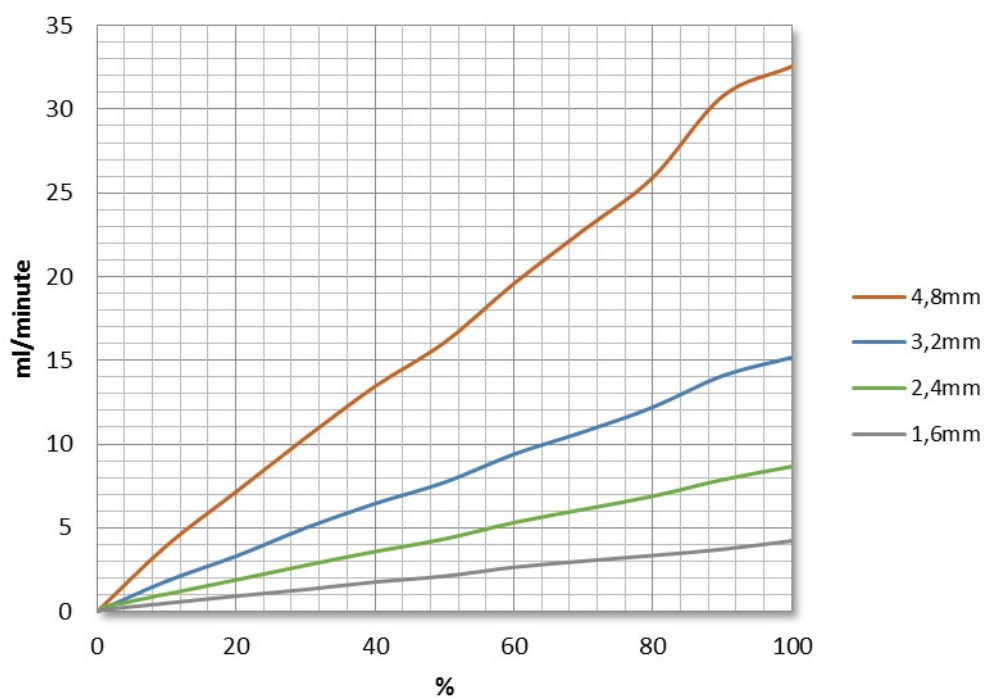




## Capacity DIGI 10 / DIGI 10 ECO



## Capacity DIGI 10 / DIGI 10 ECO







## 9. Maintenance and service

The maintenance schedule below can serve as a guideline and is derived from a swimming pool application. The frequency of some maintenance points depends on the application of the B&S DIGI Tube Pump and the environment in which the device is placed. This may require a different maintenance schedule.

With normal use, the peristaltic pump requires little maintenance. Some points to note:

- The pump's flow tube is essential. The inner diameter of the tube determines the pump capacity (see technical data). The tube is available as standard in 2.4 mm, 3.2 mm and 4.8 mm (see accessories). These sizes will suffice in most applications. In special cases, a 1.6 mm or 6.4 mm tube can be used.
- **The wall thickness is always 1.6 mm.**
- **SEM Waterbehandeling advises to extend the flow tube in good time (see page 13) and to replace it annually.**
- Keep the pump as clean of chemicals as possible. This is only for the safety of the user. The housing
- is IP54 sealed and resistant to chemicals.
- The motor of the B&S DIGI peristaltic pump requires no maintenance.
- The bearings of the pump head and motor are encapsulated and do not require lubrication



***When installing the flow tube, the pump must be switched off!***

Frequency	Description check point
Daily	<ul style="list-style-type: none"> <li>• Check display</li> <li>• Faults on display</li> </ul>
Weekly	<ul style="list-style-type: none"> <li>• Check tube</li> <li>• Check foot weight</li> <li>• Check injection valve</li> <li>• Check transport tube and tube couplings</li> </ul>
Monthly	<ul style="list-style-type: none"> <li>• Check tube</li> <li>• Pass tube (see page 13)</li> </ul>
Yearly	<ul style="list-style-type: none"> <li>• Check pump head pressure</li> <li>• Check pump head</li> <li>• Replace tube</li> <li>• Replace o-rings and gaskets</li> </ul>
Remark	Only fit original replacement parts. See chapter spare parts for a complete overview of all parts of the tube pump



