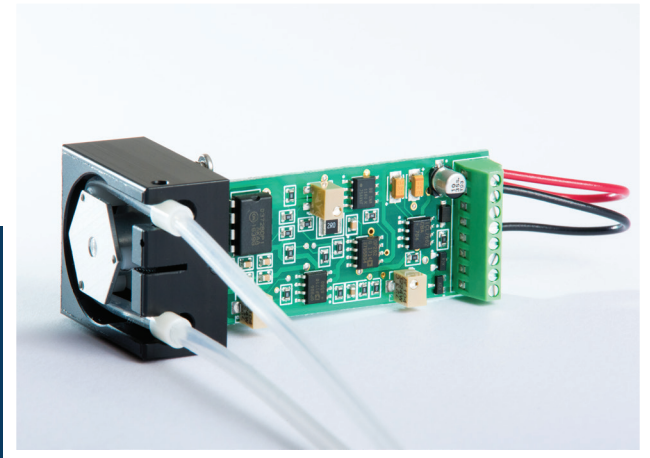


北京铭泰佳信科技有限公司

INSTECH

Model P625 Peristaltic Pump

SET-UP INSTRUCTIONS



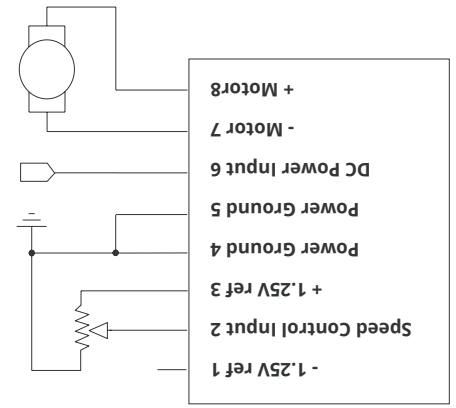
ELECTRICAL SET-UP

Attach power supply, motor, and control voltage input (either from a voltage source or from a pot as shown). The reference voltages on pins 1 and 3 are provided for your convenience. Use none, one, or both. Do not draw more than 1 mA.

Match the full-scale motor range to your full scale input signal by adjusting the Speed Range pot.

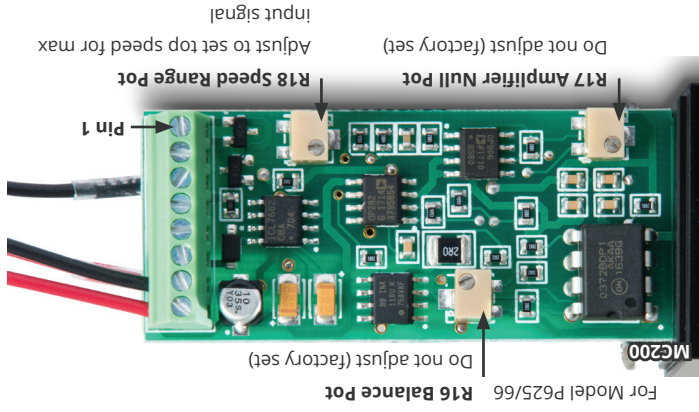
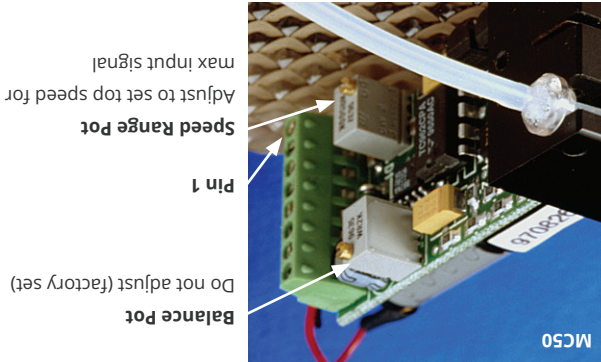
When designing this pump into your system, remember that it is better to bring the pump to a stop by setting the speed control voltage to zero. This will actively brake the motor and bring it to a stop more quickly than would occur if the supply voltage were removed.

CONNECTOR INPUTS AND OUTPUTS



Adjustments & Connector Orientation

For Models P625/275, P625/900, and P625/10K



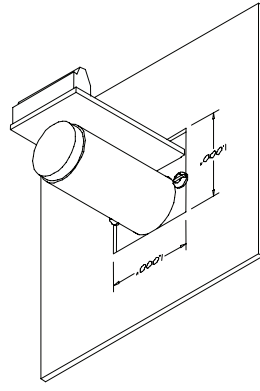
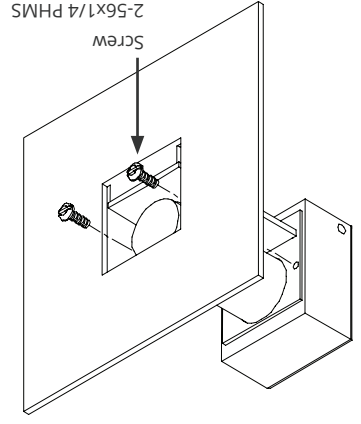
Instech Laboratories, Inc.,
 Plymouth Meeting PA USA
 800.443.4227
 610.941.0132
 610.941.0134 fax
 www.instechlabs.com

