



Site Efficiency
& Connectivity

We Believe in Choice.

ProGauge® Magnetostrictive XMT-RF Probe.

The wireless ProGauge Magnetostrictive XMT-RF Probe is perfect for sites wishing to avoid expensive digging, wiring and cabling costs. They are able to transmit data up to 80 metres from underground tanks—a distance which can be extended to 800m with the aid of an additional above ground RF receiver—and are well-equipped and rigorously tested to manage environments where wireless coverage is typically limited. The wireless liquid level probes benefit from all of the same features as the wired probe.

The Magnetostrictive XMT-RF Probe operates on the principle known as the Wiedemann effect. The transmitter consists of a microprocessor-based electronic circuit located in the head and a stainless steel measuring rod containing a waveguide, which is inserted into the tank. The probe's electronics send a high-frequency electrical pulse, and at the exact point of intersection with the magnetic field (generated by the permanent magnet contained in the float), a mechanical pulse is generated due to magnetostrictive torsional deformation.



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ProGauge®



Technology.

- Magnetostrictive
- Intrinsically Safe Model
- Microprocessor-based electronics
- Wireless transmission 169-434 MHz

Housing.

- AISI 304 stainless steel and composite, 50mm external diameter

Degree of Protection.

- IP68 protection (immersion depth 1.20m for 24 hours)

Installation Options.

- ¾" NPT-M (sliding) - 2" GAS-M (sliding) - (other threads on request)
- Flanged EN1092-1 or ANSI (DN and materials on request)
- "In riser" version, i.e. the probe is inserted into a 2" still tube (the transmitter is then closed with an isostatic material cap)

Shaft.

- Diameter 16mm

Floats.

- Ø 50mm
- (Ø 1" NBR for special applications)

Shaft Length.

- From 500mm up to 12000mm in 250mm segments (sizes beyond this standard pitch on request)

Signal Transmission Distance.

- 800m in open space
- 80...100m from inside the manhole (the distance is influenced by construction)

Measurement.

- Product level
- Interface level, i.e., detection and measurement of any water in the tank
- Product temperature via one digital sensor integrated into the probe

Accuracy.

- $\pm 0.5\text{mm}$

Resolution.

- 0.1mm

Temperature Sensor Accuracy.

- $\pm 0.2^{\circ}\text{C}$

Temperature Resolution.

- 0.0625°C

Power Supply.

- Intrinsically safe battery, lifespan 3 to 5 years depending on operating conditions

Operational Temperature.

- $-40^{\circ}\text{C} \dots +60^{\circ}\text{C}$

Accessories.

- Antenna extension for signal transmission for all-metal manhole covers
- Antenna protection cap made of isostatic material
- Double pipe construction to allow maintenance with the tank under pressure (e.g. liquefied petroleum gas (LPG) tank)

Materials | Shaft.

- AISI 304 or AISI 316L on request

Materials | Float.

- Ø 50mm in AISI316L
- Ø 50mm in NBR
- Ø 50mm in NBR (LPG)
- Ø 50 mm in NBR (AEF) - Aqueous Ethanol Float - Float to detect the presence of Aqueous Ethanol (to be installed as an alternative to the float for water detection)
- Ø 1" in NBR for special applications

Materials | Connection Flange.

- AISI316L - AISI304 - Carbon Steel - (other materials on request)

Materials | Threaded Connection.

- ¾" NPT-M in nickel-plated brass (sliding)
- ¾" NPT-M in nickel-plated brass (sliding) with double seal (for LPG)
- ¾" NPT-M AISI316 (sliding)
- 2" GAS-M in galvanized steel (sliding) - (other materials on request)

Certifications.

- CE mark
- ATEX
- PESO
- UL-BR INMETRO
- OIML R85

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