

VISY-Stick Advanced

The high-precision level and environmental sensor based on the magnetostrictive measuring principle

The VISY-Stick Advanced level sensor is ideal for applications that demand maximum precision and is also suitable for detecting tank leaks.



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

Function description

The VISY-Stick Advanced sensor operates in accordance with the magnetostrictive measuring principle. The probe 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 probe head. In the probe head, these waves are converted into an electrical signal. The float po-

sitions are calculated from the different propagation times. For precision temperature measurements, the sensor tube of the VISY-Stick Advanced contains temperature sensors.

Features of the FAFNIR technology

- Detects product filling level, water level, and temperatures at multiple points along the measurement length
- Precise gauging of product temperature by means of temperature sensors
- Detects even the most minimal of level changes
- Wireless link to a VISY-Command RF possible
- Certificates: CPA, EPA, OIML

Technical data
VISY-Stick Advanced

Standard version

- » Product:
 - Accuracy ±0.25 mm;
 - Repeatability ±0.05 mm;
 - Resolution 0.001 mm;
 - Response threshold 75 mm*;
 - Float Ø 54 mm, 2";
- » Water:
 - Accuracy ±2 mm;
 - Repeatability ±0.5 mm;
 - Resolution 0.001 mm;
 - Response threshold 23 mm*;
 - Float 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 ±0.3 °C (20 °C);
 - Repeatability ±0.1 °C;
 - Resolution 0.001 °C
- » Process connection:
 - R 1½ screw-in unit, brass, height adjustable
- » Electrical connection:
 - M12 Plug connector
- » Casing protection: IP68
- » Sensor material:
 - stainless steel
- » Approval:
 - ATEX, NEPSI, IECEX, UL-Brazil
- » Certificates: CPA, EPA, OIML

Options

- » Riser installation
- » Battery-powered transmitter VISY-RFT for wireless link to the VISY-Command RF control unit
- » Screw-in unit made of stainless steel

