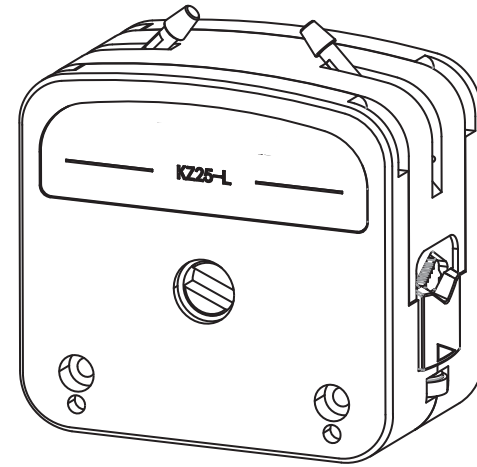


KZ25-L

Pump Head Operation Manual



Safety Precautions



Important information:

Be sure to read the manual carefully before operation!

	This icon warns: Keep fingers away from moving parts.
	This icon warns: Be careful.
	This icon warns: Be careful, the surface is hot.
	This icon warns: Be careful, electric shock hazard.
	This icon warns: To recycle this product.
	This icon warns: Personal protective equipment (PPE) must be worn.

Danger:

	Please use the same power supply as that on the nameplate of the machine, otherwise the equipment will be damaged!
	Do not disassemble the casing or modify the interior of the equipment by yourself, otherwise it may cause malfunctions or even electric shock accidents!
	When installing and disassembling the pump tube, please turn off the power first and do not approach the rotating roller to prevent fingers and clothing from getting entangled in the mechanical mechanism!
	If used for transporting hazardous liquids, a dedicated operating procedure must be established for this liquid, and personnel injury must also be prevented during using.

Warning:

	Before using, please confirm that the transmitted liquid will not react chemically with the tube or pump head, otherwise it will damage the tube or pump head. If unsure, please consult our engineers.
	Tubes are vulnerable parts, please pay attention to regular inspections. Our company is not responsible for the losses caused by tube damage, especially the leakage of toxic, harmful, and precious liquids!
	Please use tubes that are suitable for the pump head model and refer to the "Suitable Tube and Flow Rate of Pump Head" in the manual
	If the peristaltic pump is stopped for too long, please lift the pressure block on the pump head to prevent the inner wall of the tube from sticking due to prolonged compression.
	Due to actual working environment conditions (including temperature, humidity, power supply voltage, etc.) exceeding our technical specifications and causing machine damage, our company is responsible for paid warranty, but we do not bear any responsibility for any other damage caused by this!
	The main protection provided for operators to prevent them from being injured by the moving parts of the pump is provided by the safety device of the pump head. Please note that the safety devices for different products vary depending on the model of the pump head. Please refer to the pump head section in the manual.

Contents

Description -----2

Pump Head Structure-----2

Component Name and Function -----2

Usage Method -----3

 Install KZ25-L Pump Head -----3

 Tube Selection-----4

 KZ25-L Pump Head Tube Installation -----4

 Precautions for Using -----6

Malfunction and Maintenance -----6

 Daily Maintenance-----7

 Malfunction Solutions -----8

Suitable Tube and Flow Rate of Pump Head -----9

Dimension -----10

Technical Parameters-----11

Description

The KZ25-L pump head has a larger transmission flow rate, up to 6600mL/min and is suitable for various specifications of tubes. Installation and replacement are simple and fast, and multiple pump heads can be used in series. The roller material is stainless steel 304 and the shell is made of aluminum alloy which has the characteristics of strong corrosion resistance and high strength.

Pump Head Structure

Suitable tubes :

