

MICROPROCESSOR BASED SUBMERSIBLE LEVEL SENSOR

ENGINEERING SPECIFICATION

The Submersible Level Transmitter shall be microprocessor based and be manufactured of 316SS and other non-corrosive materials.

The process diaphragm shall be all welded, convoluted 316SS protected by an integral PVC or SS nose cone assembly. Overall diameter shall be 1.0" and overall length shall be 5.1"

The microprocessor based electronic board shall be integral to the transmitter body and fully conformal coated. An integral temperature sensor shall provide data to the microprocessor to provide a compensated temperature range of -32° F to 122° F with wider compensated ranges available if required.

Overall accuracy shall be $\pm 0.1\%$ terminal based.

A two-wire 4/20mA output shall be standard as will a variety of digital outputs including MVnet, ASCII and MODBUS®. Level and temperature information shall be available with the MVnet and ASCII digital outputs.

Electrical connections shall be through a custom manufactured heavy wall, polyurethane jacketed, four (4) conductor cable without the need for 'breather' tubes or other pathways for moisture to ingress the electronic assembly. A variety of mounting options shall be standard.

Measurement ranges up to 350 ft/wc shall be available.

The transmitter shall be fully repairable by the manufacturer.

The Level Transmitter shall be Sigma Controls' Model 8000.