



WATER & WASTEWATER **SOLUTIONS**

United Electric Controls is the leader in the application of threshold detection and switching technology. The UE line of pressure and temperature switches and transmitters meet the application challenges of water and wastewater treatment. They provide precise pump control, handle slurry service, submersible pressure monitoring, and stand up to corrosive media and atmospheres. Included in UE's offering is the innovative solid state One Series that is the ideal solution for isolation ring monitoring, providing a switch, digital read-out and 4-20 mA signal in one cost-effective instrument.



FILTER MAINTENANCE

Filtration is a key operating function of any water & wastewater plant. UE offers a versatile selection of pressure and differential pressure switches for the challenges associated with plugging of spray nozzles; fouling of pipes; blinding of scrubbers, membranes, R/O and analyzers; wearing of pump gland seals; plugging of irrigation heads; or initiating an automatic backwash cycle.

CORROSION-RESISTANT SOLUTIONS

Harsh environments and corrosive media require corrosion-resistant protection, so UE switches & transmitters incorporate 316 stainless steel enclosures and wetted material. 12 Series pressure switches provide a rugged, compact solution where instantaneous switching is required - i.e., valve actuation. UE's smart TX200H pressure transmitter monitors chemical treatment and other processes using the 4-20 mA output while transmitting process variable, tag and real-time diagnostic information to a control room using HART® 7 communication protocol.

APPLICATIONS

- Digesters
- Septic centrifuge feeds
- Wastewater transporting
- Thermal recovery
- Effluent monitoring
- Well and basin overflow
- Sewage lift stations
- Chemical feed pumps
- Pressure reducing valves

HART
COMMUNICATION PROTOCOL



- Wastewater recovery
- Isolation ring pressure sensing
- Monitoring lubrication oil
- Chemical injection
- SCADA system alarm and data input
- Distribution and storage
- Pump stations for hydrogen sulfide
- Tank levels
- Membrane filtration



PUMP CONTROL

For reliable, repeatable and accurate pump sequencing, you cannot make a better choice than UE's solid-state One Series switch models. These electronic monitors feature up to two fully programmable set points and deadbands that cover the entire range of the sensor. Modifying these settings is easy, yet remains tamper-resistant. Use the One Series to precisely control pumps while extending life and preventing cavitation. Sensor materials are all 316 stainless steel with welded diaphragms for gage and differential pressure.

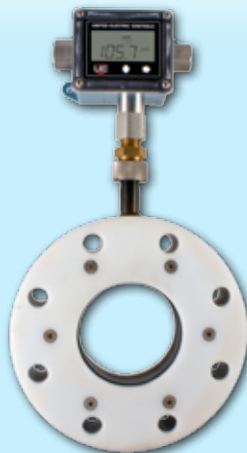
REVERSE OSMOSIS SYSTEMS

Mineral deposits inside and outside boiler tubes result in inefficiencies causing poor steam production and lack of power produced at the turbine. Avoid costly delays and maintenance by monitoring and trending your reverse osmosis system with reliable and accurate sensing solutions. Automate cartridge replacement with a wide variety of pressure and temperature sensors and reliable switch solutions. The UE line protects pumps and equipment throughout the facility.

ONE SERIES PROGRAMMABLE DELAY ELIMINATES NUISANCE TRIPS

Three instruments in one: Switch | Gauge | Transmitter

- Reduces costs/increases reliability
- A single pressure port to reduce potential leaks
- Digital display, switch and 4-20 mA output
- Self-checking diagnostics
- 0.1% of range repeatability
- Simple keypad setup and checking



Provides the perfect control of pump operation & sequencing!

Using UE's Solid State One Series:

- Fully adjustable on/off start/stop over the full sensor range via front keypad
- Tune pump to precisely match operating sequence and tank levels
- Extend pump life and protect from cavitation
- 316 stainless steel sensors with wide selection of differential and gage pressure ranges

ONE SERIES

Electronic Pressure, DP & Temperature Switches

- Fully adjustable set point and deadband
- 5X faster than a transmitter and 50% less installed cost
- Digital display includes process, status and self-diagnostics
- 2-wire and loop-powered 4-20 mA models available
- Measures gage pressure, differential pressure or temperature
- 0.1% repeatability with temperature compensation
- Provides the functions of a switch, gauge and transmitter
- Ranges to 6000 psi (410 bar), 200 psid (13.8 bar), 1000°F (538°C)



12 SERIES

Pressure, DP & Temperature Switches

- 316 stainless steel construction
- Dual seal switch certified to ANSI 12.27.01 standards
- Snap-acting belleville spring for vibration resistance and set point stability
- Convenient field setting and adjustment
- SPDT or DPDT hermetically sealed switches
- 316 stainless steel wetted parts are NACE MR-0175 compliant
- Ranges to 12,500 psi (860 bar), 150 psid (10 bar), 650°F (340°C)



100 & 400 SERIES

Pressure, Vacuum, DP & Temperature Switches

- Single, dual or triple switch outputs provide multi-switching for level control and pump staging
- Epoxy-coated aluminum enclosure designed to meet enclosure type 4X
- Wide variety of pressure sensors and materials
- Heat tracing and freeze protection thermostats
- Wide selection of adjustable set point ranges
- Easy installation and wiring



TX200H SERIES

HART Smart Pressure Transmitter

- 4-20 mA output with HART® 7 communication protocol
- 316 stainless steel enclosure and pressure connection
- Simple system commissioning and start-up
- 10:1 range turndown reduces inventory
- Real-time diagnostics report device health and process performance
- Utilizes existing wiring for easy upgrade of instrumentation
- Optimum temperature compensation limits thermal effects on sensor output



LPS

Low Pressure Switching Monitor

- Ideal for purging wastewater treatment plant air to prevent dangerous build up of hydrogen sulfide per NFPA 20 regulations
- Ranges from 0.2" wc to 50" wc
- LED display of process and high and low alarms
- 4-20 mA or 0-10 VDC analog output

