

# Magnetostrictive Level Meters

for Liquids



measuring

monitoring

analysing

## **NMT**



- Measuring length: 300 4000 mm
- Accuracy ±1 mm
- p<sub>max</sub>: PN 10; t<sub>max</sub>: -20...+70°C
- Connection: G 2 male, 2" NPT
- Material: stainless steel
- Analogue output: 4 20 mA
- Free of wear and tear
- Insensitive to impact and vibrations



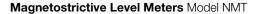
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#### **Description**

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

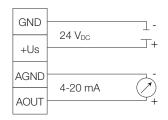
#### **Function Principle**

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/dm³	NMT-1201	<b>R50</b> = G 2
Transducer Measuring tube st. steel Density 0.7 kg/dm³	NMT-1208	<b>N50</b> = 2" NPT

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...4000 mm

Length of measuring tube: measuring length +114 mm

Overall length: see Dimensions
Standard densitiy: 1,0 kg/dm³
Special density: 0,7 kg/dm³
Operating temperature: -20...+70 °C

Max. operating pressure: PN 10

Connection/meas. tube: stainless steel 1.4571 Float: stainless steel 1.4501

(density 1,0 kg/dm³) stainless steel 1.4571 (density 0,7 kg/dm³)

Connection box: aluminium

Process connection: G2 male or 2" NPT

Electrical connection: terminal block in the connection

box

Analogue output: 4 ... 20 mA 4-wire

Load:  $500 \Omega$ 

Power supply:  $24 V_{DC} \pm 20\%$ , max. 150 mA

Power consumption: max. 150 mA

Protection: IP 65

#### **Dimensions**

