Magnetostrictive Level Transmitter

for Liquids

measuring • monitoring • analyzing

NMT

- Measuring Length: 300...4000 mm
- Accuracy: ±1 mm
- Max. Pressure: 145 PSIG
- Media Temperature Range: -4...158 °F
- Material: Stainless Steel
- 4-20 mA, 4-Wire Analog Output
- Insensitive to Shock and Vibrations

KOBOLD companies worldwide:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLOMBIA, CZECH REPUBLIC, EGYPT, FRANCE, GERMANY, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, ROMANIA, SINGAPORE, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, UNITED KINGDOM, USA, VIETNAM

KOBOLD Instruments, Inc.
1801 Parkway View Drive
Pittsburgh, PA 15205
Main Office:
1.800.998.1020
1.412.788.4890
info@koboldusa.com
www.koboldusa.com

01/02-2014

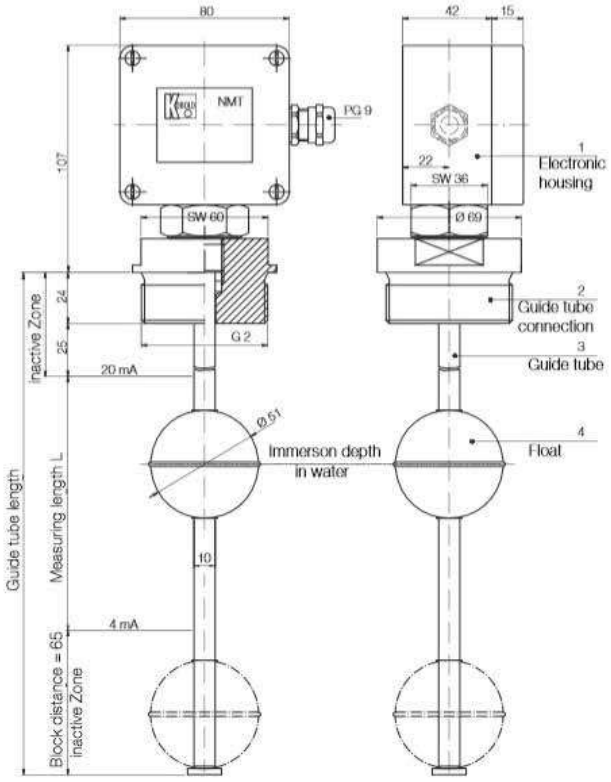
Description

The KOBOLD NMT level transmitter is an accurate, float-controlled sensor designed for continuous level sensing. It is comprised of two parts: the magnetostrictive sensor within the measuring tube and the four-wire transmitter in the connection box. The measurement principle is based on echo time or time of flight. A magnetostrictive wire is tensioned inside the measuring tube and current pulses are transmitted though the wire generating an annular magnetic field around the wire. The wire is axially magnetized by magnets fitted within the float. Due to the positioning of both magnetic fields, a torsional impulse is generated in the vicinity of the float magnet, which propagates with ultrasonic speed in both directions. The distance from the float magnet to the defined zero-point is measured by the echo time principle. The integrated electronic module transforms the signal into a standardized analog signal. Common uses for the NMT include: the chemical industry, pharmaceutical industry, tank farms, power stations, and the process industry.

Specifications

Accuracy:	±1 mm
Measuring Length:	300...4000 mm
Length of Measuring Tube:	Measuring Length + 114 mm
Overall Length:	See Dimensional Drawings
Standard Float Density:	1.0 S.G. (1.0 kg/dm^3)
Special Float Density:	0.7 S.G. (0.7 kg/dm^3)
Operating Temperature:	-4...158 °F
Max. Operating Pressure:	145 PSIG
Materials	
Connection:	316L Stainless Steel
Measuring Tube:	316L Stainless Steel
Float:	UNS 32760 Stainless Steel (1.0 S.G.) 316L Stainless Steel (0.7 S.G.)
Connection Box:	Aluminum w/ Cable Gland
Process Connection:	2" NPT or G2 Male
Analog Output:	4-20 mA, 4-wire
Load:	500 Ω
Power Supply:	24 VDC ± 20%, Max. 150 mA
Ingress Protection:	IP 65

Dimensions (mm)



Order Details (Example: **NMT-1201 N50***)

Description	Model	Connection
Level Transducer with 1.0 S.G. Float	**NMT-1201**	**..N50** = 2" NPT
Level Transducer with 0.7 S.G. Float	**NMT-1208**	**..R50** = G2

*When Ordering: Please specify Measuring Length: "L"
Overall Length of Guide Tube = Measuring Length "L" + 114 mm (Inactive Zones)

Electrical Connection