Installation Instructions
10233 1” FPT Cooling Water Flow Switch

Introduction
The Maretron 10233 is an accessory for the SIM100 Switch Indicator Module. The 10233 has a set of normally closed contacts that will open whenever a flow of cooling water of a user-settable amount is detected.

Instructions
Please follow these instructions to connect the 10233 to the NMEA 2000 network via a Maretron SIM100 Switch Indicator Module. The wiring diagram appears in Figure 1. The diagram shows a connection to channel #1, but connections to other channels are similar. Please refer to the original manufacturer’s instructions packaged with the product for additional details including setting of the switch activation flow rate.

1. Install the two wires from the 10233 to a free switch channel on the SIM100. The two wires are interchangeable. The example in Figure 1 shows the flow switch connected to switch channel 1, terminals SW1A and SW1B.

2. Use a Maretron DSM150 or DSM250 display or Maretron N2KAnalyzer software to set the switch channel mode (indicated as “Channel #x Mode” on the DSM250) for the appropriate channel to the “No End of Line Resistor” setting. For this example, you would set “Channel #1 Mode” to “No End of Line Resistor”.

3. Supply Power to the NMEA 2000 network, Verify that the switch channel indicates an “on” (normal) state using Maretron N2KView software, N2KAnalyzer, or other product capable of displaying switch indicator state.

4. Start cooling water flow through the 10233 and verify that the switch channel indicates an “off” state.

Figure 1 - Wiring Diagram
# Device Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside Diameter</td>
<td>1” (25.4mm)</td>
</tr>
<tr>
<td>Outside Diameter</td>
<td>1.92” (48.7mm)</td>
</tr>
<tr>
<td>Length</td>
<td>6.00” (152.7 mm)</td>
</tr>
<tr>
<td>Height</td>
<td>5.75” (146.05mm)</td>
</tr>
<tr>
<td>Activation Flow Rate</td>
<td>3 – 5 GPM (11.36 – 18.93 LPM)</td>
</tr>
<tr>
<td>Contacts</td>
<td>Normally Closed</td>
</tr>
<tr>
<td>Connections</td>
<td>1” FPT Female</td>
</tr>
<tr>
<td>Switching Rating</td>
<td>50W</td>
</tr>
<tr>
<td>Switching Voltage (Max)</td>
<td>300VAC / 300VDC</td>
</tr>
<tr>
<td>Maximum Switching</td>
<td>3.0A</td>
</tr>
<tr>
<td>Heat Resistance, Continuous</td>
<td>210°F (99°C)</td>
</tr>
<tr>
<td>Maximum Pressure</td>
<td>275 PSI @ 73°F 19.0 bar @ 23°C</td>
</tr>
<tr>
<td>Construction</td>
<td>CPVC</td>
</tr>
<tr>
<td>Connection</td>
<td>5’ (1.5m) Marine Grade Tinned Wire Leads</td>
</tr>
</tbody>
</table>

For installation support, please contact:

**Maretron, LLP**  
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**Telephone:** (+1) 866-550-9100  
**E-mail:** support@maretron.com  
**Web:** [http://www.maretron.com](http://www.maretron.com)
AQUALARM

COOLING WATER FLOW DETECTOR, PADDLE TYPE
10233, Installation Instructions

The Aqualarm 10233 has 1" Female Pipe Threads. Use 1" Male Pipe Threads to Hose Barb fittings corresponding to your hose size.

Install the Flow Detector between the raw water sea Strainer and engine pump raw water intake. The Detector can be installed between the engine raw water discharge and exhaust water overboard. NOTE: Double clamp all hose connections and be sure the FLOW Detector arrow on the Detector corresponds with the engine raw water flow direction.

The Flow Detector can be installed in the vertical or the horizontal position.

Complete the installation by following the wiring diagram. The electrical switch on the flow detector does not have any polarity and the wire leads can be used interchangeably. 18 to 22 gauge wire can be used.

Now with a 3.0 amp switch
12v, 24v, 32v

NOTE: You will need 3 to 4 Gallons Per Minute of flow. For smaller engines use #13209 Low Flow

Typical Wiring Diagram

WARNING LIGHT

AUDIBLE ALARM

Ground

Positive

Ignition Switch

(+) Positive Voltage

(connection can also be made to any switched device like the positive side of a pump)

Flow Detector

619-575-4011
info@aqualarm.net
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