



## Magnetostrictive Level Meters for Liquids



measuring  
•  
monitoring  
•  
analysing



- Measuring length:  
300 to 4000 mm
- Accuracy:  $\pm 1$  mm
- Pressure: max. PN 10
- Temperature:  
 $-20^{\circ}\text{C} \dots +70^{\circ}\text{C}$
- Connection:  
G 2 male thread, 2 NPT
- Material: stainless steel
- Analogue output: 4 - 20 mA
- Free of wear and tear
- Insensitive to impact  
and vibrations

N2



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**Model:**  
NMT



**Description**

The Kobold level meter NMT is a very accurate float-controlled sensor for continuous sensing of levels.

The instrument comprises two parts:

- Magnetostrictive sensor in the measuring tube
- Four-wire transmitter in the connection box

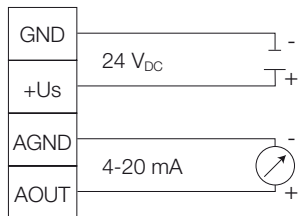
**Function Principle**

The principle of measurement is based on echo time measurement. A magnetostrictive wire is tensioned in the measuring tube. Current pulses are transmitted through the wire thus generating an annular magnetic field around the wire. The wire is also magnetized axially by magnets fitted in the float. Due to the superposition 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 a defined zero-point is measured by an echo time measurement. The integrated electronics transforms the signal to a standardized analogue signal.

**Applications**

- Chemical industry
- Pharmaceuticals industry
- Tank farms
- Power stations
- Process industry

**Electrical connection**



**Order Details** (Example: NMT-1201 R50)

Description	Model	Connection
Transducer Measuring tube st. steel Density 1.0 kg/dm <sup>3</sup>	<b>NMT-1201</b>	<b>R50</b> =G 2 <b>N50</b> =2 NPT
Transducer Measuring tube st. steel Density 0.7 kg/dm <sup>3</sup>	<b>NMT-1208</b>	

Please specify Measuring length or length of measuring tube in writing.  
Length of measuring tube = measuring length + 114 mm (non-active zone)

**Technical Details**

- Accuracy: ± 1 mm
- Measuring length: 300 to 4000 mm
- Length of measuring tube: measuring length + 114 mm
- Overall length: see Dimensions
- Standard density: 1.0 kg/dm<sup>3</sup>
- Special density: 0.7 kg/dm<sup>3</sup>
- Operating temperature: -20 to +70 °C
- Max. operating pressure: PN 10
- Connection / meas. tube: stainless steel 1.4571
- Float: st. st. 1.4501 (density 1.0 kg/dm<sup>3</sup>)  
st. st. 1.4571 (density 0.7 kg/dm<sup>3</sup>)
- Connection box: aluminium
- Process connection: G 2 male or 2 NPT
- Electrical connection: terminal block in the connection box
- Analogue output: 4 - 20 mA 4-wire
- Load: 500 Ω
- Power supply: 24 V<sub>DC</sub> ± 20%, max. 150 mA
- Power consumption: max. 150 mA
- Protection: IP 65

**Dimensions**

