

## ENGINEERING SPECIFICATION – MODEL 6100MP

Process level shall be measured by a microprocessor based hydrostatic submersible level transmitter.

The level transmitter shall be constructed of 316 stainless steel with stainless steel or viton diaphragm. Body diameter shall be 1.25" with a 2.5" non-fouling process diaphragm. The unit shall be specially designed for sewage (or sludge) service.

The transmitter sensor shall be solid state, piezo resistive type, protected from the process media by the diaphragm and silicon oil fill fluid.

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  $\pm 0.25\%$  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.

The transmitter manufacturer shall offer several mounting options including conduit adaptors, pipe mounting brackets and cable suspension brackets.

The transmitter shall be fully repairable at the factory at a cost significantly less than a replacement unit.

Level transmitter shall be Sigma Controls Model 6100.