Float Based Level Control



Part 2 – Products

2.01 Level Controller

- A. Wetwell level shall be monitored and controlled by ____ (enter "4" if you don't want low level alarm, enter"5" to include low level alarm) float switches with intrinsically safe barriers. Each intrinsically safe barrier shall include an input closed LED. Red LED's shall indicate alarm input closed. Green LED's shall indicate pump called for float input closed. An amber LED shall indicate stop float input closed.
- B. The Form "C" output contacts shall be provided for high and low level alarm. Normally open contacts shall be provided for pump control. Red LED's shall be provided to indicate alarm output on and green LED's shall be provided to indicate pump control output on. Output contacts shall be rated for 10 amps @ 120 VAC.
- C. Selector switches shall be provided to select pump sequence (1-2/Auto/2-1), simplex or duplex operation, all pumps start enable on high level, N.O. or N.C. low level float input, alarm flashing or non-flashing outputs.
- D. A 0-3 minute adjustable time delay shall be provided to delay the starting of each pump. The lead pump start time delay shall be factory set at 5 seconds. inputs. The lag pump start time delay shall be factory set at 10
- E. A 0-3 minute off delay timer shall be provided to prevent the lead pump from short cycling if the low level and common stop float switch fail to close.
- F. All LED, selector switch and timer functions shall be silk-screened on the chassis.
- G. Description of Operation (If you are going to use 4 float control delete this text and B below. If you are going to use 5 float control delete this text and paragraph A below.)
 - 1. Under normal operating conditions the pumps shall cycle between the common stop float and start lead float. If the level rises to the start lag float the lag pump shall start and run in parallel with the lead pump until the stop float opens. If the level continues to rise the high level float shall close, causing the external alarm light to flash, and both pumps shall continue to run. If an alarm horn and silence circuit is provided the horn shall sound until silenced or the alarm condition is cleared. When provided the horn silence pushbutton shall be provided adjacent to the external alarm horn. Pressing the silence pushbutton shall silence the alarm horn and cause the external alarm light to go to a steady on state.
 - 2. Under normal operating conditions the pumps shall cycle between the common stop float and start lead float. If the level rises to the start lag float the lag pump shall start and run in parallel with the lead pump until the stop float opens. If the level continues to rise the high level float shall close, causing the external alarm light to flash, and both pumps shall continue to run. If an alarm horn and silence circuit is provided the horn shall sound until silenced or the alarm condition is cleared. If the level recedes past the common stop float, the low level float shall open, cutout the pumps, and cause the external alarm light to flash. If an alarm horn and silence circuit is provided the horn shall sound until silenced or the alarm condition is cleared. The pumps shall not restart until the level rises and closes the lead pump start float. When provided the horn silence pushbutton shall be provided adjacent to the external alarm horn. Pressing the silence pushbutton shall silence the alarm horn and cause the external alarm light to go to a steady on state.