

PROCESS LIQUID STORAGE APPLICATION SENSING

Background

Liquid storage tanks in a broad range of industries require level monitoring for a variety of reasons. Avoiding downtime in factories, ensuring optimal process control and timely replenishment of supply or serving as a critical safety function are just a few examples where level monitoring is required. 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 ensure 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 limitation 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 or MEMs 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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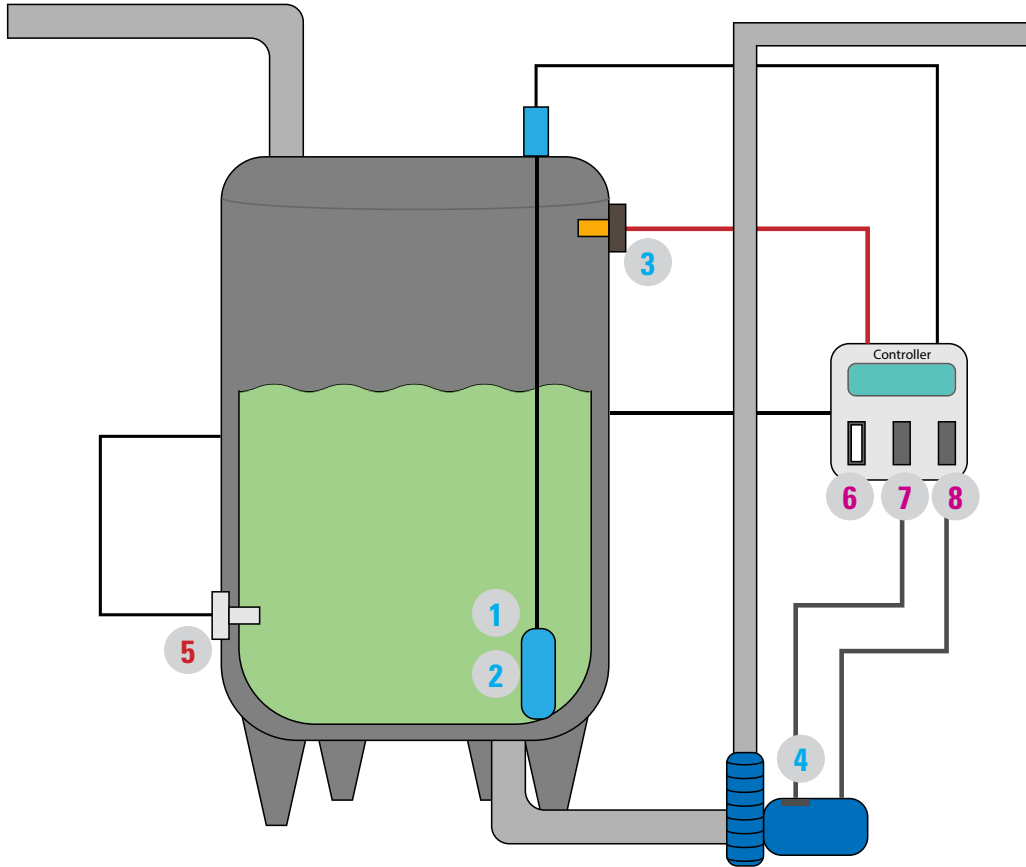


RECOMMENDED PRODUCTS

Reference on Diagram	Product	Function	Features	Brand
Pressure Sensors & Switches				
1	 P1L SERIES	Hydrostatic level pressure sensor to measure liquid level	<ul style="list-style-type: none"> • Pressure range to 2000 mbar absolute • Small (22mm diameter) stainless • High shock & vibration performance 	Sensata Technologies
2	 ILS, ILTS, ILLS SERIES	Hydrostatic level pressure sensor to measure liquid level	<ul style="list-style-type: none"> • Vented cable and 4-20mA output • Flexible measuring range from 1 to 100 mH₂O • High accuracy: ±0.10%BFSL 	Sensata Technologies
3	 PS80 SERIES	High pressure switch for safety control	<ul style="list-style-type: none"> • Custom engineered solutions • Hermetically sealed sensor • Environmentally sealed leads 	Sensata Technologies
4	 116CP SERIES	Pump pressure monitor used in conjunction with DRMS	<ul style="list-style-type: none"> • Multiple port options • High accuracy: +/-1.5%VS • Small & compact size 	Sensata Technologies
Temperature				
5	 5024 EGR SERIES	Temperature sensor with performance range up to 300°C/ 572°F	<ul style="list-style-type: none"> • High temperature NTC sensing • High accuracy over complete range • Fast response time 	Sensata Technologies
Switches & Relays				
6	 DRMS SERIES	Pump soft start electronic controller	<ul style="list-style-type: none"> • 3-phase motors reversing up to 4 kW • 4 dials for setting of starting torque • Deceleration torque • 2-phase soft start/stop • Rated motor current 	Crydom
7	 PMP SERIES	Proportional control for heater applications	<ul style="list-style-type: none"> • Single phase proportional controller • Output ratings up to 90 amps at 600 VAC • Selectable operation mode: phase angle or burst fire control 	Crydom
8	 DR22 SERIES	Solid State Relay for pump control	<ul style="list-style-type: none"> • Output ratings up to 30 amps at 200 VDC • Integral heat sink eliminates the need for complex thermal calculations • DBC substrate for superior thermal performance 	Crydom



PROCESS LIQUID STORAGE CONTROL



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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

Americas

Pressure Sensors and Switches

+1 (800) 350 2727

sensors@sensata.com

switches@sensata.com

Temperature Sensors

+1 (888) 438 2214

sensors@sensata.com

Switches & Relays

+1 (877) 502 5500 – Option 2

sales.crydom@sensata.com

Europe, Middle East & Africa

Pressure Sensors and Switches

+359 (2) 809 1826

pressure-info.eu@sensata.com

Temperature Sensors

+31 (74) 357 8156 (Klixon+Airpax)

temperature-info.eu@sensata.com

CONTACT US

Switches & Relays

+44 (1202) 416170

ssr-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com

China +86 (21) 2306 1500

Japan +81 (45) 277 7117

Korea +82 (31) 601 2004

India +91 (80) 67920890

Rest of Asia +886 (2) 27602006

ext 2808