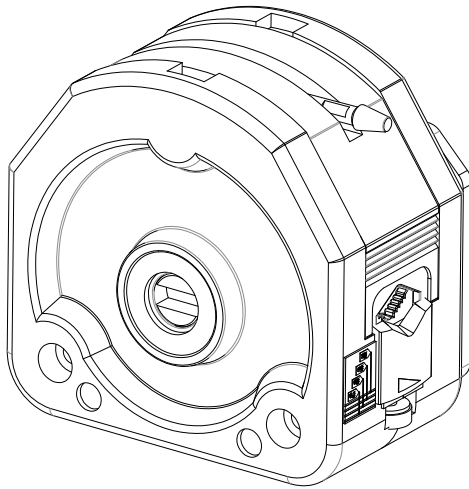




KZ25 (PPS/PC) Pump Head User's Guide



1 Safety Cautions



Warning: Please read through this user's guide carefully before operating the pump head.



Danger: Remove the power from the pump before mounting or unmounting pump head to the drive.

Danger: Remove the power from pump before attempting any maintenance or any cleaning operation is started.

Danger: Turn drive off before removing or installing tubing. Fingers or loose clothing could get caught in drive mechanism.



Warning: Tubing breakage may result in fluid being sprayed from pump. Please check the tubing frequently and change the tubing in time.

Warning: Please power the pump off before installing external control devices.

Warning: This product is not designed for, nor intended for use in patient connected applications; including, but not limited to, medical and dental use.

Note:

- Only use matched tubing with the pump head to ensure optimum performance. Use of other tubing may void applicable warranties.
- Release the tubing loading levers if the drive stopped for a long time to prevent the rollers from squeezing the tubing all the time.
- Change the squeeze section of the tubing in time to extend its lifetime.
- When tubing breakage occurs, please use a mild detergent solution to clean the pump head. Do not immerse nor use excessive fluid. Please check if the rollers can still rotate smoothly. If not, please stop the drive to prevent it from damaging the pump head.

2 Introduction

KZ25 pump head is designed to provide a simple, easy-to-use peristaltic pump system. It accepts several different tubing sizes for a wide range of flow rates, up to 6L/min. The housing and compression block can be separated to load the tubing conveniently.

The pump head is compatible with GOLANDER drives with high torque such as WT-S, WT-F, BT100S-1, BT100F-1. Mount the pump head using the 2 screws provided. The pump head is stackable.

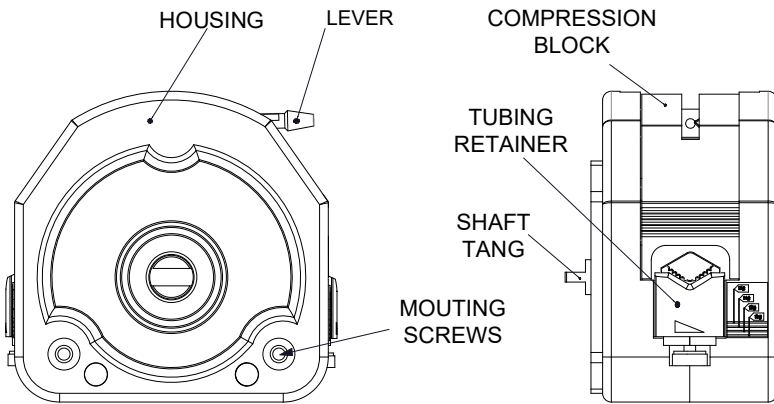


Figure 1. KZ25 Pump Head

3 Flow Data

The rated flow rate below is for 75 °F water at standard atmospheric pressure. The tubing length is 1 meter, 0.5m for inlet and 0.5m for outlet.

Table 1. KZ25 Flow Rate (mL/min)

Speed (rpm)	Tubing			
	15#	24#	35#	36#
0.1	0.25	0.43	0.82	1.00
30	74	130	245	300
150	370	650	1225	1500
350	863	1517	2858	3500
600	1480	2600	4900	6000