## 10. Malfunctions

If the pump is not functioning or is not functioning properly, please refer to the following table in order to determine whether repair is necessary:

Malfunction	Cause and solution
The pump is running, but is not displacing any liquid	<ul style="list-style-type: none"> <li>The tank is empty.</li> <li>The suction mechanism is higher than the surface of the liquid.</li> <li>The tube is not positioned correctly in the pump head or is leaking.</li> <li>The tube or the injector is blocked.</li> <li>Sodium hypochlorite can gasify when still. In long pressure pipes (&gt;50 m) this process can create gas bubbles that obstruct circulation. These gas bubbles are compressed by the pump pressure, but cannot be pressed through the tube.</li> <li>The pump head's flow tube has worn and become flat. Reposition the tube approximately 20 cm (8 inches) towards the suction side of the pump.</li> <li>There is a leak in the suction side of the pump. Check the pump tube and the couplings.</li> </ul>
The message Error 2 appears in the LED display	<p>There is a motor malfunction, the motor is overloaded or blocked:</p> <ul style="list-style-type: none"> <li>Remove the blockage from the pump head (defective tube).</li> <li>If no cause for the motor blockage can be found, write down the pump's serial number, which is located on the back, and then contact SEM Waterbehandeling.</li> </ul>
The message SD appears in the LED display	<p>The service interval counter has exceeded 120 days:</p> <ul style="list-style-type: none"> <li>Reposition the flow tube approximately 20 cm (8 inches) towards the suction side of the pump.</li> <li>Turn off the 'SD' message by simultaneously pressing the + and - keys. It is also possible to reset the counter earlier using the service menu (see chapter 3 of this manual).</li> </ul>
<b>When the pump is not controlled by means of an external control signal:</b>	
Pump is not running, LED display is not functioning	<p>There is no power or the internal fuse (100 mA slow-blow) is defective.</p> <ul style="list-style-type: none"> <li>Check the mains voltage using a voltage tester or multimeter.</li> <li>Replace the fuse.</li> </ul>
Pump is not running, LED display is functioning	<p>There is power.</p> <ul style="list-style-type: none"> <li>The display is set to <b>(A) Auto</b> instead of <b>(H) manual</b>;</li> <li>The display is set to 0% instead of the desired rotational speed (10%..100%).</li> </ul>
Pump is not running, status indicator is green	<p>The printed circuit board or motor is defective.</p> <ul style="list-style-type: none"> <li>Write down the pump's serial number, located on its back, and then contact SEM Waterbehandeling.</li> </ul>
<b>When the pump is controlled by means of an external control signal:</b>	
Pump is not running, LED display is not functioning	<p>There is no power or the internal fuse (100 mA slow-blow) is defective.</p> <ul style="list-style-type: none"> <li>Check the mains voltage using a voltage tester or multimeter.</li> <li>Replace the fuse.</li> </ul>
Pump is not running, status indicator is red	<p>There is power:</p> <ul style="list-style-type: none"> <li>There is no external control signal.</li> <li>The display is set to 0% instead of the desired rotational speed (10%..100%).</li> </ul>

In the event of any other malfunction, always contact SEM Waterbehandeling's technical service department.



**SEM Waterbehandeling does not handle any equipment soiled with chemicals or toxic substances that may be hazardous to health!**



