

VISY-Stick

The Level and Environmental Sensor based on the Magnetostrictive Measuring Principle

VISY-Stick is a level and environmental sensor that has been specially designed to offer high-precision volume and leakage monitoring.



VISY-Stick magnetostrictive sensors with screw-in unit (left) and for riser installation (right)

Function

The VISY-Stick sensor operates in accordance with the magnetostrictive measuring principle. The sensor tube contains a wire made of magnetostrictive material. Magnets integrated in the floats magnetise the wire at the float position. The sensor electronics transmit current pulses through the wire, which generate a circular magnetic field.

A torsional wave develops at the point where the two magnetic fields overlap and it propagates towards the sensor head. In the sensor head, these waves are converted into an electrical signal. The float positions and the temperature are calculated from the different propagation times.

Design

A VISY-Stick comprises:

- » Stainless steel sensor housing
- » Stainless steel sensor tube
- » Brass screw-in unit
- » (height adjustable)*
- » Stainless steel product float
- » Stainless steel water float

Features of FAFNIR technology

- High-precision sensors based on the magnetostrictive measuring principle
- Detects product filling level, product temperature and water level
- All parts with media contact are made of high-quality stainless steel
- Maintenance-free
- Permanent self-diagnostics
- Also suitable for AdBlue
- Optional: with 1" floats and screw-in unit*
- Wireless link to VISY-Command supported

* for use in AdBlue, the screw-in unit is made of stainless steel

Technical Data

VISY-Stick

Standard Version:

» Product:

Accuracy: ± 0.5 mm;
 Repeatability: ± 0.1 mm;
 Resolution: 0.001 mm;
 Response threshold: 75 mm*;
 Floater: $\text{Ø } 43$ mm, 1½"

» Water:

Accuracy: ± 2 mm
 Repeatability: ± 0.5 mm;
 Resolution: 0.001 mm;
 Response threshold: 23 mm*;
 Floater: $\text{Ø } 43$ mm, 1½"

* Product density and the position of the other float may result in variations

» Temperature:

Measuring range:
 - 40 °C to + 85 °C;
 Accuracy: ± 1 °C (20 °C);
 Repeatability: ± 0.5 °C;
 Resolution: 0.001 °C

» Process connection:

R1½ screw-in unit continuously
 variable height adjustment

» Electrical connection:

M12 Plug connector

» Protection class: IP68

» Sensor material:

Stainless steel 304 (Tube),
 Stainless steel 303 (Head)

» Approvals:

ATEX, NEPSI, IECEx, UL-Brazil

» Certificate: CPA

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Options:

- » Riser installation
- » Battery-powered sensor with wireless link to the VISY-Command measurement analysis unit
- » 1" Installation kit
- » Screw-in unit made of stainless steel

