

ENGINEERING SPECIFICATION SUBMERSIBLE POINT LEVEL PROBES/RELAY

A) Submersible Point Level Probe

The well pump operation shall be controlled by a series of conductance level probes submersed in the well.

The probes shall be constructed of 316SS and shall be protected by a PVC shield to prevent contact with the pickup pipe. The submersible probe shall be 0.77 inches in diameter and 3.77 inches long with an integral packing style cable termination.

The submersible suspension cable shall be a single conductor, 18 AWG, 41 strand copper conductor with heavy wall 4/64 vinyl insulation.

The submersible probe shall be a Sigma Controls Model 200 with the required length of Model 200-SW suspension wire.

B) Conductance Control Relay

A conductance control relay shall be provided to which the submersible probes will be attached.

The control relay shall be an 8 or 11 pin octal design for secure socket base mounting. The relay shall offer single or double pole, double throw contacts rated at 10 Amp resistive at 120 or 250 VAC.

Excitation shall be provided by the relay for the down hole probes at safe low voltage levels.

The relay shall provide differential control action for 'pump up' or 'pump down' control modes and shall include an indicating LED when relay is activated.

The conductance relay shall be a Sigma Controls 1000 Series.