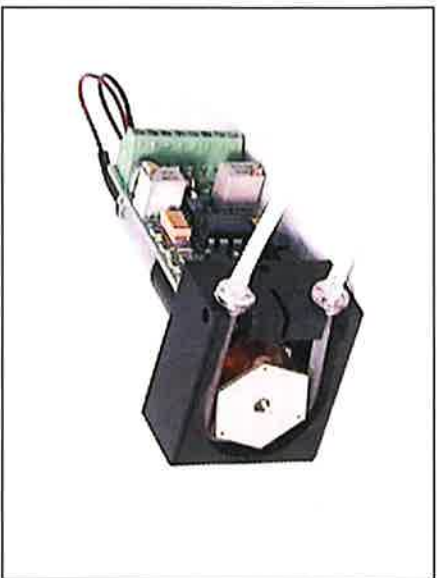




Set-up Instructions

Model P625 Peristaltic Pump

INSTECH

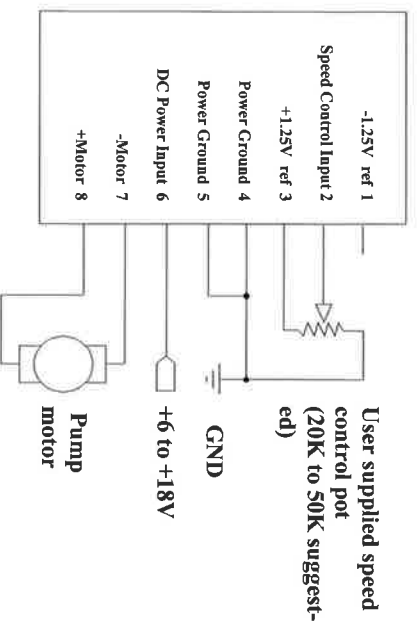
Electrical Set-up

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



INSTECH

The instrument behind the science.

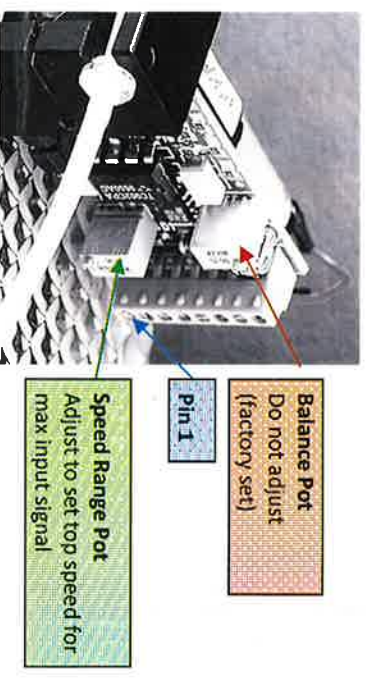
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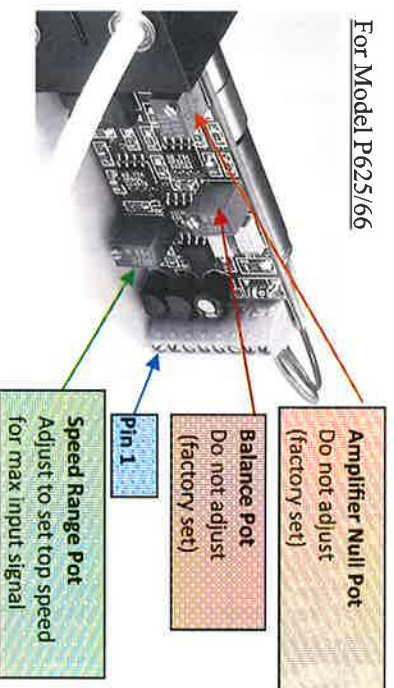
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Adjustments and Connector Orientation