- KZ25-L tube size : 15#,24#,35#,36#

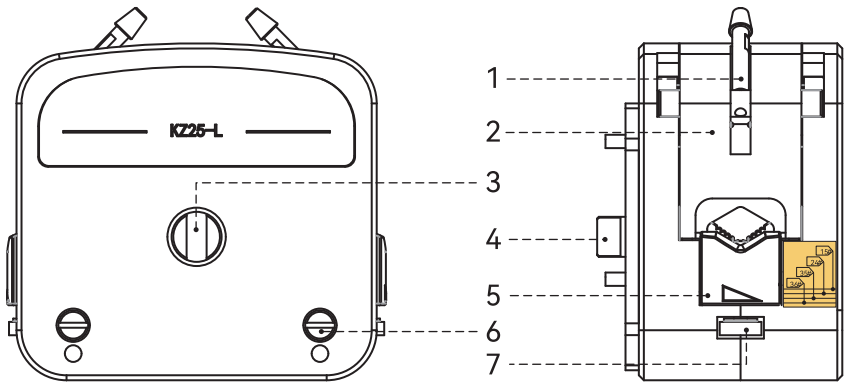


Figure 1 Pump Head Structure

◆Component Name and Function

1. Lever: When installing tubes rotating the lever can install and remove the upper pressure block.
2. Upper Pressure Block: The upper pressure block is detachable making it convenient and quick to replace the tube.
3. Front Groove of Roller: Suitable for connecting pump heads in series when using dual pump heads.

KZ25-L Pump Head Operation Manual

4. Flat Shaft End: Used to connect the driver coupling and pump head in series.
5. Tube Clamp: After the slider is pressed down, the tube is clamped so that it cannot move.
6. Fixing Hole: Fix the pump head onto the driver through the pump head screw.
7. Tube Clamp Adjustment Screw: Rotate the screw to move the tube clamp up and down, used to clamp the tube.

Usage Method

◆Install KZ25-L Pump Head

- First use four M4X10 cross recessed countersunk head screws to secure the KZ25-L pump head mounting plate to the pump head mounting bracket of the driver.
- Remove the coupling between the driver coupling and the pump head, and secure it to the flat shaft end of the pump head with a set screw (provided with the coupling) as shown in Figure 2, and secure it firmly.
- Insert the coupling of the previous pump head into the coupling of the driver, and fix the pump head on the mounting plate with the pump head mounting screws after it is in place.

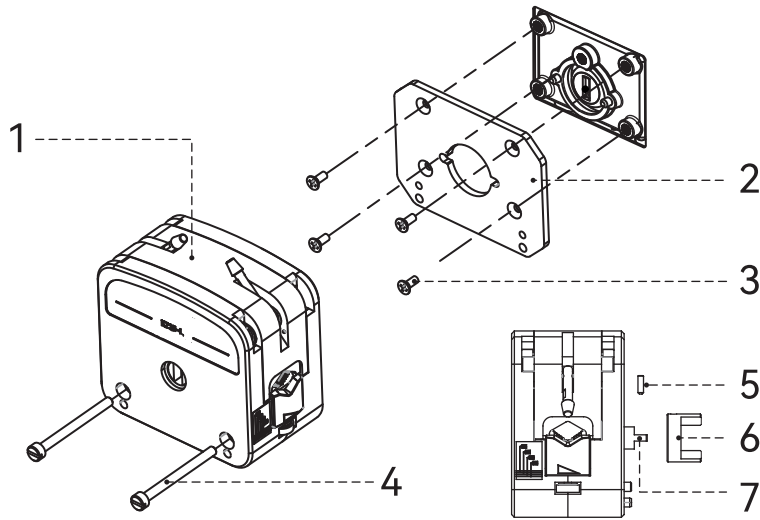


Figure 2 Installation Diagram of KZ25-L Pump Head

1. KZ25-L pump head
2. Pump head mounting plate
3. M4X10 GB819 Cross recessed countersunk head screws
4. Pump head mounting screws
5. Set screw (coupling belt)
6. Coupling (drive belt) 7. Pump head flat shaft end



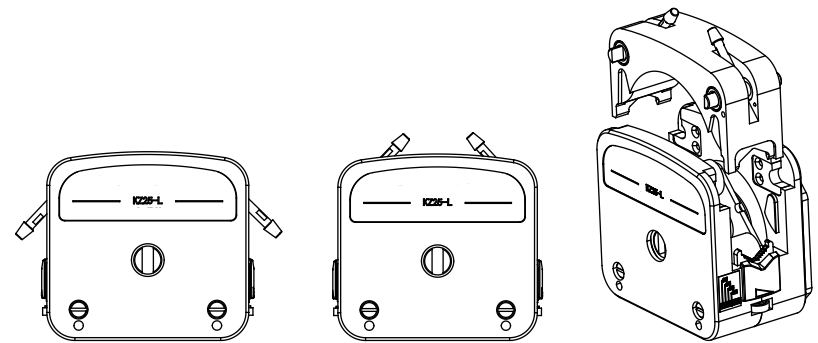
Note: When tightening the pump head screws, it is important to ensure that the tightening torque of the two screws is the same and not too tight!

