ADS Multi-Point Ultrasonic Sensor with Batchguard® Monitor



In a tank with known dimensions the amount of product added can be verified by measuring the level of liquid. This is achieved by installing multi-point sensor equipped with preset detection points that signal as a product is added. When the product is loaded in a sequence matching the sensor detection points the level of liquid can be confirmed. When used in blending applications our multi-port ultrasonic sensor is a proven, reliable system; here is why.

- Our monitor is programmable to detect liquid levels at predefined set points
- Spacing of the set points on our multi-point sensor corresponds to the volume of the liquid added to the tank or vessel
- The Batchguard Monitor can be programmed to sound an alarm indicating when a predefined liquid level is reached, to turn off a pump, or to change the position of a valve
- Combined with actuated valves¹ to stop the flow of one liquid at a predefined set point and the next liquid can be added until the next detection point is reached
- · Multi-point ultrasonic sensor can alert operators both audibly and visually when a tank is full
- · At a predefined high/high level the system can be shut down and locked to prevent spilling or overfilling

Application

 For use when multiple detection points are required in blending applications such as dribble mode, pump shutoff, and overfill alarm

Features

- · Intrinsically safe design Class I, Div 1, Groups A, B, C, D
- Up to five detection points available
- · Rugged "tube in tube" ultrasonic sensor welded construction
- Individual level and pressure outputs
- Silicon strain gauge pressure transducer available, welded diaphragm, 0-50 PSIA standard range, single or dual set points, trip high, low, or outside of gap
- · Full hard heavy wall probe shaft, laser engraved scale up to 86" long
- · Tilt storage indicator option
- · Ground verification option

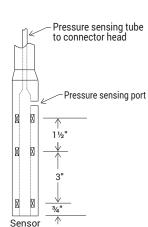
Material

· Wetted material: 316 stainless steel

Specification

Operating temperature range: -40°F (-40°C) to 250°F (121°C)

Example: 3-point ultrasonic sensor



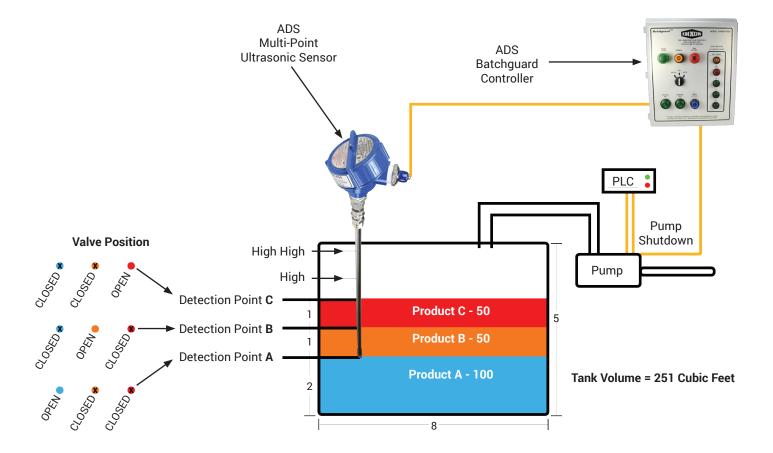


¹ Visit dixonvalve.com to see our actuated valve options.

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Installation Example



Tank = cylinder 8 feet in diameter by 5 feet tall with a volume of 251 cubic feet (1877 gallons)

Detection point A is 2 feet from the bottom of the tank. Filling to this detection point will add 100.53 cubic feet (752 gallons) of product A to the tank.

Detection point B is 1 foot above detection point A. Filling to this detection point will add 50.27 cubic feet (376 gallons) of product B to the tank. The total volume at 3 feet from bottom will be 150.8 cubic feet (1128 gallons) of combined product A+B.

Detection point C is 1 foot above detection point B and 4 feet from the bottom of the tank. Filling to this detection point would add 50.27 cubic feet (376 gallons) of product C to the mixture. The total volume would be 201.07 cubic feet (1504 gallons) of combined product A+B+C.

NOTE: The mixture would be a blend of 50% product A + 25% product B + 25% product C

Dixon Bayco®

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