

# WPC-9001 ELECTRONIC PUMP CONTROLLER

The WPC-9001 is an electronic control module designed to automate the speed control of Williams pneumatically operated metering pumps. The WPC-9001 interfaces with our pumps through the use of an electro-pneumatic solenoid valve. The solenoid valve is used in place of our Oscillamatic® controllers, where the speed is adjusted manually.

# Superior Pump Control

The WPC-9001 is designed to receive a 4-20 mA input signal and generate a 24 VDC square wave output pulse. The pulses alternately energize and de-energize a 3-way solenoid valve, which in turn provides the air to operate the pump.





WPC-9001-XP (Nema 7) For Hazardous Locations

### **FEATURES**

- Annunciator light to indicate operation
- · Displays strokes per minute
- Displays total strokes
- Selector for dual pump system
- Annunciator light for pump selection
- Automatic switching for flow condition\*

- Pump selection reset button\*
- Selector/Annunciator for auto/manual mode
- Auto to manual switching for loss of signal\*\*
- Manual mode stroke rate adjustment\*\*
- Weatherproof Enclosures (Nema 4x) for GP
- Explosion Proof (Nema 7) Weatherproof Enclosures available for XP
- \* This feature applies to a two pump system. A flow switch is necessary to provide the no flow signal.
- \*\* During a manual mode the solenoid valve is operated by a repeat cycle timer. The rate can be adjusted through a potentiometer.

#### FLOW ELEMENT & TRANSMITTER

#### **INPUT POWER\***

- Standard 115 VAC, 48 watts (maximum)
- Standard 230 VAC, 48 watts (maximum)
- Optional 24 VDC

#### **ALARM OUTPUT SIGNALS**

- Loss of signal N/O, N/C dry contact
- No flow condition N/O, N/C dry contact
   With adjustable delay from 0 to 5 minutes
- Manual control mode N/O, N/C dry contact

#### **INPUT SIGNAL**

• 4-20 mA

## **OUTPUT POWER**

24 VDC, 0.5 A square wave pulse

#### SHIPPING WEIGHT:

- GP (Nema 4x) 11 lbs XP (Nema 7) 70 lbs
  - \* Specify power by adding the voltage to the base part number.

#### SIGNAL & POWER ELECTRICAL CONNECTION

- 1/2 inch NPT (F)
- XP classification: N.E.C., Class 1, Div 1& 2, Group C&D
- GP classification: Nema 4x
- Temperature Capabilities: 0° to 140°F (-18° to 60°C)

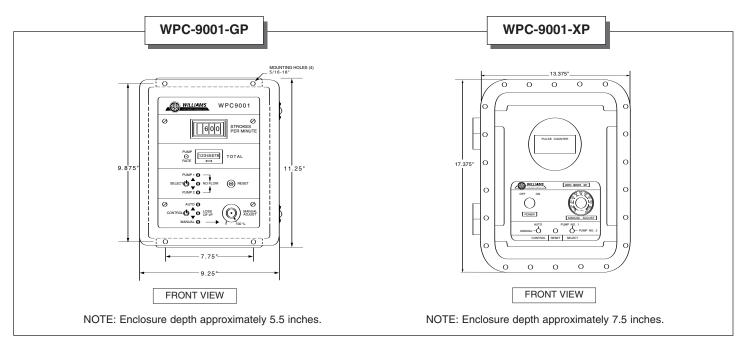
#### **OPERATION**

- Auto Mode The output is 0 to 45 strokes per minute in proportion to the 4-20 mA input. The rate is field adjustable.
- Manual Mode Field adjustable from 0 to 45 strokes per minute.
- Pump Switching Mode With a two pump system using the optional flow switch the unit selects the standby pump when no flow signal is transmitted.
- Auto/Manual Switching Mode With the loss of signal (signal drops below 3.5 mA for more than one minute) the unit automatically switches to the manual mode.

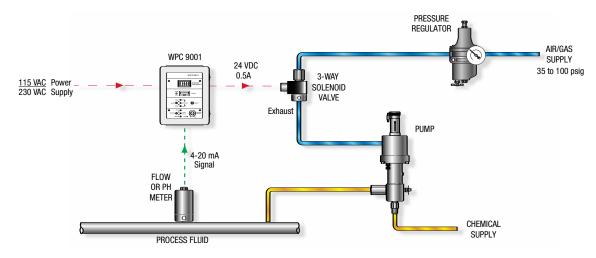


# WPC-9001 ELECTRONIC PUMP CONTROLLER

## **MOUNTING DIMENSIONS**



# **APPLICATIONS**



### PART NUMBER FOR ORDERING ORDERING

WPC-9001-GP-115 (Std. 115 VAC POWER)

WPC-9001-GP-230 (Std. 230 VAC POWER)

WPC-9001-GP-024 (Opt. 24 VDC POWER)

**WPC-9001-XP-115** (Std. 115 VAC POWER) **WPC-9001-XP-230** (Std. 230 VAC POWER)

WPC-9001-XP-024 (Opt. 24 VDC POWER)



201 Ivyland Road Ivyland, PA 18974-0577 USA • (215) 293-0415 • Toll Free in the USA (800) 235-3421 • Fax: (215) 293-0498 E-mail: info@williamspumps.com • www.williamspumps.com