

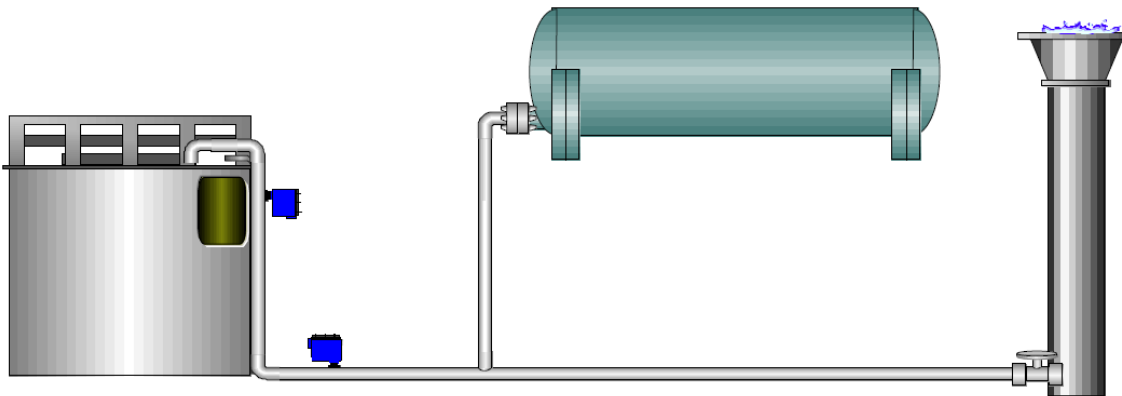


APPLICATION NOTE 364039: **MONITORING DIGESTER
GAS FLOW**

Water/Wastewater Treatment

Application: Monitor Gas Flow in a Digester.

Product Used: Kurz 6500 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, flocculent/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: Kurz thermal dispersion switches perform reliably in applications where coating/contamination cause other instruments to fail. The Kurz 6500 Series Switch may be set to alarm either on flow (or increasing flow) or no-flow (or decreasing flow) with two independent relay contacts and 4-20 mA 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”. Kurz switches are versatile, easy to set up and require very little maintenance. The electronics modules are interchangeable and 100% field-replaceable. **Every Kurz electronics module is built to be configured by the user for FLOW, LEVEL, INTERFACE LEVEL and/or TEMPERATURE applications in IR, 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.