◆Tube Selection

- The tubes used for the KZ25-L pump head are: 15 #, 24 #, 35 #, and 36 #, with wall thickness of 2.4mm.
- The size accuracy of the wall thickness and inner diameter of the tube can affect the flow accuracy.

◆KZ25-L Pump Head Tube Installation

- Install the tube as shown in Figure 3



1. Pressure block installation status on the pump head
2. Rotate the lever to the state shown in this picture
3. Lift the upper pressure block

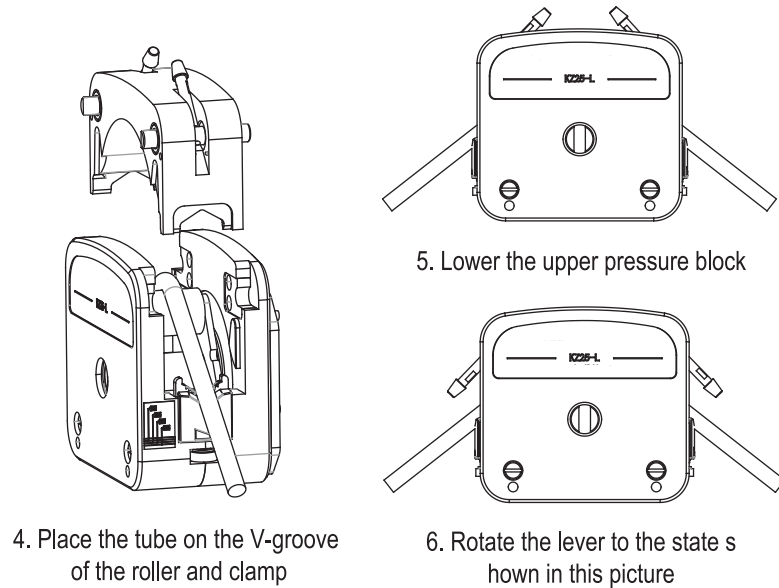


Figure 3 Installation of Tubes

- According to the specifications of the tube, rotate the screw at the bottom of the tube clamp (Note: the triangle on the tube clamp corresponds to the direction identification and tube specifications), and clamp the tube, as shown in Figure 4.

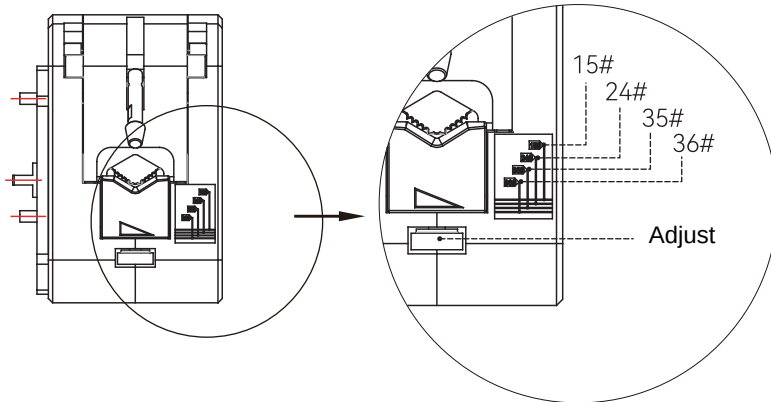


Figure 4 Tube Clamping Adjustment

◆Precautions for Using

- The KZ25-L pump head does not require special maintenance.
- Please use tubes that match the model of the pump head.
- The tube flow will fluctuate with the use time, please pay attention to adjust the speed of the peristaltic pump (please recalibrate the flow of the flow type peristaltic pump).
- This series of pump heads can be used in series and when multiple pump heads are used simultaneously, there is a flow deviation between each channel. If there is a high requirement for consistency in traffic, please contact the engineer.
- When the pump head is running, there is wear on the tube. During using, attention should be paid to checking the wear of the tube and replacing it regularly.
- This series of pump heads can be used in series, and when multiple pump heads are used simultaneously, there is a flow deviation between each channel. If there is a high requirement for consistency in traffic, please contact the engineer.