## 11. Technical specifications

Product code	B&S DIGI 10 E 2502044	B&S DIGI 10 2502013	B&S DIGI 60 2502033	B&S DIGI 200 2502053
Adjustable rotational speed	0,5-14 rpm	0,5-14 rpm	7-60 rpm	13-200 rpm
Capacity 1,6 mm tube (ml/hour)	8-250	8-250	30-1000	225-3600
Capacity 2,4 mm tube (ml/hour)	17-510	17-510	65-2150	475-7300
Capacity 3,2 mm tube (ml/hour)	30-900	30-900	115-3900	840-13000
Capacity 4,8 mm tube (ml/hour)	65-1900	65-1900	240-8000	3800-27000
Minimum pump pressure 2 bar	•	•	•	•
Motor overload alarms	•	•	•	•
Running hours counter	•	•	•	•
Tube repositioning indicator	•	•	•	•
External control (In1)	o	•	•	•
External release pump (In2)	o	•	•	•
Tank empty notification (In2)	o	•	•	•
Potential-free contact 0-10 up to 150 pulses/minute	o	•	•	•
Pulse length of the potential- free contact	o	•	•	•
Batch dosage (fixed amount after each pulse)	o	•	•	•
Internal on/off timer, on/off time (adjustable 1-300 sec.)	•	•	•	•
Analogue 0-20 mA	o	•	•	•
Analogue 0-1 up to 10 V (adjustable)	o	•	•	•
Suitable for additional 313X head*	•	•	•	•
LED indication	•	•	•	•
Connection for external control with 4-pole plug	o	•	•	•
Voltage	100-240V	100-240V	100-240V	100-240V
Frequency	50/60HZ	50/60HZ	50/60HZ	50/60HZ
Power consumption nom/max	30/60 W	30/60 W	30/60 W	30/60 W
Synthetic housing (high-impact polystyrene)	IP54	IP54	IP54	IP54
Dimensions l x w x h	215 x 200 x125 mm	215 x 200 x125 mm	215 x 200 x125 mm	215 x 200 x125 mm
Weight	2,5 kg	2,5 kg	2,5 kg	2,5 kg












## 12. Accessories and parts

### 12.1 Spare parts

Article	Description	Number
	<b>Pressure test pump head</b> Test tool for pressure measurement of the pump head D-ER and X-ER.	2516201
	<b>B&amp;S DIGI PERISTALTIC PUMP replacement parts kit</b> Case with basic parts for service B&S DIGI TUBE PUMP	2522027
	<b>Tube 1,6mm with couplings 6x12</b>	2505900
	<b>Tube 2,4mm with couplings 6x12</b>	2505901
	<b>Tube 3,2mm with couplings 6x12</b>	2505902
	<b>Tube 4,8mm with couplings 6x12</b>	2505903
	<b>Marprene tube 1,6mm per meter</b>	4913016
	<b>Marprene tube 2,4mm per meter</b>	4913024
	<b>Marprene tube 3,2mm per meter</b>	4913032
	<b>Marprene tube 4,8mm per meter</b>	4913048
	<b>Viton o-ring for tube connection/tube coupling</b>	2615020
	<b>Control cable with plug 2m</b> For external control	2501035
	<b>Control cable with plug 5m</b> For external control	2501036
	<b>Control cable with plug 10m</b> For external control	2501037
	<b>Control cable with plug 25m</b> For external control	2501038
	<b>Cable with plug M12 5m</b> For external release / tank empty notification	2501040
	<b>Separate pump head 313D-ER</b> To be placed on B&S DIGI Vlok, B&S DIGI 07.40, 100, 10, 10E.60,200	4916040
	<b>Separate pump head 313X-ER</b> To be placed on B&S DIGI Vlok, B&S DIGI 07,40, 10, 10E, 60  NOTE: not suitable for B&S 20 and B&S DIGI 100 due to its maximum motor torque!	4916030
	<b>Glass fuse 1A slow</b>	6026010

