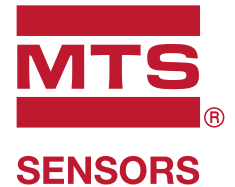


Level Plus®

Magnetostrictive Liquid Level Transmitters
with Temposonics® Technology



RefineME® Product Brief

- ▶ **No scheduled maintenance or recalibration**
- ▶ **Inherent accuracy ± 1 mm**
- ▶ **Hazardous area certified**



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

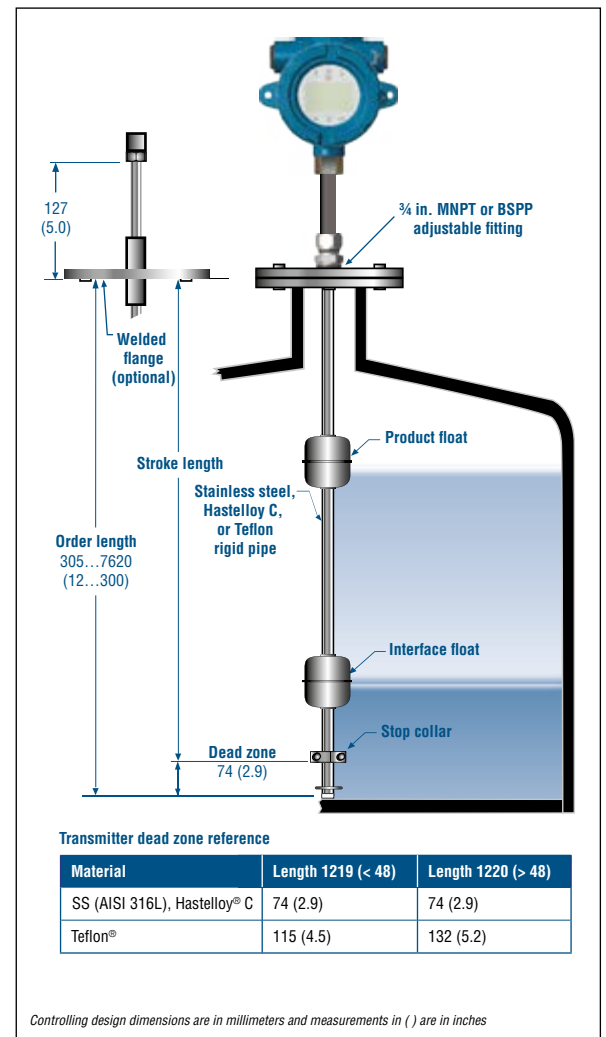
- Intrinsically safe
- Explosion proof / Flameproof
- API 3.1B
- API 7.3
- API 18.2
- SIL2

TECHNICAL DATA

Output	
Output signal / Protocol	Analog (4...20mA), 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: -40 ...71 °C (-40...160 °F) Sensing element: -40...125 °C (-40...257 °F) ² Temperature element: -40...105 °C (-40...221 °F)
Design / Material	
Wetted parts	Stainless steel (AISI 316L), Hastelloy® C, Teflon® ³
Non-wetted parts	Stainless steel (AISI 316L), epoxy coated aluminum
Order length	Rigid pipe: 305...7620 mm (12...300 in.) ^{4,5}
Vessel pressure	Rigid pipe: 69 bar (1000 psi) Teflon® pipe: 1.75 bar (25 psi)
Electrical connection	
Operating voltage	10.5...28 VDC

- ¹ Whichever is greater
² Contact factory for specific temperature ranges
³ Contact factory for alternative materials
⁴ Contact factory for longer lengths
⁵ Order length equals the measurement range plus the inactive zone

TECHNICAL DRAWING



Authorised distributor

In Australia:

For customer service, call 1300-735-292
 To fax an order, use 1800-067-639
 To email an order, ordersau@thermofisher.com

In New Zealand:

For customer service, call 0800-933-966
 To fax an order, use 0800-329-246
 To email an order, ordersnz@thermofisher.com

ThermoFisher
SCIENTIFIC

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



UNITED STATES

MTS Systems Corporation
Sensors Division
Phone: +1 919 677-0100
E-Mail: info.us@mtssensors.com

GERMANY

MTS Sensor Technologie
GmbH & Co. KG
Phone: +49 2351 9587-0
E-Mail: info.de@mtssensors.com

ITALY

Branch Office
Phone: +39 030 988 3819
E-Mail: info.it@mtssensors.com

FRANCE

Branch Office
Phone: +33 1 58 4390-28
E-Mail: info.fr@mtssensors.com

GREAT BRITAIN

Branch Office
Phone: +44 79 44 15 03 00
E-Mail: info.uk@mtssensors.com

CHINA

Branch Office
Phone: +86 21 6485 5800
E-Mail: info.cn@mtssensors.com

JAPAN

Branch Office
Phone: +81 42 707 7710
E-Mail: info.jp@mtssensors.com

www.mtssensors.com

MTS, Temposonics and Level Plus are registered trademarks of MTS Systems Corporation in the United States; MTS SENSORS and the MTS SENSORS logo are trademarks of MTS Systems Corporation within the United States. These trademarks may be protected in other countries. All other trademarks are the property of their respective owners. Copyright © 2018 MTS Systems Corporation. No license of any intellectual property rights is granted. MTS reserves the right to change the information within this document, change product designs, or withdraw products from availability for purchase without notice. Typographic and graphics errors or omissions are unintentional and subject to correction. Visit www.mtssensors.com for the latest product information.

Image reference:

Front page: © Alex Staroseltsev - Fotolia.com