



KZ25-L Aluminum Pump Head

User's Guide



1 Safety Precautions



Danger

- Turn off the pump drive before mounting or unmounting the pump head, installing or removing tubing, attempting any maintenance or cleaning, or connecting or disconnecting external control devices or a communication interface.



Warning

- Before operating the pump head, carefully review this user's guide.
- Ensure no chemical reactions occur between the handled fluid and pump head/tubing material before use.
- Check tubing regularly to avoid breakage. Breakage may result in fluid being sprayed from the pump. Use appropriate measures to protect the operator and equipment. The operator is solely liable for damages resulting from tubing breakage, particularly the leakage of toxic or valuable liquids.
- This product is not designed nor intended for usage in patient-connected applications, including but not limited to medical and dental use.

Note:

- Use only matched tubing with the pump head to ensure optimal performance. The use of other tubing may void applicable warranties.
- If the drive has been stopped for an extended period, release the tubing loading levers to prevent the rollers from continuously squeezing the tubing.
- Regularly change the squeeze section of the tubing to extend its lifespan.

- If tubing breakage occurs, clean the pump head using a mild detergent solution. Do not immerse or use excessive fluid. Verify if the rollers can still rotate smoothly. If not, please halt the drive to prevent damage to the pump head.

2 Introduction

The KZ25-L pump head is designed as part of a user-friendly peristaltic pump system. Constructed from durable aluminum, the pump head ensures long-lasting performance. Its versatility is evident in its acceptance of various tubing sizes, accommodating a broad spectrum of flow rates. The housing and compression block can be effortlessly separated for convenient tubing loading.

The pump head is compatible with GOLANDER pump drives with high torque, such as WT-S, WT-F, BT100S-1, and BT100F-1. It can be securely mounted using the provided 2 screws. The pump head is also stackable, providing flexibility in system configuration.

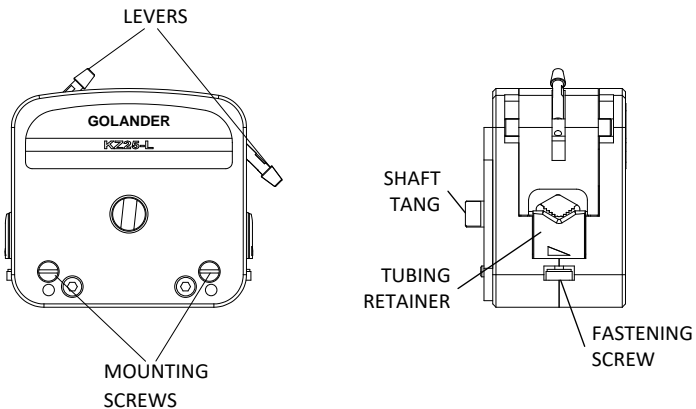


Figure 1. KZ25-L Pump Head

3 Dimensions

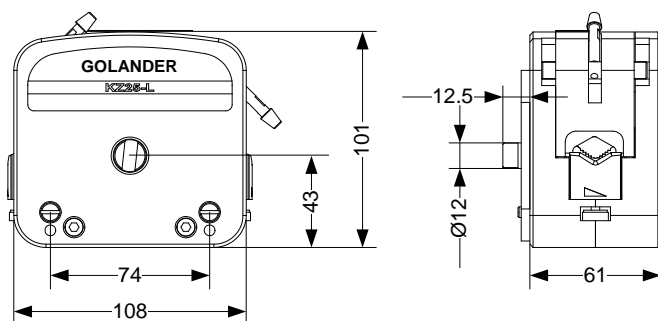


Figure 2. Dimensions (mm)

4 Specifications

Compatible Drive	WT-S, WT-F, BT100S-1, BT100F-1
Suitable Tubing Size	15#, 24#, 35#, 36# (Wall thickness: 2.4mm)
Suitable Tubing Type	Silicone, Pharmed etc.
Speed Range	0-600 rpm
Flow Range	0-6000 mL/min
Channels	1
No. of Rollers	3 (304 stainless steel)
Case Material	Aluminum
Occlusion	Fixed
Operating Condition	Temperature 0-40 °C, Relative humidity <80%
Dimensions (WxHxW)	108x101x61mm
Weight	1.45 kg (3.20 lbs)

5 Setup and Operation

5.1 Tube Loading

- 1) Ensure the pump drive is turned off.

- 2) Lift the two levers to release the compression block, and then remove it.

