

SMALL SPACE. BIG REQUIREMENTS

Engineering Reliable Sensing Into Compact Spaces





The Challenge:

A manufacturer of premium coffee and espresso machines needed a reliable method for detecting water levels and monitoring the position of removable water reservoirs. The challenge was integrating multiple sensing functions into an already compact design while maintaining reliable operation in a moisture-prone environment.

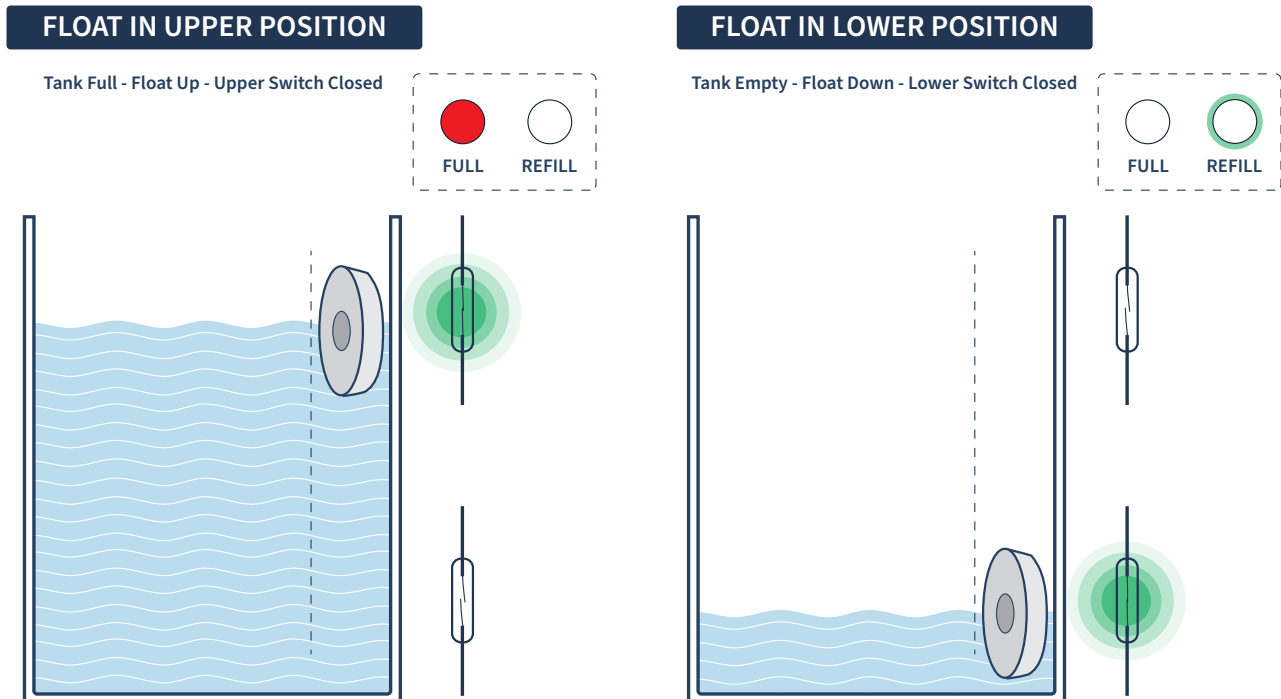
Space constraints, fluid exposure, and varying installation requirements made standard sensing approaches difficult to implement without affecting overall product design.

The Solution

Rather than forcing the application to fit a standard sensor, Standex Detect developed an application-specific sensing solution using reed sensor technology and magnetic actuation. The design enabled reliable position and level detection while maintaining physical separation between the sensor and moving components.

The solution offered:

- Minimal installation space requirements
- Hermetically sealed sensing technology
- Reliable operation in wet environments
- Flexible mounting options
- Long operational life





The Outcome

The customer achieved reliable sensing performance without increasing product footprint or compromising system design.

The result was:

- Compact integration
- Reliable position detection
- Reliable fluid-level monitoring
- Simplified system architecture
- Long-term operational reliability



Key Takeaway:

When installation space is limited, successful sensing solutions require more than miniaturization. They require a design engineered around the application's specific mechanical, environmental, and performance requirements.



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