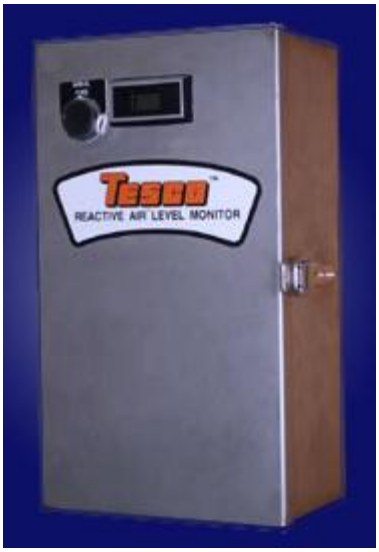
Reactive Air Level Monitor



Continuous fluid level monitoring system specifically developed for water and wastewater.
A trapped-air fluid level monitoring instrument designed for applications in most liquids and slurries.
This technology offers an elegantly simple solution for measuring fluid levels with extreme reliability and accuracy in liquids containing up to 30% solids.

Benefits

- Simplified operation
- Increased system reliability
- Cost-effective
- No maintenance requirements

Features

- Choose from 120VAC or 12VDC
- High-strength polymer bell resists corrosion and material build-up
- Not susceptible to inaccuracies due to foaming or solids build-up
- Self-cleaning components
- High noise immunity
- Operation can continue without power for compressor, for up to 30 days
- Wide variety of pressure ranges available
- Compression bell can be mounted up to 1000 feet from pressure transmitter
- Output hold during purge, with adjustable duration
- Optional, surface mounted cabinet
- Optional, digit display provides visual indication of measured level
- Optional, manual purge switch

SIMPLICITY & ROCK-SOLID RELIABILITY
TESCO's REACTIVE AIR LEVEL MONITOR

Tesco's Reactive Air Level Monitor consists of a compression bell connected to a sensing tube. The sensing tube routes the pressure to a remotely mounted pressure transmitter. The principal of operation is based on the fact that a change in fluid level outside the bell will compress the trapped air column proportional to the change in fluid level. The purpose of the bell is to provide a large volume of trapped air in order for a large change in level outside the bell to result in a relatively small change in fluid level within the bell.
This small change in level within the bell, however, corresponds with a significant change in pressure at the pressure transmitter. TESCO has arrived at an optimal bell volume that increases system accuracy and decreases compressor volume displacement requirements.
Due to the fact that many liquids absorb a substantial amount of air over time, and the need to prevent solids build-up, an integral compressor is used to purge the pressure bell. The compressor is sized to provide a blast of air through the tube into the compression bell. This

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Reactive Air level monitor

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blast causes any solids that may have accumulated around the bell opening to dislodge and, at the same time, replenishes the air column. During the purge cycle, the level seen by the pressure transmitter is frozen using onboard electronics. A solenoid valve automatically isolates the pressure transmitter from the sensing line during the purge cycle, eliminating undue shock to the pressure sensing element.

This method of level monitoring provides significant advantages over other products, such as capacitive, ultrasonic and continuous purge submersible devices. TESCO's REACTIVE AIR LEVEL MONITOR is immune to solids build-up and inaccuracies resulting from foaming or fluid separation. Since no electronics or electrical conductors are used between the bell and the pressure transmitter, high noise immunity is realized.

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