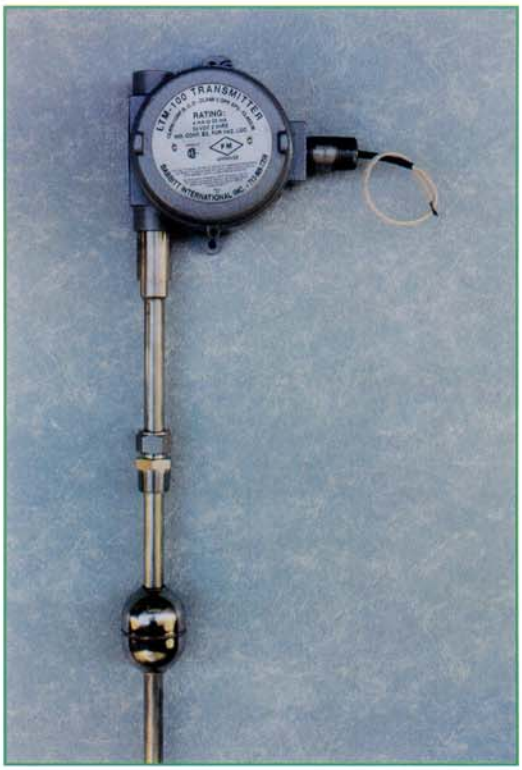
BABBITT INTERNATIONAL

LTM-100S Magnetostrictive Level Transmitter



FEATURES

- Accuracy to .01% of Full Span
- .005% Repeatability
- Dual output capability - 4-20 mA:
  Level and Temperature or
  2 Levels for Interfaces
- Optional HART Protocol
- Quick calibration for Zero and Span -
  In the field or on the bench
- Loop Powered 15 to 36 VDC

APPLICATIONS

- Interfaces - 3" minimum separation
- Propane
- Acids
- Pharmaceuticals
- Underground Tank Gauging
- Batching Processes

GENERAL

The LTM Series Magnetostrictive Level Transmitter is an accurate, stand-alone, loop powered device, usually mounted in the top of a tank or other container. It may also be used as a level transmitter when mounted externally on a Babbitt Magnetic Level Gauge (brochure LS99-A).

The unit is suitable for liquid applications that require high accuracy and repeatability. The unit may be ordered in several configurations that will give outputs of simple level, level and temperature, or two levels as in an interface application.

HART protocol is also available.

CALIBRATION

The unit may be calibrated on the bench or in the tank where it will be used. Simply locate the float where you want the "zero", press a button, then move the float to the "span" position and press another button. It's that fast and simple!

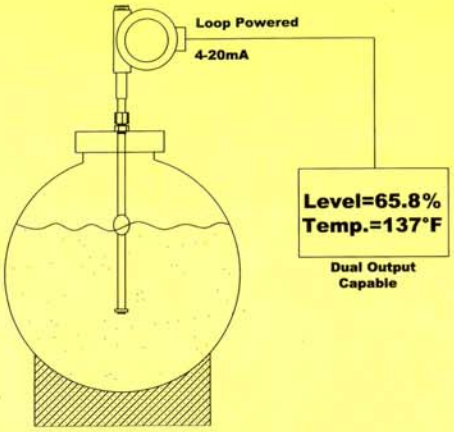
The memory is non-volatile, so the unit stays calibrated even during loss of power.

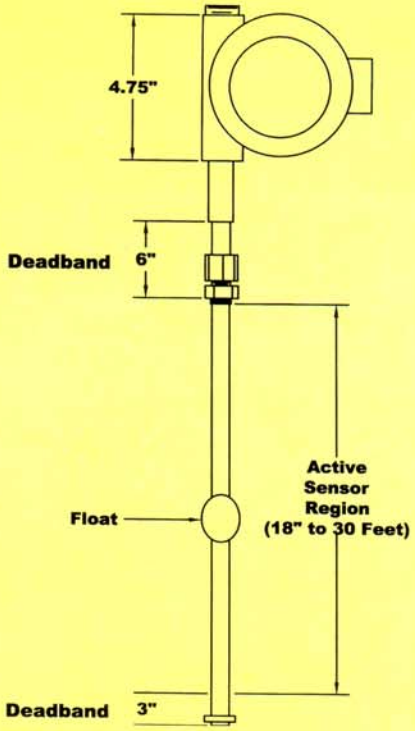
THEORY OF OPERATION

The sensor consists of a 5/8" stainless steel tube with a heat-treated wire stretched through the center of it. A magnetic float is placed around the tube and tracks the fluid level.

A low power microprocessor-controlled circuit produces a high current pulse which is transmitted down the heat-treated wire. The magnetic field in the float interferes with the high current pulse creating a torsional wave which is "bounced" back to the electronics. The transit time of the wave is converted to a 4-20 mA signal, proportional to the fluid level.

BABBITT INTERNATIONAL (713) 467-4438 • P.O. Box 70094 • Houston, Texas 77270 • www.babbittlevel.com





SPECIFICATIONS

ELECTRONICS

Repeatability:	.005% of FS or .015" whichever is greater
Non-linearity:	.01% of FS or .030 whichever is greater
Accuracy:	.01% of FS or .020 whichever is greater
Analog Output:	.025% of full scale
Supply Voltage:	15 to 36 VDC
Outputs:	Dual 4-20 mA capable; Primary: level & HART Second: level or temp.
Calibration:	Two push-buttons or via HART
Diagnostics:	On-board via LED
Damping:	1-15 seconds (field adjustable)
Temperature:	-40 to 150 degrees F
Housing:	Cast Aluminum - Epoxy Coated

SENSOR ASSEMBLY

Material:	As specified 316SS, 304SS Hastelloy, Kynar or specials.
Operating Temp.:	-40 to 300 degrees F
Max. Pressure:	900 psig @ 300 F
Measuring Range:	18" to 30 feet *
Mounting:	3/4" MNPT compression fitting standard; other sizes available. 2" min. nozzle size for the float. Flanges available.

***A stilling well is recommended for lengths over 10 feet or when in turbulent applications.**

APPROVALS FM, CSA

Class I, Div. 1, Groups B, C & D
Class II, Div. 1 & 2, Groups E, F & G
Class III
Specifications subject to change without notice.

ORDERING INFORMATION

LTM-100S- 316 - 3/4" - .09 - 150F - 300 PSIG - 72" - X

MATERIAL
316 = 316SS
304 = 304SS
KYN = KYNAR
OTHER-SPECIFY

PROCESS CONN.
3/4" NPT STD.
OTHER-SPECIFY

MIN. SPECIFIC GRAVITY

MAX. OPER. TEMP.

MAX. OPER. PRESSURE

MEASURING (ACTIVE) LENGTH

OPTIONS (SPECIFY)
X = HART
X = TEMP. OUTPUT (RANGE)
X = STILLING WELL (FOR APPLICATIONS LONGER THAN 10 FEET OR TURBULENT SERVICES)

Distributed By:

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