

## 16.0 Fault Finding Checklist(s)

Fault event	Fault Detected and Remedy
<b>SERVICE</b> LED flashing every 10 seconds Internal buzzer sounding for 1 second at weekly test time	<b>Batteries need replacing. Replace battery's.</b> Refer to Service mode section 7.1 to reset
<b>SERVICE</b> LED Flashing every 5 seconds	<b>12 month service required</b> Arrange for Service and Annual Test Refer to Service mode section 7.1 to reset
<b>SERVICE</b> LED flashing every 1.5 seconds Internal buzzer sounding every 30 mins Digital output DO1 changed over	<b>Pump failed healthy test – Low current</b> Outside of FLC – 30%, Service Pump Refer to Service mode section 7.1 to reset
<b>SERVICE</b> LED flashing every 1 seconds Internal buzzer sounding every 30 mins Digital output DO1 changed over	<b>Pump failed healthy test – High current</b> Outside of FLC + 30%, Replace/Service Pump Refer to Service mode section 7.1 to reset
<b>FAULT</b> LED flashing every 2 seconds Digital output DO1 changed over	<b>Fire Mode Active</b> Restore system pressure and press Test/Reset button on the controller.
<b>FAULT</b> LED flashing every 1 seconds Internal buzzer sounding every 30 minutes Digital output DO1 changed over	<b>Pump failed health test – Excess current</b> Refer to Service mode section 7.1 to reset
<b>FAULT</b> LED Flashing every 1.5 seconds Internal buzzer sounding every 30 minutes Digital output DO1 changed over	<b>Pump Failed health test – Pump fuse blown or pump fault. No current (&lt; 1amp).</b> Replace fuse/repair pump Refer to Service mode section 7.1 to reset
<b>FAULT</b> LED Flashing every 10 seconds Digital output DO1 changed over	<b>Exceeded 10 Pump starts in a 7 day period</b> System leak detected, fix leak. Refer to Service mode section 7.1 to reset
<b>FAULT</b> LED Flashing every 15 seconds Digital output D02 changed over after 60 second hold off	<b>Low water level detected in tank</b> Check water tank, top up tank.
<b>POWER</b> LED off Internal buzzer sounding every 30 minutes Digital output DO1 changed over	<b>Mains Power failure or Controller fuse failure</b> (> 2 Hours without mains power) Restore Mains Power Refer to Service mode section 7.1 to reset
<b>Alarm!</b> LED ON Internal buzzer sounding constantly Digital output D03 changed over	<b>Flow switch activated, Sprinkler head activated.</b> Restore system pressure and press Test/Reset button on controller

The Digital outputs (D01/D02/D03) represent the following faults:

Digital Output	Fault detected
<b>D01</b>	Fault detected by the controller refer to the checklist above. LED coding will describe fault found.
<b>D02</b>	Low water low level device (level switch in breaktank) has been activated.
<b>D03</b>	Fire Alarm device (system flow switch) has been activated.

System Operation problems can be diagnosed from the following checklist:

Fault	Possible cause(s)	Corrective Action(s)
Pump does not run when "Test/Rest" button is pressed for 3 seconds	<ol style="list-style-type: none"> <li>1) No electrical supply to Pump/<b>FireSAFE at home</b> control panel.</li> <li>2) Pump fuse blown.</li> <li>3) Controller fuse blown.</li> <li>4) Faulty Controller.</li> <li>5) Power wiring to pump.</li> </ol>	<ol style="list-style-type: none"> <li>A) Check power LED ON on controller front.</li> <li>B) Check Fault LED, refer to above coding table.</li> <li>C) Check electrical supply to pump</li> <li>D) Contact your system supplier/Grundfos Service for remedial action.</li> </ol>
Pump does not reach the duty point but continues to run.	<ol style="list-style-type: none"> <li>1) Not enough water getting to the pump.</li> <li>2) Air trapped in pump and or system.</li> <li>3) Small demand from system or leak.</li> </ol>	<ol style="list-style-type: none"> <li>a) Check suction isolating valve is fully open.</li> <li>b) Bleed air from system and pump.</li> <li>c) Check system for demand/leak.</li> <li>d) Contact your system supplier/Grundfos Service for remedial action.</li> </ol>
Pump does not reach the duty point while running and shuts off.	<ol style="list-style-type: none"> <li>1) Pressure switch setting too low</li> <li>2) Pressure switch fault.</li> <li>3) Wrong <b>FireSAFE at home</b> unit specified/delivered</li> </ol>	<ol style="list-style-type: none"> <li>a) Check settings of the pressure switch are not too low.</li> <li>b) Replace pressure switch</li> <li>c) Check unit is suitable for duty point required.</li> <li>d) Contact your system supplier/Grundfos Service for remedial action.</li> </ol>
Pump delivers correct pressure, but does not stop with no demand.	<ol style="list-style-type: none"> <li>1) Pressure switch setting too high</li> <li>2) Pressure switch fault.</li> <li>3) Demand from system/leak</li> <li>4) Pressure vessel settings (if used)</li> </ol>	<ol style="list-style-type: none"> <li>a) Check settings of the pressure switch are not too high.</li> <li>b) Replace pressure switch.</li> <li>c) Inspect system.</li> <li>d) Check vessel pre-set pressure.</li> <li>e) Contact your system supplier/Grundfos Service for remedial action.</li> </ol>
Fire mode engaged, pump on but no sprinkler head activated.	<ol style="list-style-type: none"> <li>1) Leak in system great enough to cause pressure drop and engage fire mode.</li> </ol>	<ol style="list-style-type: none"> <li>a) Find and fix leak.</li> </ol>