

Pump Controller 701

Economical controller for pumps or valves.

2.21

General



The Pump Controller 701 is a compact instrument for accurate level control based on a 4 - 20 mA level input signal.

The Pump Controller 701 is supplied either complete with pressure transmitter model 2100 and cable bracket, or as a separate unit that accepts inputs from other pressure transmitters. (See also data sheet 2.75.)

When used with two pumps, the 701 can alternate the pumps to distribute the running hours between the pumps.

The Pump Controller 701 is a stand alone controller or installed in a control panel box integrated with other equipment.

Special features

- The Pump Controller 701 can be supplied with a rugged model 2100 hydrostatic level transmitter with measuring ranges of 10, 30, or 100 ft.
- The pressure transmitter model 2100 has polypropylene, PVC and stainless steel wetted materials, and is suited for measurement in surface waters, waste water and sludge, or other water applications.
- Pump Controller 701 is calibrated via the front panel. The calibration values are read on a voltmeter connected to the test sockets on the front where 0 - 1 V corresponds 0 - 10 / 0 - 100 ft, and 0 - 3 V corresponds to 0 - 30 ft. This eliminates the need for a mA simulator to set-up the 701.

Application

The Pump Controller 701 is designed for accurate measurement and reliable control of levels in tanks, containers, pumping stations, sewage plants, water works and the processing industry.

The Pump Controller 701 is easy to install and use for control of one pump with one level alarm, or two pumps between separately adjustable level control for each.

Function

The 701 accepts a 4-20mA signal from the sensor that is proportional to the level. The 701 compares the level signal to the

control set points to start and stop the pump(s) and/or the level alarm by switching on and off relays.

Specifications

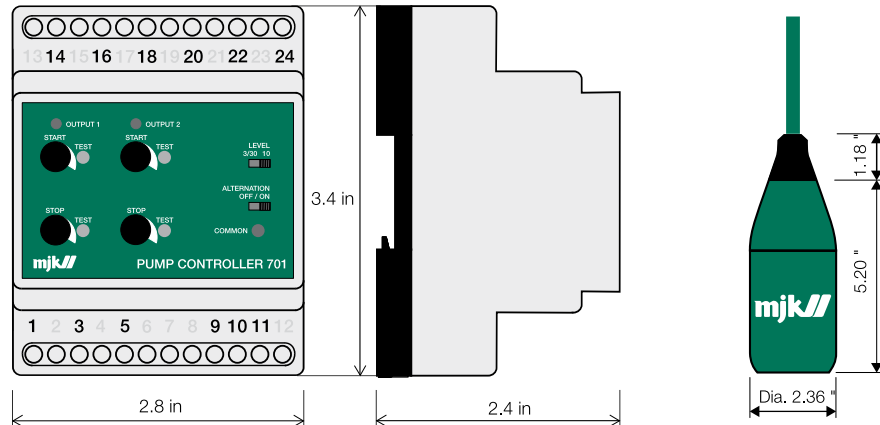
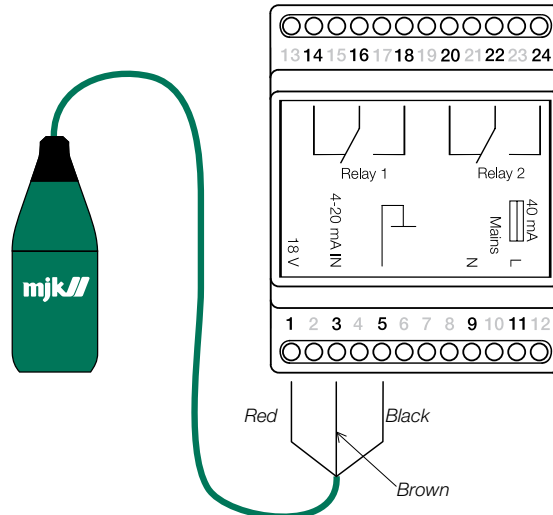
Pump Controller 701P

Measuring range:	4-20 mA (0 - 10 ft. / 0 - 30 ft. / 0 - 100 ft.)
Supply:	110 - 130 V AC
Temperature:	- 5 to 140 °F
Input signal:	From pressure transmitter (4-20 mA)
Accuracy:	± 1 %
Outputs:	2 nonpowered relays rated for 115 V AC, 4 A resistive load, (inductive 100 VA).
Operation:	From front panel
Dimensions:	3.4 x 2.8 x 2.4 in. (h x w x d)
Enclosure:	NEMA 1



Pressure Transmitter model 2100

Measuring ranges:	0 - 10 ft., 0 - 30 ft. or 0 - 100 ft. Custom ranges and cable lengths available on request.
Signal:	2-wire, 4-20 mA
Accuracy:	Better than $\pm 0.5\%$ FS.
Temperature:	15 to 150 °F
Material:	Housing in PP, diaphragm 316 stainless steel (AISI 316L)
Cable:	2 x AWG20, length = 39 ft. (100 ft. range: 115 ft.). Can be extended
Mounting:	Suspended on bracket.
Enclosure:	NEMA 6P, waterproof, max. 3 bar.

Dimensions**Connection****Order numbers**

209850	Pump Controller 701 without sensor, 4-20 mA input
209855	Pump Controller 701, 0 - 10 ft., complete with pressure transmitter model 2100
209856	Pump Controller 701, 0 - 30 ft., complete with pressure transmitter model 2100
209857	Pump Controller 701, 0 - 100 ft., complete with pressure transmitter model 2100