

V300 Stroke Rate Controller

Precision Flow Control for
FMI Variable Speed Pumps
RHV, QV, & QVG50

NEW!

*For R&D, Laboratory,
Process, Test Stands, and
Production*



Features:

- Membrane Switches for manual Flow Rate Settings and Start / Stop functions
- 3 1/2 Digit LCD Flow Display
- Selectable 4-20 mA, 0-5 VDC, & 0-10 VDC input for communication with process instrumentation
- Start, Stop & Reverse Flow while maintaining flow settings
- Universal Power Input accepts 100-240 VAC 50/60 Hz
- Rugged, anodized aluminum enclosure designed for both bench-top & wall mounting



Call us at 516-922-6050 or use our convenient online application form on our web site: www.fmipump.com

V300 General Description

The V300 is a variable stroke rate metering pump system that drives FMI pumps from 5% to 100% of their rated flow with 0.1% adjustability. Typical speed rates for the direct drive system are 90 to 1800 strokes per minute. The system repeatability is 1%.

The metering system consists of two modules; a controller and a pump drive. The two modules are designed for convenient use in both the laboratory and production environments. The two modules are connected by a single cable. The standard pump drive cable is 4 meters while optional extension cables up to 20 meters are readily available. The controller module utilizes a 3½ digit numeric LCD and a membrane switch panel for easy user interface. Manual control of the stroke rate is simply a matter of pressing the up or down arrows until the desired percentage is displayed. The pump may be started or stopped without affecting the rate by using the Start and Stop buttons. The system includes three remote interface capabilities (4-20mA, 0-5V, and 0-10V) as well as manual control.

While configured for a remote interface, the actual percentage of the selected signal is displayed on the LCD for easy monitoring and troubleshooting. Configuring the remote interface is easily accomplished with a protected 'set and forget' screwdriver slotted interface selection switch located on the front panel. The controller also incorporates a protected screwdriver slotted pump reversing switch on the front panel to facilitate special maintenance requirements. The controller is powered by a standard universal wall outlet (100-240V 50/60Hz) and draws a maximum of .5 amp at 100VAC. Line voltage settings are not required however; an appropriate detachable line cord must be utilized.

Manual Mode:

To run the V300 system in manual mode, simply turn the mode selection switch to "MANUAL" using a screwdriver. Use this mode if you want to control the stroke rate manually. This mode allows you to select a stroke rate by pressing the up and down arrows located next to the display. The stroke rate is displayed as a percentage of the fastest rate. An attempt to go beyond these limits will display three dashes indicating that the limit has been reached.

Analog Input Modes:

0-5 Volt Mode: Use this mode to remotely control the stroke rate with a voltage source of 0 to 5 Volts DC. This voltage level interface utilizes the "ANALOG INPUT" connector on the control module to connect to the user's voltage source. Standard RG58 or other coaxial cable should be utilized for inducted noise immunity.

0-10 Volt Mode: Use this mode to remotely control the stroke rate with a voltage source of 0 to 10 Volts DC. This voltage level interface utilizes the "ANALOG INPUT" connector on the control module to connect to the user's voltage source. Standard RG58 or other coaxial cable should be utilized for inducted noise immunity.

4-20 Milliamp Mode: Use this mode to remotely control the stroke rate with a current source of 4 to 20 milliamps DC. This current level interface utilizes the "ANALOG INPUT" connector on the control module to connect to the user's current loop controller. Standard RG58 or other coaxial cable should be utilized for inducted noise immunity. The 4-20 mA interface requires approximately 3.8 volts of drive voltage to achieve 20mA, thus making it compatible with most current control loop configurations.



Model QV



Model Q2V Ratio:Matic

0-5 Volt Specifications

Input voltage range: -5 volts
Input current at 5 volts: 2 mA
Maximum Rate (100.0%): 4.5 V
Minimum Rate (5.0%): 225 mV
Interface Linearity: 1.5%
Accuracy: 1%

0-10 V Specifications

Input voltage range 0-10 volts
Input current at 10 volts: 1 mA
Maximum Rate (100.0%): 9.5 V
Minimum Rate (5.0%): 450 mV
Interface Linearity: 1.5%
Accuracy: 1%

4-20mA Specifications

Input current range: 0-20 milliamps
Input voltage at 20 mA: 3.8 volts
Maximum Rate (100.0%): 20 mA
Minimum Rate (5.0%): 4.8 mA
Interface Linearity: 1.5%
Accuracy: 1%