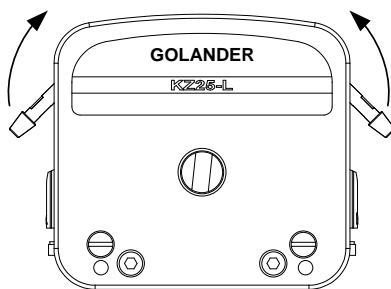


Figure 3. Remove the Compression Block

- 3) Load the tubing onto the rollers and the two V-shaped slots of the tubing retainers. Then, reattach the compression block.

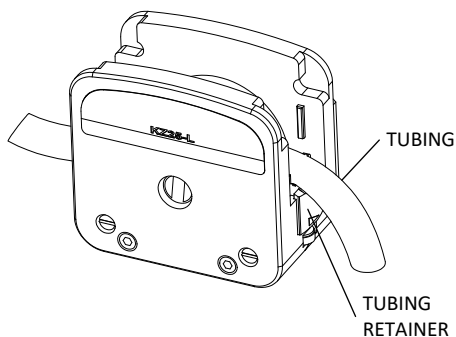


Figure 4. Load Tubing

- 4) Press the compression block and lower the two levers down to secure it.
- 5) Adjust the fastening screws to position the retainer correctly, as illustrated below, to secure the tubing.

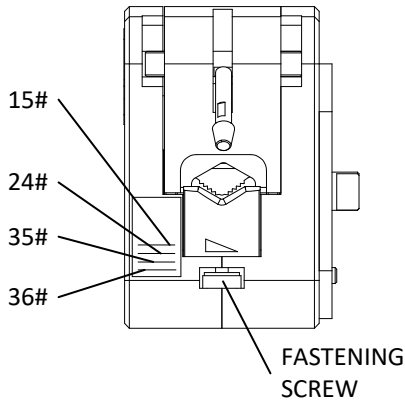


Figure 5. Fastening Screws Adjustment

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

To verify the gap between the compression block and the tubing retainer, immerse one end of the tubing in water and pump air into the tubing from the opposite end. If no bubbles emerge from the tubing submerged in water, the gap is appropriate. If bubbles are observed, it indicates that the gap is too small.

5.2 Pump Head Installation

- 1) Ensure the pump drive is turned off.
- 2) Align the shaft tang of the pump head with the coupler of the drive.
- 3) Secure the pump head to the drive by tightening the mounting screws. Ensure both screws are equally tightened, avoiding excessive tightness to prevent housing deformation and associated noise.

Note: When stacking another pump head, align the shaft tang of the second pump head with the shaft slot of the first pump head. Utilize the provided screws to secure the stacked pump heads onto the drive.

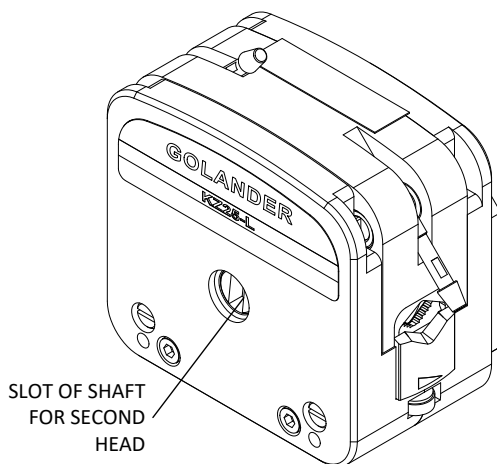


Figure 6. Slot of Shaft

6 Warranty

The product comes with a one-year labor and parts warranty. The limited warranty does not extend to damages resulting from improper usage or handling.

7 Regular Maintenance

- 1) Regularly check tubing and connections to ensure there is no leakage. Keep the pump head dry.
- 2) Do not use chemical solvents to clean the pump head.
- 3) Over time, the flow rate may undergo slight changes. Adjust the drive speed or calibrate the flow rate as needed. Replace tubing when necessary.
- 4) In a multiple-channel pump head, there may be a 3-5% difference among channels. For applications requiring higher precision, it is recommended to use a single-channel pump head for each pump.

8 Reference Flow Data

The provided flow rate is based on water at room temperature and standard atmospheric pressure. The tubing length is 1 meter, with 0.5m designated for the inlet and 0.5m for the outlet.

KZ25-L 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

Golander LLC

4405 International Blvd
Ste B117, Norcross, GA 30093
USA

Tel: +1 678-587-8806

info@golanderpump.com

www.golanderpump.com

Golander GmbH

Dechant-Heimbach-Str. 29
53177 Bonn

Germany

Tel: +49 228 50446952

info@golander.de

www.golander.de