Level Plus[®]

Magnetostrictive Liquid Level Transmitters with Temposonics[®] Technology





The Level Plus[®] RefineME[®] liquid level transmitter is designed for use in industrial environments for process control and has a proven track record of over 35 years of satisfied customers in the oil & gas, chemical, mining, and various other industries.

The key to the success of the RefineME[®] level transmitter is its 4-in-1 measurement capability of providing product level, interface level, temperature, and volume from a single process opening. The RefineME[®] level transmitter is able to provide all of these measurements through harsh process conditions including turbulence, foam, misting, and gas layering. MTS has replaced inferior ultrasonic and guided wave radar sensors that were not able to function correctly in the harsh environment or that were not able to provide the specified accuracy. MTS tests 100 % of our level transmitters and guarantees the inherent accuracy of ± 1 mm on both the product level and interface level.

The RefineME[®] is available in stainless steel, Hastelloy[®] C, and Teflon[®] for chemical compatibility with most applications. The RefineME[®] can also be ordered with different process connection types and process connection sizes to allow for fitment on almost any tank.

Once the RefineME[®] level transmitter is installed and calibrated there is no requirement scheduled maintenance or recalibration. *Set it and forget it!*

MORE FEATURES

- 4-in-1 measurement
- Product level
- Interface level
- Temperature
- Volume
- Integral display with through glass programming
- 200 point strap table
- API temperature corrected volumes
- No scheduled maintenance or recalibration
- Field repairable

TYPICAL APPLICATIONS

- · Inventory control
- Bulk storage
- Alkylation

MARKETS

- Petroleum and Petrochemical
- LPG terminals
- Mining

REGULATORY COMPLIANCE

- Intrinsically safe
- Explosion proof / Flameproof
- API 3.1B
- API 7.3
- API 18.2
- SIL2

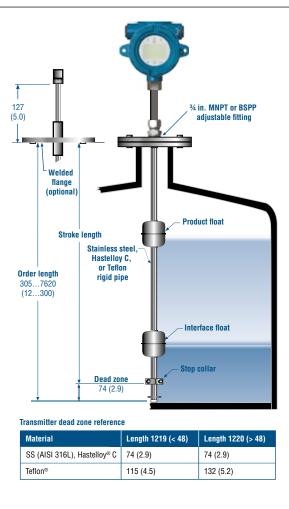
TECHNICAL DATA

TECHNICAL DRAWING

Output	
Output signal / Protocol	Analog (420mA), HART [®] , Modbus RTU, DDA
Measured value	Product level, interface level and temperature
Measurement parameters	
Inherent accuracy	±1 mm (±0.039 in.)
Repeatability	0.001 % F.S. or 0.381 mm (0.015 in.) ¹ (any direction)
Operating conditions	
Operating temperature	Electronics: -4071 °C (-40160 °F) Sensing element: -40125 °C (-40257 °F) ² Temperature element: -40105 °C (-40221 °F)
Design / Material	
Wetted parts Non-wetted parts	Stainless steel (AISI 316L), Hastelloy [®] C, Teflon ^{® 3} Stainless steel (AISI 316L), epoxy coated aluminum
Order length	Rigid pipe: 3057620 mm (12300 in.) ^{4,5}
Vessel pressure	Rigid pipe: 69 bar (1000 psi) Teflon® pipe: 1.75 bar (25 psi)
Electrical connection	
Operating voltage	10.528 VDC

1 Whichever is greater

2 Contact factory for specific temperature ranges 3 Contact factory for atternative materials 4 Contact factory for oligner lengths 5 Order length equals the measurement range plus the inactive zone



Controlling design dimensions are in millimeters and measurements in () are in inches

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Document Part Number 551862 Revision B (EN) 03/2018

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