4 Dimensions

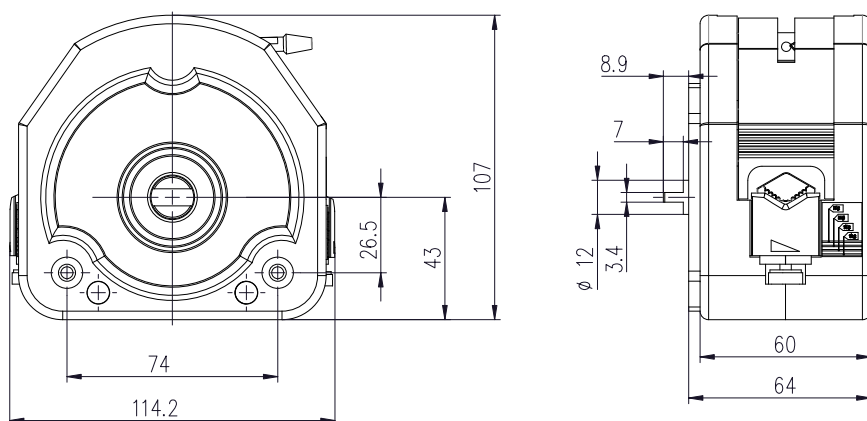


Figure 2. Dimensions (mm)

5 Specifications

Suitable Drive	WT-S, WT-F, BT100S-1, BT100F-1
Suitable Tubing Size	15#, 24#, 35#, 36# (Wall thickness: 2.5mm)
Suitable Tubing Type	Silicone, pharmed etc.
Speed Range	0-600 rpm
Flow Range	0-6000 mL/min
Channels	1
Output Pressure	0.14Mpa
No. of Rollers	3 (304 stainless steel)
Case Material	PC(Polycarbonate) or PPS(Polyphenylene sulfide)
Occlusion	Fixed
Operating Condition	Temperature 0~40 °C, Relative humidity < 80%
Dimensions (WxHxW)	114x60x107mm
Weight	0.72 kg (1.60 lbs)

6 Setup and Operation

6.1 Tube Loading

- 1) Be sure the pump drive is turned off.
- 2) Rotate the lever all the way to the left to release the compression block, and then remove it.

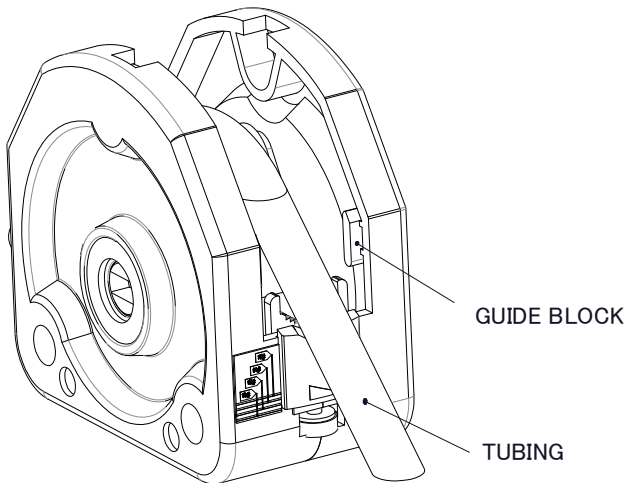
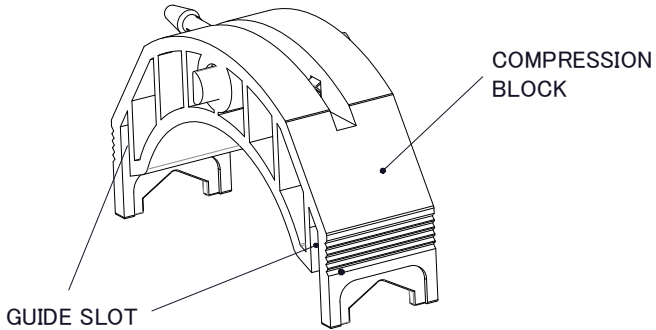


Figure 3. Remove Compression Block and Load Tubing

- 3) Load the tubing on the rollers and the two V-shaped slots of the tubing retainers. Then put the compression block back.
- 4) Press the compression block and rotate the lever all the way to the right to lock it.
- 5) Adjust the fastening screws to push the retainer to the right position as shown below to fix the tubing.