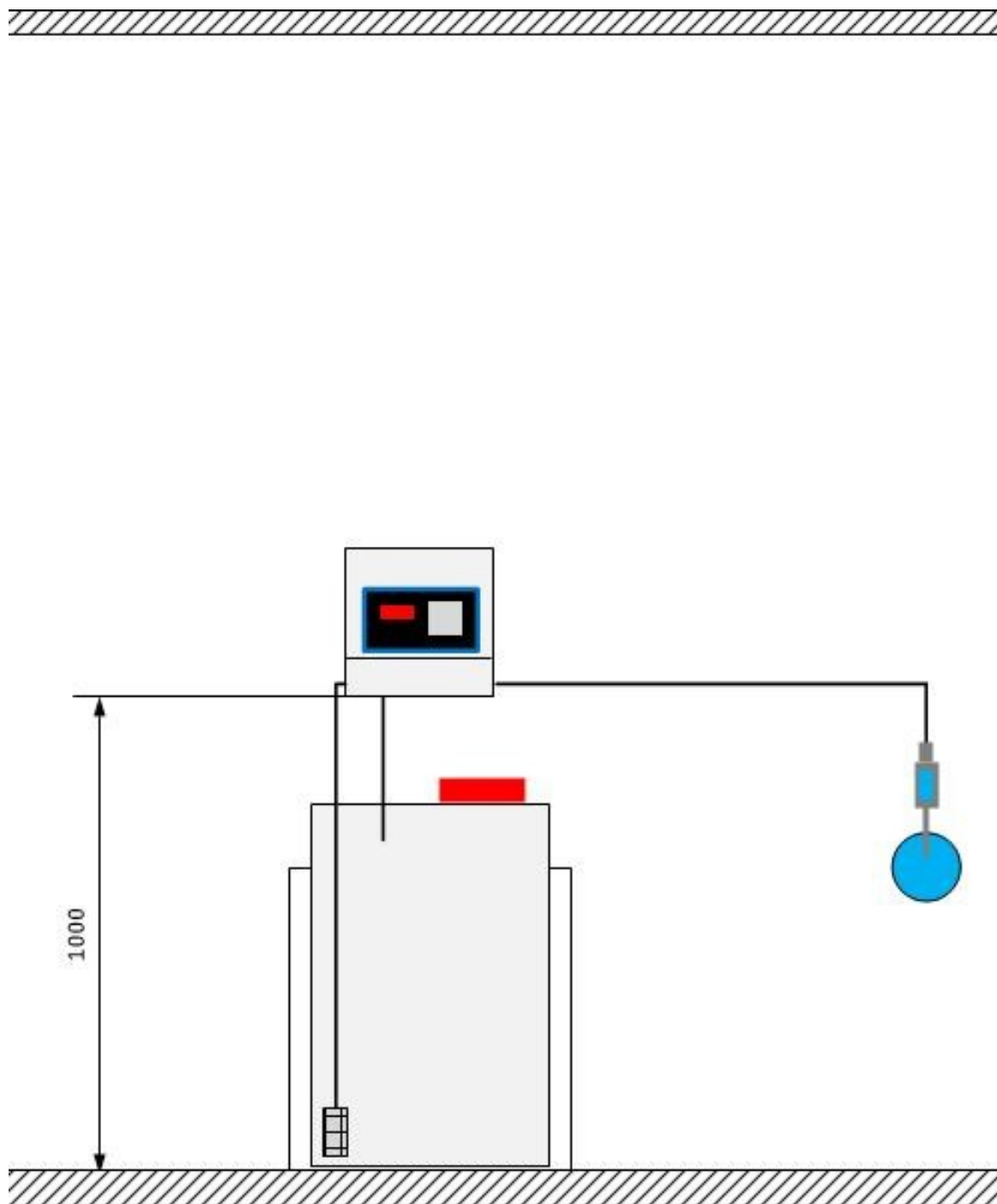


## 12.2 Accessories

Artikel	Omschrijving	Artikelnummer
	Connection kit B&S DIGI 10 E	2522026
	Connection kit B&S DIGI Peristaltic pump	2522024
	Connection kit B&S DIGI 10 E with Injection lance valve 1/2"	2522033
	Connection kit B&S DIGI 10 E with Injection lance valve 1/2" extended	2522034
	Connection kit B&S DIGI Peristaltic pump with Injection lance valve 1/2"	2522031
	Connection kit B&S DIGI Peristaltic pump with Injection lance valve 1/2" extended	2522032
	Control cable with plug 2m For external control	2501035
	Control cable with plug 5m For external control	2501036
	Control cable with plug 10m For external control	2501037
	Control cable with plug 25m For external control	2501038
	Cable with plug M12 5m For external release / tank empty notification	2501040
	Protective cap Female M12 (for chassis part) DIGI housing external release	2501034
	Protective cap Male M12 (for chassis part) DIGI housing control cable	2501033
	Mounting bracket for dosing pump With drip tray, according to W.H.V.B.Z. guidelines	2816030



## ATTACHEMENT A WALL MOUNTING DRAWING





**Notes:**

[illegible]



**Notes:**

[illegible]





SEM Waterbehandeling B.V.  
[www.semwaterbehandeling.nl](http://www.semwaterbehandeling.nl)  
[info@semwaterbehandeling.nl](mailto:info@semwaterbehandeling.nl)