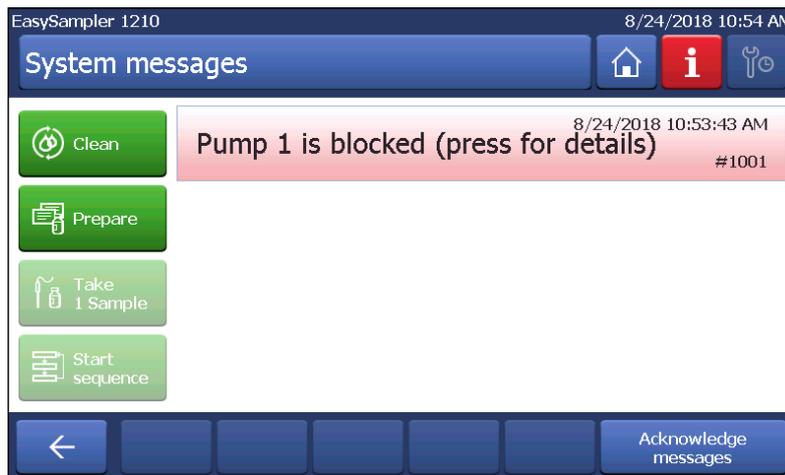


EasySampler 1210

Error Message "Pump 1 is Blocked"

EasySampler™ Error Message "Pump 1 is blocked"



If the pressure in the fluidic system of EasySampler exceeds a certain level, the EasySampler pump is stopped to prevent any damage to the sleeve or the rest of the system.

Excessive pressure in the system can be caused by a blockage in the solvent tubes, the tip of the probe, the needle, the valve or in the pump itself. To determine where a blockage is and how to resolve it, follow this step-by-step guide.

Step 1 – Determine Where the Blockage Is

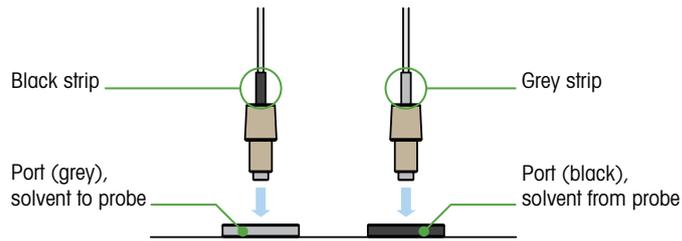
1. Disconnect both solvent tubes from the EasySampler probe.
 2. Leave the electrical connection installed.
 3. Install a bypass tube (use the "EasySampler Pump Rinsing Set" P/N 30466882).
 4. Start **Clean** from EasySampler touchscreen.
- If the **Clean** runs without error – the blockage is in the probe. Press **Abort Cleaning** on EasySampler touchscreen. ▶ **Step 2**
- If the error message "Pump 1 is blocked" appears again – the blockage is in the EasySampler system. ▶ **Step 3**



Bypass Tube

Step 2 – Blockage in the Probe

1. Reconnect the EasySampler probe tubes incorrectly (black tube to grey port and grey tube to black port).



2. Start **Clean** from EasySampler touchscreen.
3. If the error "Pump 1 is blocked" appears again, disconnect the solvent tubes of the probe on EasySampler and the probe. Flush all solvent tubes through individually (use the "EasySampler Pump Rinsing Set" P/N 30466882).



Disconnect the solvent tubes in the conduit from the probe and connect the syringe with the adapter to one of the tubes. Place the other end into a vessel and flush solvent through it. Repeat these steps for the second tube.



To rinse the tubes in the probe shaft, connect the syringe, the adapter and the tube provided in the EasySampler Pump Rinsing Set to one of the tubes leading to the probe shaft. Place the other end into a vessel and flush solvent through it.

4. If the blockage in the probe shaft can't be washed out, remove the sleeve and flush the solvent tubes again.
5. If the blockage can't be flushed out, exchange the entire tube:

Video: [Change Tubing in the Original EasySampler Probe Conduit](#)

Video: [Replacing the EasySampler Probe Head Tubing](#)

Replacement tube for probe 210: Tube set probe 210, PEEK fittings, P/N 30247094

Replacement tube for probe 330: Tube set probe 330, PEEK fittings, P/N 30246342

Replacement tube for probe 450: Tube set probe 450, PEEK fittings, P/N 30306036

- Mount a new sleeve and start **Clean** from EasySampler touchscreen.

Video: [Change a Sleeve on the New Style EasySampler Probe](#)

Video: [Change a Sleeve on the EasySampler Original Probe](#)

Step 3 – Blockage in the EasySampler System

- Remove the back cover of EasySampler and disconnect the solvent tubes from the pump.
 - Start **Clean** from EasySampler touchscreen.
 - If the **Clean** runs without error – the blockage is in the solvent tubes, the needle or the valve. Press **Abort cleaning** on EasySampler touchscreen. ▶ **Step 4**
- If the error message "Pump 1 is blocked" appears again – the blockage is in the EasySampler pump. ▶ **Step 5**



Step 4 – Blockage in the Solvent Tubes, the Needle or the Valve:

- Disconnect the EasySampler needle and flush it (use the "EasySampler Pump Rinsing Set" P/N 30466882).
Video: [Replace the Needle](#)
Replacement needle: Needle, P/N 30041011
- If the needle is unblocked but the error appears again when running a **Clean**, flush the solvent tube located between the syringe the black probe port.
- If the solvent tube is unblocked but the error appears again when running a **Clean**, flush the remaining solvent tubes individually. If the blockage cannot be flushed out, exchange the entire tube.
Video: [Change the Solvent Tubing](#)
Replacement tubes for EasySampler: PTFE tube set for EasySampler 1210, PEEK fittings, P/N 30246340
Replacement tubes for solvent bottles: PTFE tube set for EasySampler 1210, P/N 30246341
- If all solvent tubes are unblocked but the error appears again when running a **Clean**, flush solvent through the EasySampler valve. Disconnect the tube from the pump to the valve and use the "EasySampler Pump Rinsing Set" P/N 30466882 for the flush.



5. If the valve cannot be unblocked, exchange the valve or call a METTLER TOLEDO Service engineer.
Replacement valve: 3-way valve, P/N 30107048

Step 5 – Blockage in EasySampler Pump

1. Connect the "EasySampler Pump Rinsing Set" to the rinse port of the pump.
2. Flush three (3) times with 10 mL of solvent. We recommend distilled water first.
3. If the error message appears again when running a **Clean**, flush three (3) times with 10 mL of a different solvent.
We recommend an organic solvent second, e.g. acetone or isopropanol.
4. If the error message appears again when running a **Clean**, soak with 10 mL distilled water overnight.
5. If the error persists, call a METTLER TOLEDO Service engineer.



Information

We recommend to flush the rinse port of the pump after each experiment to ensure continued operation of the EasySampler pump.