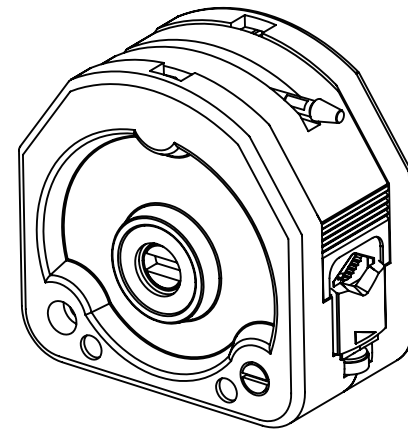


KZ25 Pump Head Operation Manual



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.
	If the pump is running before the power outage, it will automatically start after the power is reconnected.

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Description

The KZ25 pump head has a larger transmission flow rate, up to 6 L/min, suitable for various specifications of tubes. Replacement and installation are simple and fast, and multiple pump heads can be used in series. The roller is made of stainless steel 304 material, and multiple shell materials are available, suitable for different working conditions. Among them, the outer shell of KZ25-PC (polycarbonate) is transparent making it easy to observe the interior. The black shell of KZ25-PPS (polyphenylene sulfide) has strong corrosion resistance.

Pump Head Structure

Suitable tubes :

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

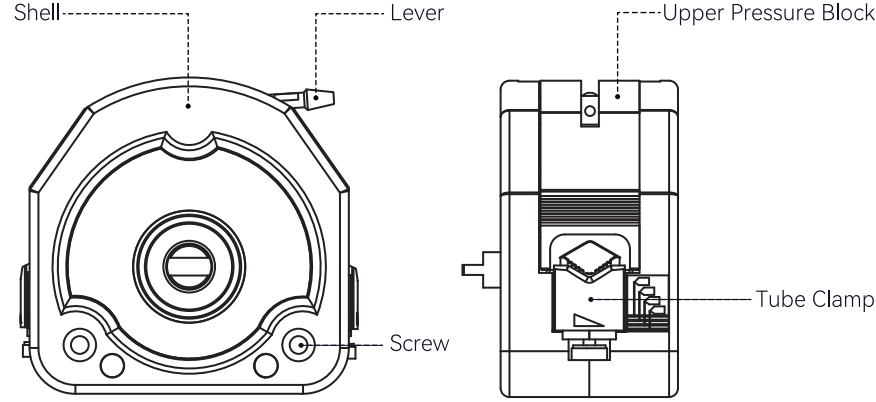


Figure 1 Pump Head Structure

◆Component Name and Function

1. Lever and Upper Pressure Block: When pulling the lever clockwise, it can compress the pressure block and tube. When pulling the lever counterclockwise, the pressure block can be released.
2. Tube Clamp: Can be moved up or down. Clamp the tube so that it cannot move.
3. Screw: Secure the pump head to the driver.

Usage Method

◆Install KZ25 Pump Head

- First use four M4X10 cross recessed countersunk head screws to secure the KZ25 pump head mounting plate to the pump head mounting bracket of the drive.
- Orient one side of the pump head flat shaft towards the driver, align it with the coupling groove in the pump head bracket, and push it in. Position it through the two positioning columns of the pump head bracket, tightly pressing the back of the pump head against the pump head bracket.
- 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.

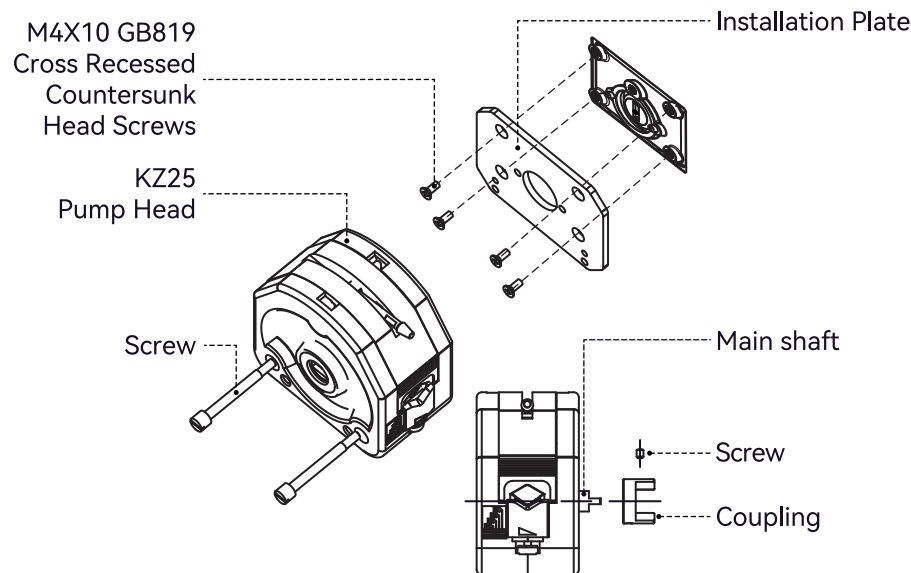


Figure 2 Installation Diagram of KZ25 Pump Head



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 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 Pump Head Tube Installation

- Rotate the pressure block lever 180 ° counterclockwise and extract the pressure block upwards to remove it.
- Select a tube that is suitable for the specified wall thickness of the pump head, place the tube on the roller and the V-shaped groove of the tube clamp on the left and right sides, straighten the internal tube of the pump head, and tighten both ends of the tube with both hands to make it naturally extend without distortion or deviation, as shown in Figure 3.

