San Marcos, CA — With its no-moving parts flow/level sensor housed in a stainless steel package and NEMA 4X enclosure, the robust SIL-2 rated FLT93 Series Switch from Fluid Components International (FCI) is ready for the most punishing heavy marine seawater, acidic or alkaline fluids and wash-down cycles encountered in a wide range of industrial processes and plant environments.

The field-proven FLT93 Switches provide air/gas flow or point level measurement wherever exposure to seawater, salty air, harsh process fluids and heavy wash-downs are a requirement. Its flow/level sensors come in stainless steel, Hastelloy or other exotic metals for demanding service environments. This versatile switch offers users a choice of insertion or inline mounting, faster response or high flow rate capabilities and optional sanitary service.

Aboard offshore oil/gas platforms and large floating, production, storage and offloading (FPSO) vessels as well as other types of marine cargo and passenger ships, the continuous exposure of ordinary flow/level switches to corrosive sea water and air is an issue. In contrast, the FLT93 Switch with its stainless steel construction and NEMA 4X rating performs highly dependable flare gas and safety relieve valve leakage measurement as well as many other tasks including vessel boiler air flow monitoring and HVAC leak detection.

In oil/gas refineries and in many chemical plants, flow/level instruments are exposed to a wide range of harsh catalysts, solvents and other corrosive fluids including dirty methane and hydrogen sulfide gases that over time can affect measurement accuracy in less robust instruments. The rugged design of the FLT93 makes it a perfect fit in these harsh conditions that requires virtually no maintenance over a long service life.

The FLT93 Switch is a dual-function instrument that indicates both flow and temperature, and/or level sensing in a single device. Dual 6A relay outputs are standard and are assignable to flow, level or temperature. Based on FCI’s thermal dispersion expertise, the unique sensor technology

-More-
of the FLT93 Switches, combined with FlexSwitch™ temperature-compensation circuitry, introduces unparalleled performance capabilities:

- Exclusive flow accuracy as precise as ± 2% of the setpoint velocity over ± 50°F [± 28°C] temperature range; repeatability of ±0.5% reading
- Level resolution of ± 0.1 inch [± 2.5 mm]; repeatability of ± 0.05 inch [± 1.3 mm]
- Standard temperature accuracy ± 2.0 °F [± 1 °C]; repeatability ± 1.0 °F [± 0.6 °C]; improved temperature accuracy is available with factory calibration

One standardized, field-configurable FLT93 FlexSwitch control circuit satisfies virtually any combination of application requirements. FCI’s advanced FlexSwitch technology can be packaged in integral or remote configurations for installation flexibility.

The rugged FLT93 Switch is hydrostatically proof pressure tested to 3500 psig [240 bar (g)] at 70°F [21°C]. De-rated with temperature, the maximum operation service recommended is 2350 psig [162 bar (g)] at 500°F [260°C]. Higher ratings are available with special construction and test certification.

The FLT93 Switch beats the heat, too. Depending on the model and materials chosen, it withstands temperatures up to 850°F [454°C]. Comprehensive agency approvals for hazardous, Div. 1/Zone 1 environments include: ATEX, FM, FMc, IECEx, Inmetro and EAC/TRCU.

Fluid Components International is a global company committed to meeting the needs of its customers through innovative solutions to the most challenging requirements for sensing, measuring and controlling flow, level and temperature of air, gases, and liquids.