Malfunction and Maintenance

● Special Instructions

Please check the model specifications before using tubes and other consumables. Please note that once opened for using, returns and exchanges are no longer accepted unless there are quality issues.

◆Daily Maintenance

- Regularly inspect the tubes for damage or loss of elasticity.
- Applying silicone oil on the wall of the pressure block can reduce tube wear and prolong the service life of the tube.
- The pump head cannot be washed with water. If the pump tube breaks during operation, the liquid in the pump head shall be wiped or dried in time.
- Do not use chemical reagents to clean the pump head.

◆Malfunction Solutions

NO.	Malfunction	Solution	Remarks
1	Unable to inhale liquid	1. Whether the viscosity of the liquid too high. When the viscosity is too high, the flow rate will seriously decrease or even become unusable 2. If the negative pressure at the inlet of the tube is too high or the inlet is blocked, check the inlet tube line	
2	The service life of the tube has significantly shortened	1. To detect whether the liquid contains solid particles, please choose an imported tube. Excessive particle impurities can seriously reduce the service life of the tube and even render it unusable 2. If the tube is not installed in the correct position, reinstall it according to the instructions for use 3. Check whether the roller rotates flexibly	

Suitable Tube and Flow Rate of Pump Head

Experimental conditions:

- 1. Normal temperature and pressure
- 2. Test medium: Water
- 3. Tubeline: The length of inlet and outlet is 500mm, and the inlet and outlet are at the same level.

When the liquid, viscosity, tubeline length, inlet and outlet pressure difference and other service conditions change, the flow value will change. Please consult the engineer .

◆Suitable Tube and Flow Rate of KZ25 Pump Head (unit: mL/min)

Speed \ Tube Flow	Tube			
	15#	24#	35#	36#
0.1rpm	0.31	0.53	0.77	1.10
30rpm	93	159	231	330
150rpm	465	795	1155	1650
350rpm	1085	1855	2695	3850
600rpm	1860	3180	4620	6600

Dimensions

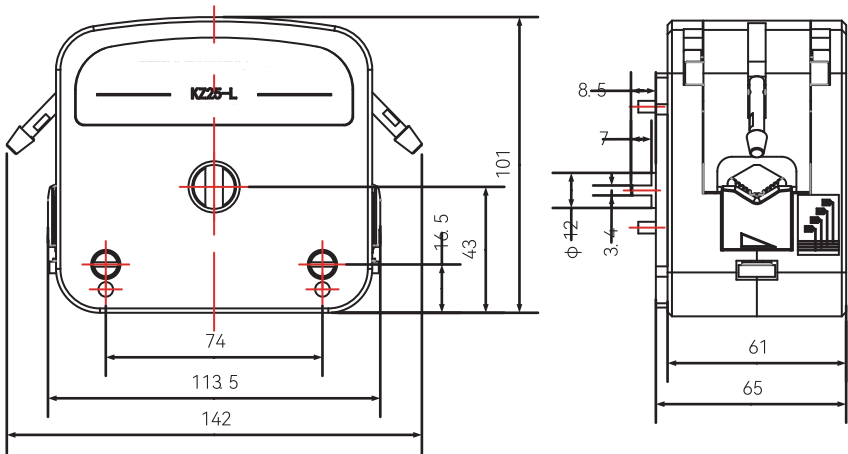


Figure 5 Dimensions of KZ25-L

Technical Parameters

KZ25-L pump head

Suitable Tube Size	15#,24#, 35#,36# (Wall thickness 2.4mm)
Type of Tube	Silicone, Pharmed, Viton, Chemical, A-60-G/F, etc
Maximum Speed	600rpm/min
Maximum Flow	6600 mL/min
Rollers	3 rollers,304 stainless steel
Case Material	Aluminum alloy
Work Environment	Temperature 0~40℃ Relative humidity <80%
Dimension	113.5x61x101mm
Pump Head weight	1.5kg
Cascade	Cascadable