Motor Voltage Nominal	4.5 VDC	4.5 VDC	4.5 VDC	8.0 VDC	12 VDC
Motor Power Rating	0.3 W	0.3 W	0.3 W	0.75 W	1.4 W
Power Supply Voltage	1. Recommended +18-22 VDC	+18-22 VDC	+8-12 VDC	+12-16 VDC	+16-18 VDC
2. Maximum	+18 VDC	+18 VDC	+18 VDC	+18 VDC	+18 VDC
Power Supply Current	1. Typical at full speed 18-22 mA	18-22 mA	25-30 mA	19-25 mA	50-75 mA
2. Quiescent	7.5 mA	7.5 mA	7.5 mA	7.5 mA	14 mA
Speed Control Voltage Input	Factory Set -1.25 to +1.25 VDC (voltage for top speed adjustable from +/-.125 to +/-10 VDC)				
Rotation Direction	Determine by polarity of speed control voltage				
Terminal Barrier Block Type	8 pin screw with 2.5mm spacing				
Panel Mounting Hole	1.0 x 1.09 inch (2.54 x 2.54 mm) - see diagram				
Weight (excluding tube set)	55 grams	53 grams	53 grams	39 grams	72 grams
Dimensions (W x H x D)	1.3 x 1.1 x 2.1 in	1.3 x 1.1 x 2.1 in	1.3 x 1.1 x 2.4 in	1.3 x 1.1 x 2.4 in	1.3 x 1.1 x 2.7 in
Recommended Flow Rate Range	0.34-150 µl/min 0.02-9 µl/hr	0.15-1 ml/min 9-60 ml/hr	1-5 ml/min 60-300 ml/hr	1-5 ml/min 60-300 ml/hr	5-22 ml/min 300-1300 ml/hr
Flow Rates*	0.32-6.7 µl/min 0.59-12 µl/min 1.6-34 µl/min 6.7-145 µl/min 13.5-275 µl/min	0.004-0.08 ml/min 0.007-0.14 ml/min 0.020-0.40 ml/min 0.08-1.7 ml/min 0.16-3.3 ml/min	0.008-0.17 ml/min 0.017-0.34 ml/min 0.046-0.92 ml/min 0.17-3.4 ml/min 0.37-7.3 ml/min	0.03-0.6 ml/min 0.05-1.0 ml/min 0.15-3.0 ml/min 0.5-10 ml/min 1.1-22 ml/min	0.03-0.6 ml/min 0.05-1.0 ml/min 0.15-3.0 ml/min 0.5-10 ml/min 1.1-22 ml/min
Accuracy	5%	5%	5%	5%	5%
Motor Gear Ratio	10683:1	900:1	275:1	66:1	66:1
Top Speed	1.5 RPM	17.8 RPM	44 RPM	150 RPM	150 RPM
Gearhead Type	Spur	Spur	Planetary	Planetary	Planetary

* Actual output values may vary.

Panel Mounting

1 inch square opening



Pump Tube Removal

1. Actuate the pump.
2. With the rotor turning, lift the input side of the tube from its slot and wait until it has fully disengaged.

Pump Tube Installation

1. Slide the tube set into the slot and seat the ferrules.
2. Leave the U-shaped loop over the rotor.
3. Actuate the pump.
4. With the rotor turning, use your finger to guide the tube down between the rotor and the interior wall of the pump head, starting from the input side.

Replacement Parts

TUBE SETS

Instech offers replacement P625 tube sets in a variety of materials and sizes, including silicone, C-FLEX®, PharMed® and Tygon® from .015" to .093" ID. Please refer to our website, www.instechlabs.com, for details on available tube sets. The list changes frequently as we add new materials, sizes and configurations. In addition, custom tube sets may be available depending on your application. Information on tube set compatibility with various solutions is also available on our website.

Tube set lifetime will depend on the tube material, motor RPM, and the solution you are pumping. A silicone, C-FLEX® or Tygon® tube will not last as long as tubing in the neoprene family, such as PharMed®. Neoprene tubing will last about 10 times longer but is harder and will draw higher motor current.

KAPTON STRIPS

This amber strip reduces tube wear and minimizes the tendency for the peristaltic action to walk the tube through the pump, which can stretch the tube and alter the flow rate calibration. The strip should never be tight around the rotor. Replacement strips are available—specify part number KSK.

NOTE: PharMed and Tygon are registered trademarks of Norton Performance Plastics Corporation.
C-FLEX is a registered trademark of Consolidated Polymer Technologies Inc.