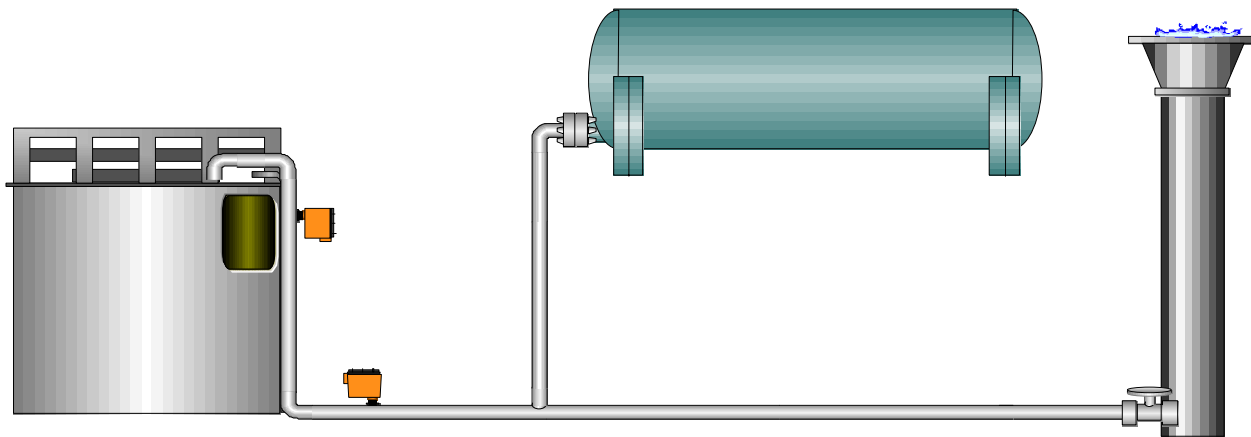


APPLICATION NOTE: 062706 Monitoring Digester Gas Flow
Water / Wastewater Treatment

Application: Monitor Gas Flow in a Digester

Product used: Kayden 800 Series Flow – Level – Interface – Temperature Switch



Description: Accurate and repeatable monitoring of the gas flow in anaerobic digester systems is critical to proper operations in any wastewater treatment plant.

Problem: It is extremely difficult to find *one device* that is versatile enough to perform in multiple applications and rugged enough to withstand the conditions in a WWT plant. Most WWT plants have several digesters, pumps, flocculant / sludge tanks, and sluice lines, each of which requires flow / level instrumentation that will resist damage caused by high / low temperatures, humidity, corrosion, and contamination.

Most flow / level instruments are either too expensive, too difficult to install, or are damaged when the probes are coated by the material / media. For this reason the E & I personnel in a typical WWT plant are forced to “adapt” and maintain an array of flow and level instrumentation.

Solution: **Kayden thermal dispersion switches perform reliably in applications where coating / contamination cause other instruments to fail.** The Kayden Classic 800 switch may be set to alarm either on flow (or increasing flow) or no-flow (or decreasing flow) with two independent relay contacts and 4-20mA analog output. The power, range, and set points may be independently and incrementally set for a wide range of response times and to eliminate “nuisance alarms”.

Kayden switches are versatile, easy to set up and require very little maintenance (no calibration is ever required). The electronics modules are interchangeable and 100% field-replaceable. **Every Kayden electronics module is built to be configured by the user for FLOW, LEVEL, INTERFACE LEVEL and / or TEMPERATURE applications in AIR, GASES, OIL, WATER-BASED LIQUIDS and SLURRIES.**

All units feature automatic, continuous self-diagnostics with auto-alarm function.

Other WWT Applications: *Pump protection, Tank (high / low) level, sluice line (flow), Flocculent / sludge control, Chemical (liquid or gas) injection / additive flow monitoring, Reverse flow detection*