

Model 702 pH Monitor

Overview

The Model 702 pH Monitor is used in conjunction with either the Wedgewood Model B605 pH and conductivity/ temperature flowcell, Model B606 pH flowcell or Model B608 pH/temperature flowcell to measure the pH concentration of flowing process fluids. It is designed to operate with a standard combination pH electrode. A wide selection of available flowcell sizes and styles along with compatibility to many of the popular pH electrode brands on the market make the Model 702 applicable to a wide variety of applications throughout industry and research.

Ranges

The Model 702 is available calibrated to one of three full-scale measurements: 0 to 14pH, 0 to 10pH and 2 to 12pH. The temperature input range is 0 to 100°C.

Temperature Compensation

The Model 702 features built-in temperature compensation of the pH measurement. For automatic compensation to operate, the instrument requires an input signal representing 0 to 100°C (this signal is available from the Wedgewood Model 722 Conductivity/Temperature transmitter). The temperature input is used to correct for the different response of the pH probe at different temperatures. Where a temperature signal is not available, the temperature can be manually set using a front panel adjustment.

The Model 702 is designed to provide a measurement element in an overall control



scheme. It is ideally suited for computerized process plant where user interface with the process is through computer terminals and MMI nodes rather than directly with the measurement element.

Outputs

There are two analog outputs from the unit, a Voltage output and a 4 to 20mA current signal both tracking pH.

General

The electronics used at the heart of the Model 702 are state-of-the-art solid state low-noise amplifiers allowing accurate, repeatable and reliable measurement. The Model 702 is fully compliant to European CE directives.

All calibration of the instrument is done with adjustments to controls on the front panel. The 4 to 20mA outputs can be independently calibrated with controls on the back panel.

An optional NEMA 4X/IP66 polished stainless steel enclosure is available to enable the transmitter to be mounted locally in the field.

702 Features and Specifications

Model 702 Features

- ◆ Three Full Scale Ranges
- ◆ Front Panel Calibration Controls
- ◆ Maximum Range of 14pH
- ◆ Works With All Popular Combination Electrodes
- ◆ All Calibration Controls Accessible Externally
- ◆ AC or DC Power Supply Option
- ◆ Remote Temperature Input

Model 702 Specifications

Signal Inputs	Standard Combination pH Electrode 0 to 2Vdc for Temperature
pH Ranges	0 to 14pH, 0 to 10pH or 2 to 12pH
Calibrated pH Accuracy	±2% of range
Temperature Range	0 to 100°C
Temperature Accuracy	± 0.5°C
pH Outputs	4 to 20mA (0-400 ohm load) 0 to 2Vdc (10K ohm load min)
Power	115/230 Vac +/- 15%, 50/60 Hz, 6VA, (Optional 20-28Vdc, 5W)
Operating Environment	Temperature - 0 to 55°C Humidity - 0 to 90% RH
Dimensions	35mm DIN Rail Mount Enclosure 74 x 119 x 100mm (2.91" x 4.69" x 3.94")

Part Number Selection

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<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Cable Length F Feet ⇒ <input type="text"/> <input type="text"/> <input type="text"/> M Meters ⇒ <input type="text"/> <input type="text"/> <input type="text"/> N None ⇒ <input type="text"/> <input type="text"/> <input type="text"/> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Cable Type -Q Ingold Cable -R ISI Quick Disconnect pH Cable -N None -X Special </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Transmitter Range C- 0 - 10 pH D- 2 - 12 pH E- 0 - 14 pH </div> <div style="border: 1px solid black; padding: 5px;"> Power Supply C 115/230Vac D 24Vdc </div>		Enter 3 digit value for length <input type="text"/> <input type="text"/> <input type="text"/>						

