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



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OBOLD

Magnetostrictive Level Transmitter Model NMT

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: $\pm 1 \text{ mm}$ Measuring Length: 300...4000 mm

Length of Measuring Tube:Measuring Length + 114 mmOverall Length:See Dimensional DrawingsStandard Float Density:1.0 S.G. (1.0 kg/dm³)Special Float Density:0.7 S.G. (0.7 kg/dm³)

Operating Temperature: -4...158 °F
Max. Operating Pressure: 145 PSIG

Materials

Connection:316L Stainless SteelMeasuring Tube:316L Stainless SteelFloat: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: $24 \text{ VDC} \pm 20\%$,

Max. 150 mA

Ingress Protection: IP 65

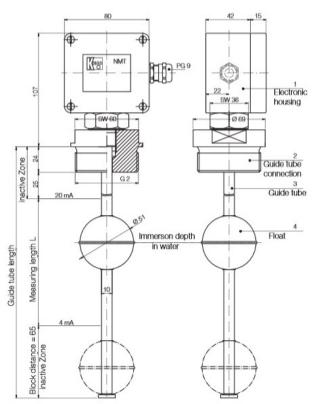
Order Details (Example: NMT-1201 N50*)

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)



Dimensions (mm)



Electrical Connection