For Models P625/66, P625/275, P625/900, and P625/10K



For Model P625/66



	P625/10K	P625/900	P625/275	P625/66
Motor Voltage nominal	4.5 VDC	4.5 VDC	8.0 VDC	12 VDC
Motor Power Rating	0.3 W	0.3 W	0.75 W	1.4 W
Power Supply Voltage 1. Recommended 2. Maximum	+8 to 12 VDC +18 VDC	+8 to 12 VDC +18 VDC	+12 to 16 VDC +18 VDC	+16 to 18 VDC +18 VDC
Power Supply Current 1. Typical at full speed 2. Quiescent	18 - 22 mA 7.5 mA	25 - 30 mA 7.5 mA	19 - 25 mA 7.5 mA	50 - 75 mA 14 mA
Speed Control Voltage Input	Factory Set -1.25 to +1.25VDC (voltage for top speed adjustable from +/-1.25 to +/-10 VDC)			
Rotation direction	Determine by polarity of speed control voltage			
Terminal Barrier Block Type	8 pin screw with 2.5 mm spacing			
Panel Mounting Hole	1.0 x 1.0 inch (2.54 x 2.54 mm) - see diagram			
Weight (excluding tube set)	55 grams	53 grams	39 grams	72 grams
Dimensions (W x H x D)	1.3 x 1.1 x 2.1 inches 32 x 27 x 54 mm	1.3 x 1.1 x 2.1 inches 32 x 27 x 54 mm	1.3 x 1.1 x 2.4 inches 32 x 27 x 61 mm	1.3 x 1.1 x 2.7 inches 32 x 27 x 68 mm

	P625/10K	P625/900	P625/275	P625/66
Recommended flow rate range	0.34 - 150 ul/min 0.02 - 9 ul/hr	0.15 - 1 ml/min 9 - 60 ml/hr	1 - 5 ml/min 60 - 300 ml/hr	5 - 22 ml/min 300 - 1300 ml/hr
Flow rates*				
.015" tube	0.34 - 6.7 ul/min	0.004 - 0.08 ml/min	0.008 - 0.17 ml/min	0.03 - 0.6 ml/min
.020" tube	0.59 - 12 ul/min	0.007 - 0.14 ml/min	0.017 - 0.34 ml/min	0.05 - 1.0 ml/min
.031" tube	1.6 - 34 ul/min	0.020 - 0.40 ml/min	0.046 - 0.92 ml/min	0.15 - 3.0 ml/min
.062" tube	6.7 - 145 ul/min	0.08 - 1.7 ml/min	0.17 - 3.4 ml/min	0.5 - 10 ml/min
.093" tube	13.5 - 275 ul/min	0.16 - 3.3 ml/min	0.37 - 7.3 ml/min	1.1 - 22 ml/min
Accuracy	5%	5%	5%	5%
Motor Gear Ratio	10683:1	900:1	275:1	66:1
Top Speed	1.5 RPM	17.8 RPM	44 RPM	150 RPM
Gearhead Type	Spur	Spur	Planetary	Planetary

Replacement Parts

Tube sets. Instech offers replacement P625 tube sets in a variety of materials and sizes, including silicone, C-FLEX®, PharmMed® 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 PharmMed®, 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: PharmMed and Tygon are registered trademarks of Norton Performance Plastics Corporation. C-FLEX is a registered trademark of Consolidated Polymer Technologies Inc.

Pump Tube Installation

Slide the tube set into the slot and seat the ferrules. Leave the U-shaped loop over the rotor.

Activate the pump.

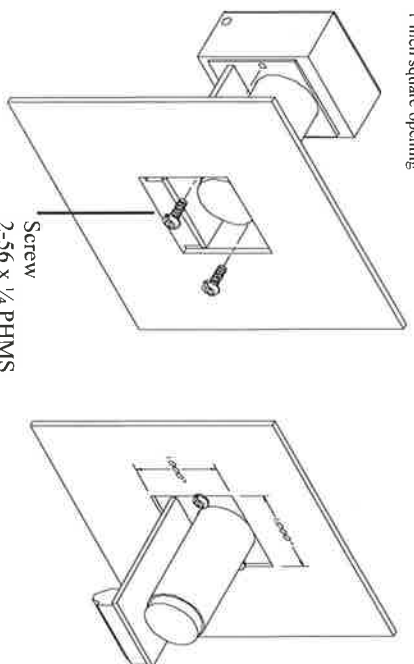
With the rotor turning, use your finger to guide the tube down between the rotor and the interior wall of the pump head, starting from the input side. Pump Tube Removal

Activate the pump.

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

Panel Mounting

1 inch square opening



Screw
2-56 x 1/4 PHMS