

## PROCESS LIQUID STORAGE APPLICATION SENSING

### Background

Liquid storage tanks are in a broad range of industries requiring level monitoring for a variety of reasons such as avoiding downtime in factories, ensuring optimal process control, and timely replenishment of supply or serving as a critical safety function. False indications from level monitoring devices could lead to costly maintenance or serious damage to facilities and the environment. Pressure transducers are a cost effective, reliable and safe technology to monitor liquid levels in both vented and sealed tanks. Sensata's comprehensive hydrostatic level sensor selection ensures that you have the right level sensor for the application.

### Solution

There are a number of level sensing technologies on the market, from mechanical to laser based devices, however, each has its limitations dependent on a range of factors. Temperature, reflectivity of the liquid, condensation or even turbulence and foam on the surface can affect the accuracy of measurement. Pressure sensing can be an ideal choice due to its insensitivity to many of these issues.





Sensata's hydrostatic level pressure sensors incorporate a ceramic sensing element with the latest state of the art electronics in an IP68 stainless steel housing. Accurate and highly reliable, Sensata's hydrostatic level pressure sensors are ideal for measuring a broad range of liquids and most hydrocarbon based fluids.

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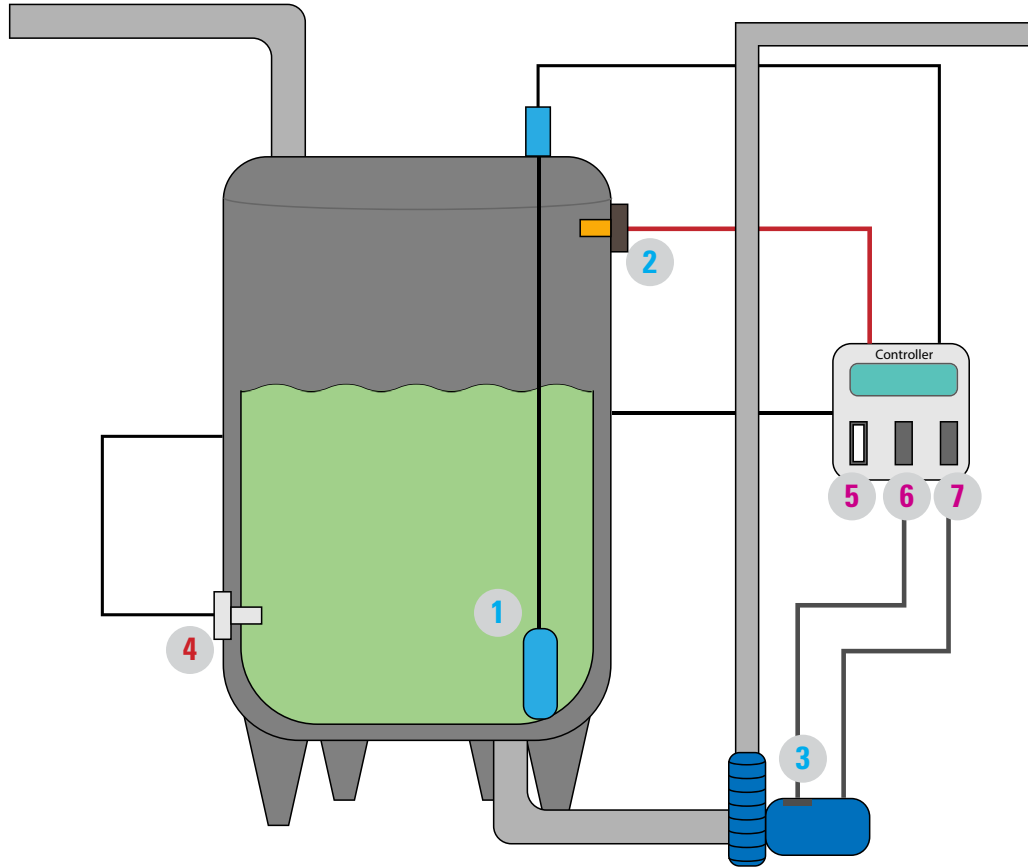


## RECOMMENDED PRODUCTS

Reference on Diagram	Product	Function	Features	Brand
<b>Pressure Sensors &amp; Switches</b>				
1	 P1L SERIES	Hydrostatic level pressure sensor to measure liquid level	<ul style="list-style-type: none"> <li>• Pressure range to 2000 mbar absolute</li> <li>• Small (22mm diameter) stainless</li> <li>• High shock &amp; vibration performance</li> </ul>	Sensata Technologies
2	 PS80 SERIES	High pressure switch for safety control	<ul style="list-style-type: none"> <li>• Custom engineered solutions</li> <li>• Hermetically sealed sensor</li> <li>• Environmentally sealed leads</li> </ul>	Sensata Technologies
3	 116CP SERIES	Pump pressure monitor used in conjunction with DRMS	<ul style="list-style-type: none"> <li>• Multiple port options</li> <li>• High accuracy: +/-1.5%VS</li> <li>• Small &amp; compact size</li> </ul>	Sensata Technologies
<b>Temperature</b>				
4	 5024 EGR SERIES	Temperature sensor with performance range up to 300°C/ 572°F	<ul style="list-style-type: none"> <li>• High temperature NTC sensing</li> <li>• High accuracy over complete range</li> <li>• Fast response time</li> </ul>	Sensata Technologies
<b>Switches &amp; Relays</b>				
5	 DRMS SERIES	Pump soft start electronic controller	<ul style="list-style-type: none"> <li>• 3-phase motors reversing up to 4 kW</li> <li>• 4 dials for setting of starting torque</li> <li>• Deceleration torque</li> <li>• 2-phase soft start/stop</li> <li>• Rated motor current</li> </ul>	Crydom
6	 PMP SERIES	Proportional control for heater applications	<ul style="list-style-type: none"> <li>• Single phase proportional controller</li> <li>• Output ratings up to 90 amps at 600 VAC</li> <li>• Selectable operation mode: phase angle or burst fire control</li> </ul>	Crydom
7	 DR22 SERIES	Solid State Relay for pump control	<ul style="list-style-type: none"> <li>• Output ratings up to 30 amps at 200 VDC</li> <li>• Integral heat sink eliminates the need for complex thermal calculations</li> <li>• DBC substrate for superior thermal performance</li> </ul>	Crydom



# PROCESS LIQUID STORAGE CONTROL



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