

Product Manual

Kamoer Fluid Tech (Shanghai) Co., Ltd.

Version : A/0

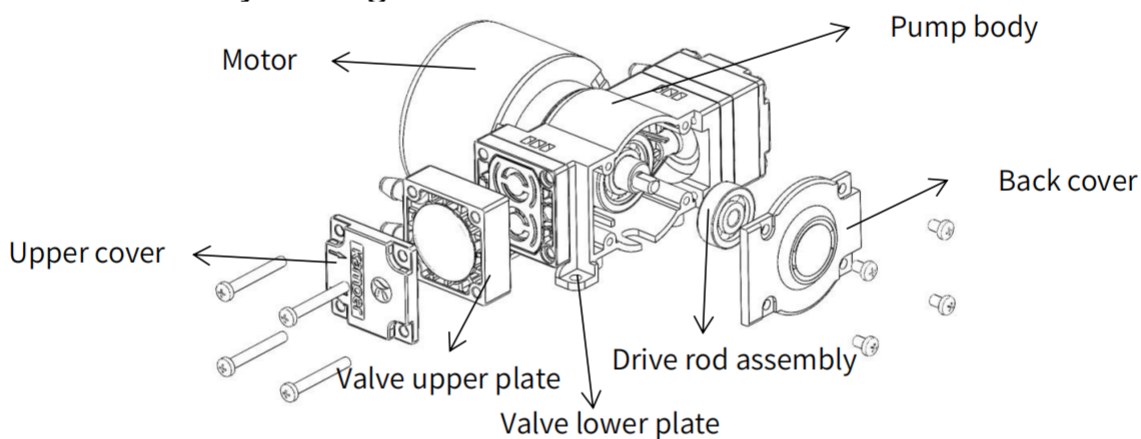
Product name	Micro Diaphragm Liquid Pump
Product model	KLLP1000
Execution date	2022.02.18
Company name	Kamoer Fluid Tech (Shanghai) Co., Ltd.

A. Product Overview

1. Product physical picture



2. Product assembly drawing



3. Model definition

KLLP1000	A	B	12
Model	Valve plate type	Motor type	Input voltage

3.1 Valve plate type

A: Internal thread type Thread specification: G1/8

B: Pagoda type is suitable for 4×6 PU tube

C: External thread type is suitable for 4×6 PU tube, not easy to fall off



Type: A



Type: B



Type: C



3.2 Motor type

B: Brushless motor

3.3 Input voltage

12: 12V voltage input 24: 24V voltage input

4. Performance characteristics, typical applications

4.1 Performance characteristics

■ KLLP1000 series diaphragm air pumps are available in 24V and 12V voltage options, customers can choose the appropriate voltage according to their own usage scenarios

■ The appearance of the product is personally checked by the design master, which is beautiful and generous.

- Features two chambers for higher output flow
- Three matching valve plates to support a variety of customer needs
- Large bearings are used for stronger pressure bearing capacity and longer service life
- Brushless motor, with better performance and life performance
- High-quality engineering plastics and rubber materials, showing good product stability

4.2 Typical applications

- Environmental protection industry: such as used as a pump for liquid monitoring
- Medical devices: such as used as a reagent transfer pump
- Filling industry: used as a transfer pump for liquid transfer
- White goods: such as used as a transfer pump for beverage machines

4.3 Known Risk Notification

■ The medium will be in contact with the pump head and the rubber, so it is necessary to check the chemical compatibility or conduct an immersion test when selecting the model

■ The working environment of the product should not exceed 40°C, and the humidity should not exceed 70% (no condensation). The harsh working environment will cause premature damage to the product

■ Frequent start and stop, overpressure or underpressure and other unreasonable working conditions will lead to premature damage of the pump

- High overloading may result in premature failure of the product

■ Dust, oil and other pollutants in the medium will contaminate the pump parts, which will lead to premature damage of the pump