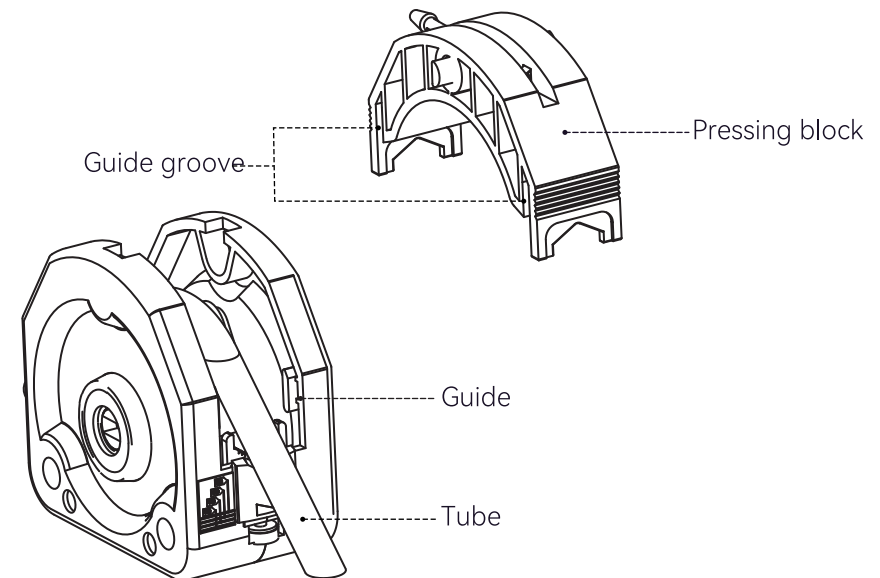


Figure 3 Installation of Tube

- Restore the pressure block. Firstly, align the rotating shaft of the pressure block with the notches on the upper part of the front and rear shells, and place the guide groove of the pressure block along the guide of the front and rear shells. Then, press the pressure block with one hand and rotate the lever 180 ° clockwise with the other hand to lock the pressure block.
- According to the thickness of the tube, rotate the screw at the bottom of the tube clamp (Note: the triangle on the tube clamp is the direction indicator), and clamp the tube, as shown in Figure 4.

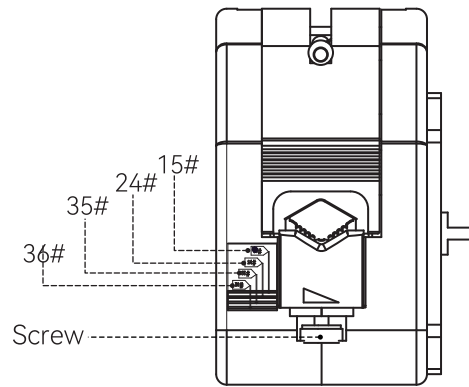


Figure 4 Tube Adjustment

◆Precautions for Using

- 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 of Enterprise.
- 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 of Enterprise.

Malfunction and Maintenance

◆ Warranty and After-sales

● KZ25 pump head comes with a one-year free warranty

1. The warranty scope is only for KZ25 pump heads, and tubes and other consumables are not included in this warranty scope.
2. The warranty period starts from the purchase date displayed on the customer's valid purchase certificate.
3. If there are quality issues during the warranty period, Enterprise is responsible for free repair and replacement.
4. If there are problems caused by human factors such as leakage, falls, improper use, etc., Enterprise is exempt from manual repair fees and only charges material cost fees.

● 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 3. If the tube is not installed in the correct position, reinstall it according to the instructions for use 4. Whether the tube specification is appropriate, and select the appropriate specification of tube according to the instructions for use	
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	



Note: If the above methods still cannot be solved, please contact the after-sales service of Enterprise!

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 of Enterprise.

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

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

Dimensions

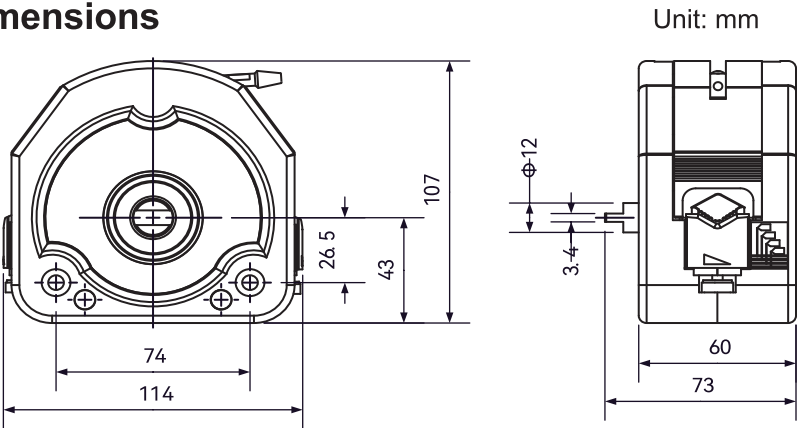


Figure 5 Dimensions of KZ25

Technical Parameters

KZ25 pump head

Suitable Tube Size	15#,24#, 35#,36# (Wall Thickness 2.4mm)
Type of Tube	Silicone tube, pharmed tube
Maximum Speed	600rpm/min
Maximum Flow	6600 mL/min
No. of Rollers	3 rollers,304 stainless steel
Case Material	PPS, PC
Work Environment	Temperature 0~40℃ Relative humidity <80%
Dimension	114x73x107mm
Pump Head weight	0.72kg
Cascade	Cascadable