

# Signet

## 3-4630 Chlorine Analyzer Troubleshooting Guide

The troubleshooting table below outlines possible causes and remedies related to the flow cell panel system. Refer to the transmitter and sensor manuals for specific component troubleshooting.

Problem	Possible Cause	Remedies
No water flow	<ul style="list-style-type: none"> <li>Inlet pressure below 1 bar (15 psi)</li> <li>Clogged filter</li> <li>Damaged flow regulator</li> </ul>	<ul style="list-style-type: none"> <li>Check source pressure</li> <li>Clean filter or remove pressure regulator if inlet pressure is below 1 bar (15 psi)</li> <li>Replace flow regulator</li> </ul>
Low water flow	<ul style="list-style-type: none"> <li>Clogged filter</li> <li>Insufficient inlet pressure</li> <li>Damaged flow regulator</li> </ul>	<ul style="list-style-type: none"> <li>Clean filter</li> <li>Increase inlet pressure to specification or remove flow regulator</li> <li>Inspect or replace</li> </ul>
Excessive flow	<ul style="list-style-type: none"> <li>Excessive pressure over 10 bar (150 psi)</li> <li>Damaged flow regulator</li> </ul>	<ul style="list-style-type: none"> <li>Ensure inlet pressure does not exceed 10 bar (150 psi)</li> <li>Replace flow regulator</li> </ul>
Flow cell leaks	<ul style="list-style-type: none"> <li>Incorrect assembly</li> <li>Loose bolts</li> <li>Defective or missing O-rings</li> <li>Damaged sealing surfaces</li> </ul>	<ul style="list-style-type: none"> <li>Inspect, clean, and reassemble</li> <li>Tighten bolts (8.1 Nm, 72 Lb-In Max)</li> <li>Replace O-rings</li> <li>Replace flow cell</li> </ul>
Leaks around sensor	<ul style="list-style-type: none"> <li>Damaged sensor O-ring</li> <li>Damaged flow cell</li> </ul>	<ul style="list-style-type: none"> <li>Inspect or replace O-ring</li> <li>Inspect flow cell</li> </ul>
Water leaks out of top vent hole	<ul style="list-style-type: none"> <li>Drain valve closed or plugged</li> <li>Hose connections are backwards</li> <li>Outlet drain not below flow cell</li> </ul>	<ul style="list-style-type: none"> <li>Inspect</li> <li>Connect water source correctly</li> <li>Route drain line below flow cell and vented to atmosphere</li> </ul>
Algae growth in flow cell	<ul style="list-style-type: none"> <li>Low chlorine concentration in water</li> <li>Exposure to light</li> </ul>	<ul style="list-style-type: none"> <li>Locate flow cell away from light</li> </ul>
Excessive small bubbles in flow cell accumulating on sensors	<ul style="list-style-type: none"> <li>Water source contains bubbles</li> <li>Water source is saturated with dissolved gasses</li> </ul>	<ul style="list-style-type: none"> <li>Check water source</li> </ul>
Transmitter does not turn on	<ul style="list-style-type: none"> <li>No power or external circuit breaker is switched off</li> <li>Loose or incorrect wire connections</li> <li>Open loop wiring or missing jumper wire on terminal 1 (Loop 1) on the wiring enclosure terminal block</li> </ul>	<ul style="list-style-type: none"> <li>Inspect power and wiring connections</li> <li>Check connections</li> <li>Replace jumper wire to terminal 1 or connect a loop device if the jumper wire to terminal 1 is removed</li> </ul>
Chlorine reading too high	<ul style="list-style-type: none"> <li>Breached membrane</li> </ul>	<ul style="list-style-type: none"> <li>Replace membrane and fill solution</li> </ul>
Chlorine reading too low	<ul style="list-style-type: none"> <li>Low flow rate</li> <li>Filter clogged</li> <li>Sensor conditioning not long enough</li> </ul>	<ul style="list-style-type: none"> <li>Check source pressure</li> <li>Clean the filter</li> <li>Allow the sensor to condition for 4 hours (See 2630 sensor manual for details)</li> </ul>
Sensor output drifts	<ul style="list-style-type: none"> <li>Variable flow rate</li> <li>Clogged filter</li> <li>Contaminated fill solution</li> </ul>	<ul style="list-style-type: none"> <li>Check flow rate</li> <li>Clean the filter</li> <li>Change electrolyte fill solution</li> </ul>