



Thinking solutions.

Operation & maintenance

Vacuum spray tube degassing

Type Servitec 35-95

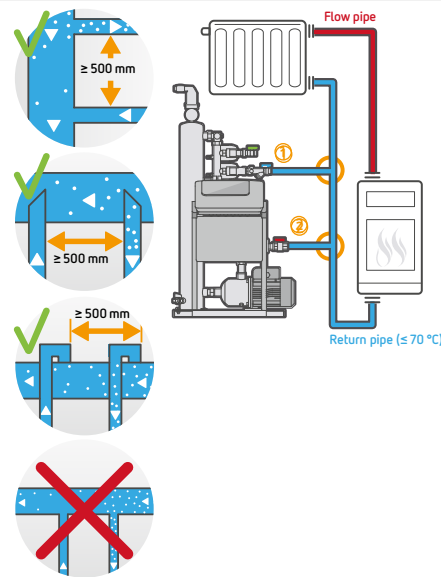
reflex+
experts No.

M80

Check preconditions for commissioning*

1 Hydraulic connection — System ↔ Servitec

- Preferably integrate the Servitec in the return pipe of the system.
- Carry out pipe connections as shown in the graphic to avoid dirt ingress.
- In the direction of flow, first connect the pipe (blue-coloured ball valve) ① with gas-rich water and then the pipe (red-coloured ball valve) ② with degassed water. Always maintain a distance ≥ 500 mm.
- Check: Plant system filled and properly vented.



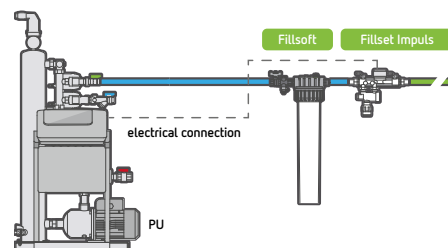
Basics

Function

Operation & Maintenance

2 Hydraulic connection — water make-up ↔ Servitec

- When making up water from the potable water system, a system separator type BA must be installed between the plant and potable water system. Example: Reflex Fillset Impuls
- Water make-up line with water treatment (e.g. Fillsoft type) — Ensure capacity monitoring
 - Option 1:** Contact water meter for capacity monitoring via the Reflex Control Unit, see graphic on the right
 - water make-up parameters see [M81: Initial commissioning](#)
 - Option 2:** Fillguard/Fillmeter for capacity monitoring, see [M30](#)
 - Option 3:** Keep a system logbook in accordance with e.g. VDI 2035 Part 1. Record the water meter count manually
- Optional: Water make-up from a mains separator tank. Tank must be installed $\geq 1,000$ mm above the pump.
- Important:** If it is unclear whether water treatment is necessary, see regional regular or legislation



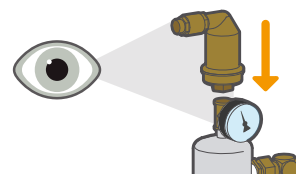
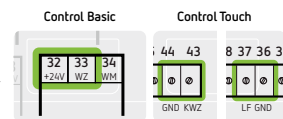
3 Visual check — Servitec

- Electrical connection is made correctly. Optional components (Fillset Impulse (KWZ)) are correctly connected in the control unit → Functional test after commissioning
- Note:**
 - Magcontrol: Operation with diaphragm pressure expansion vessel
 - Levelcontrol: Operation with pressurisation station
 - When using Levelcontrol, check electrical connection, see [M81 + F21](#)
- Quick air vent (here: Reflex Exvoid T) with back suction protection is mounted on the vacuum spray tube.
- Tightness test: Fill Servitec with system water
 - Open the red and blue ball valves.
 - Filling process until the vacuum gauge indicates system pressure.
- System and screw connections are tight — tighten accordingly in the event of leaks.
- Note:** The Servitec is ready for initial commissioning as soon as the steps listed above have been checked and guaranteed.

SERVITEC

Signal input

WZ = (Contact) water meter
KWZ = Contact water meter
LF = Conductivity sensor





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Initial commissioning*

4 Startup of the facility

Display	Function/Parameter	Operating
1. Equipment type	Servitec	
2. Language	Selection of menu language	
3. Please read manual before starting the facility!	(Important note)	Control Basic
4. Select system	Servitec XX (35/60/75/95)	<ul style="list-style-type: none"> Confirm menu items with OK Select parameters and values with ▲ ▼ Exit routine with selection Yes and OK
5. Magcontrol <> Levelcontrol	Select function mode; see also F21	
Only for Magcontrol:		
5a. Safety valve actuation pressure in bar	Setting p_{SV} 2.5 ... 10 bar	Control Touch
5b. Minimum operating pressure in bar	Setting $p_0 \geq p_{at} + 0.2$ bar; see also B10	<ul style="list-style-type: none"> Select parameters by clicking on the selection ○ or values with ▲ ▼ and confirm and save with OK Exit start routine with OK
6. Time	Format: hh:mm:ss	
7. Date	Format: dd.mm.yy	
8. Exit start routine?		

Optional: Activate Fillsoft water treatment

If a Fillsoft water treatment system is present, it must be activated after the start routine in the water make-up (replenish) customer menu!

Display	Function/Parameter	Operating
1. Customer menu: Replenish		Control Basic
2. With water meter	Yes/No (menu expands)	<ul style="list-style-type: none"> Confirm menu items with OK Adjust with ▲ ▼
3. Water preparation	NONE / SOFTENING / DESALTING	
4. Hardness reduction	Set according to the $^{\circ}dH_{actual} - ^{\circ}dH_{target}$ Example: Input: $15^{\circ} dH_{actual} - target: 0^{\circ} dH_{target} = 15^{\circ} dH$	Control Touch
5. Capacity soft water	Softening: Set 6,000 (Fillsoft I) / 12,000 (Fillsoft II) Desalting: Set 3,000 (Fillsoft Zero I) / 6,000 (Fillsoft Zero II)	<p>Read the value:</p> <p>Control Basic: Customer menu water make-up quantity and remaining soft water capacity</p> <p>Control Touch: Water make-up quantity and remaining soft water capacity can be read off the display</p>

- Note Operating mode Levelcontrol** (see M80):
The electrical connection between the Servitec and the pressurisation station (e.g. Reflexomat) has been made correctly.
- Tips & tricks:**
The correct function of the water make-up can be tested in manual operating mode. For this, simply start the water make-up in **manual mode** on the control unit of the pressurisation station.
Control Basic: Activate **WV**
Control Touch: Activate **WV**

SERVITEC
Signal input
Water make-up signal



REFLEXOMAT
Signal output
Water make-up signal



5 Vent the pump

- To vent the pump, the Servitec must be completely filled with water, see M80 point 3.
- Open the vent screw **1** on the pump and close it again if water flows out.
- Start and stop the pump briefly with the venting screw closed in manual mode using the **SE** system degassing function (Control Basic) or using the **Circulate** button (Control Touch) — open the venting screw and vent the air.
- Repeat this procedure until bubble-free water comes out immediately.

Commissioning is complete

- The system can now be set to automatic mode. A 24 hours continuous degassing cycle starts (factory setting). After continuous degassing, the Servitec automatically switches to interval degassing.

