Digital Liquid Level Displacement

The Magnetrol® Digital E3 Modulevel® liquid level displacer transmitter, an intrinsically safe 2-wire instrument used for continuous liquid level measurement, liquid/liquid interface level measurement or density control, uses Macro Sensors' high-temperature custom-designed PR Series of separate core LVDT linear position sensors as part of the internal electronics needed to convert liquid level changes into 4- to 20-mA output signals. According to the companies, the liquid level displacer transmitter additionally delivers:

- Simple buoyancy principles, which act upon the spring-supported displacer of the transmitter, causing a vertical motion of the core within Macro Sensors' AC-operated LVDT linear position sensor installed near the top of the transmitter, to detect and convert liquid level changes to useable measurement output.
- Voltages induced across the secondary windings of the separate core LVDT as the core position changes with liquid levels.
- Signal processing, which controls the current in the 4- to 20-mA output, in the electronic circuitry of the LVDT linear position sensor.
- An enclosing tube that acts as a static isolation barrier between the LVDT and the process media.
- An inline design that results in low instrument weight and simplified installation.
- Suitability for the chemical, petroleum refining, nuclear, power generation and oil field industries for various level applications.

positionsensors@macrosensors.com [1].

http://us.magnetrol.com/products.aspx?product=769 [2]

www.macrosensors.com/separate_core_lvdts.html [3]

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