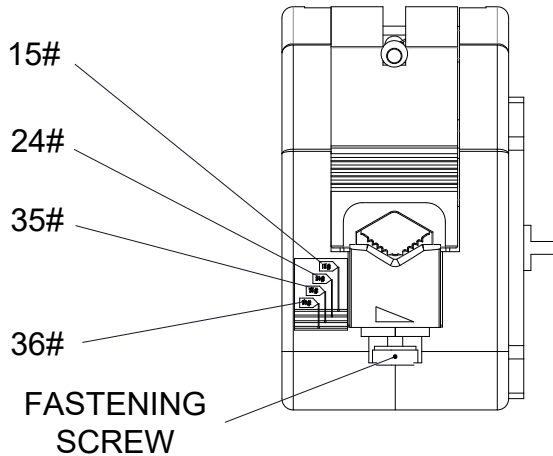


Figure 4. Fastening Screws Adjustment

Note: The fastening screw is for adjusting the gap between compression block and tubing container to hold the tubing. It does not adjust flow rate.

To check the gap between compression block and tubing retainer, put one end of tubing into water and pump air into tubing from the other end. There should be no bubbles coming out from tubing on the end in water. Otherwise, it means the gap is too small.

6.2 Pump Head Installation

- 1) Be sure the pump drive is turned off.
- 2) Mount the mounting panel on the drive.
- 3) Align the shaft tang of the pump head to the coupler of the drive.
- 4) Tighten the mounting screws to secure the pump head on the drive. Ensure the tightness of the two tightening screws is the same and should not be too tight in order to prevent noise due to deformed housing.

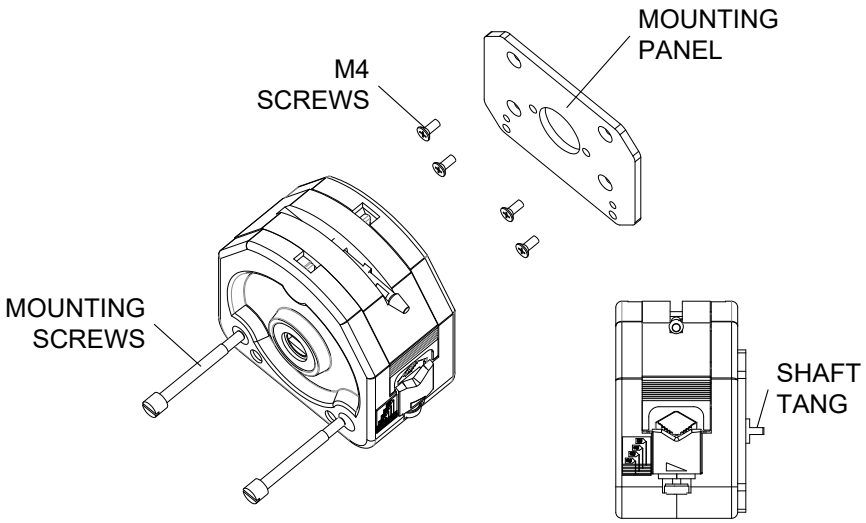


Figure 5. Pump Head Installation

Note: When stack another pump head to it, please align the shaft tang of the second pump head to the shaft slot of the first pump head and use provided screws to secure the stacked pump heads to the drive.

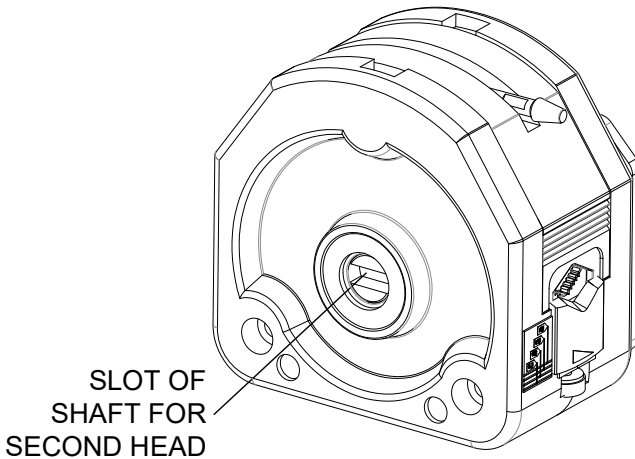


Figure 6. Slot of Shaft

7 Warranty

The product comes with one-year labor and parts warranty. The limited warranty does not cover any damage that is caused by improper usage and handling.

8 Regular Maintenance

- 1) Always check the tubing and connections to make sure there is no leakage. Keep the pump head dry.
- 2) Do not use chemical solvents to clean the head.
- 3) As time goes on, the flow rate will slightly change. Please adjust the drive speed or calibrate the flow rate when necessary. Change the tubing when necessary.
- 4) There would be 3-5% difference among the channels for multiple-channel pump head. For higher precision application, we recommend only use one channel pump head on each pump.