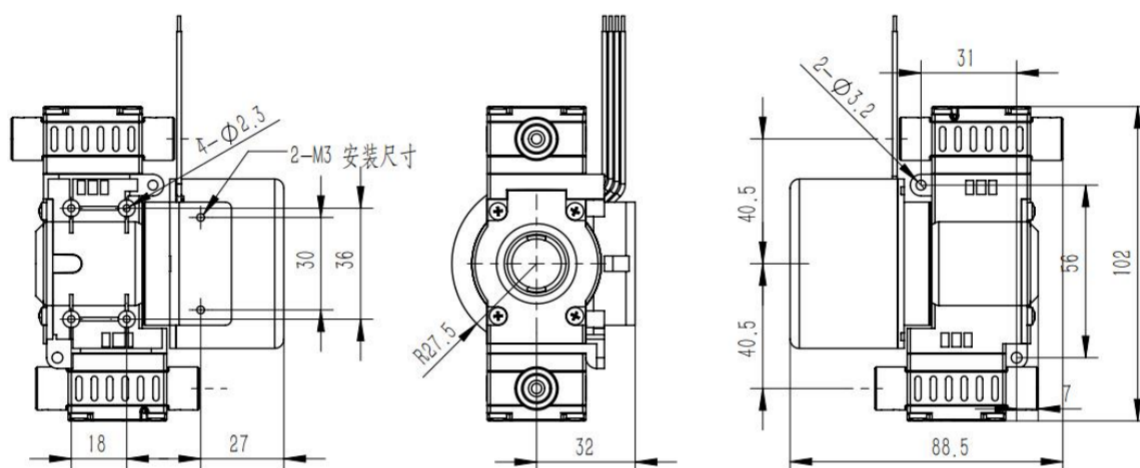


2. Product material

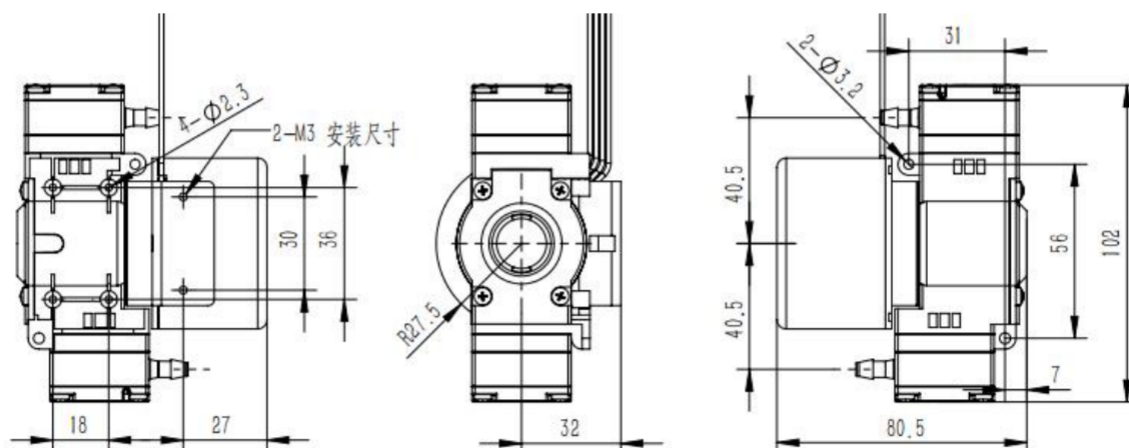
Model	Pump head	Pump body	Diaphragm	Valve	Eccentric wheel
KLLP1000	PP	PA	EPDM	EPDM	Aluminum

3. Product Size

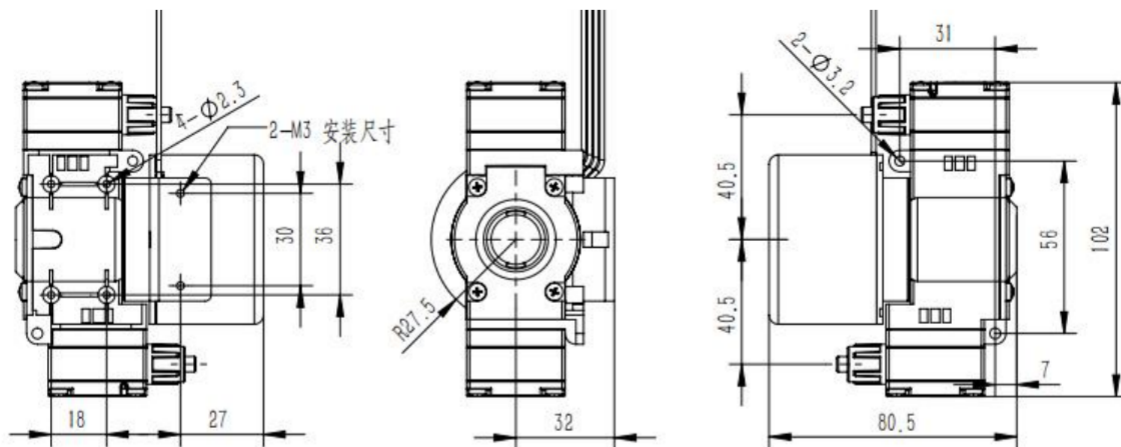
KLLP1000 (A series)



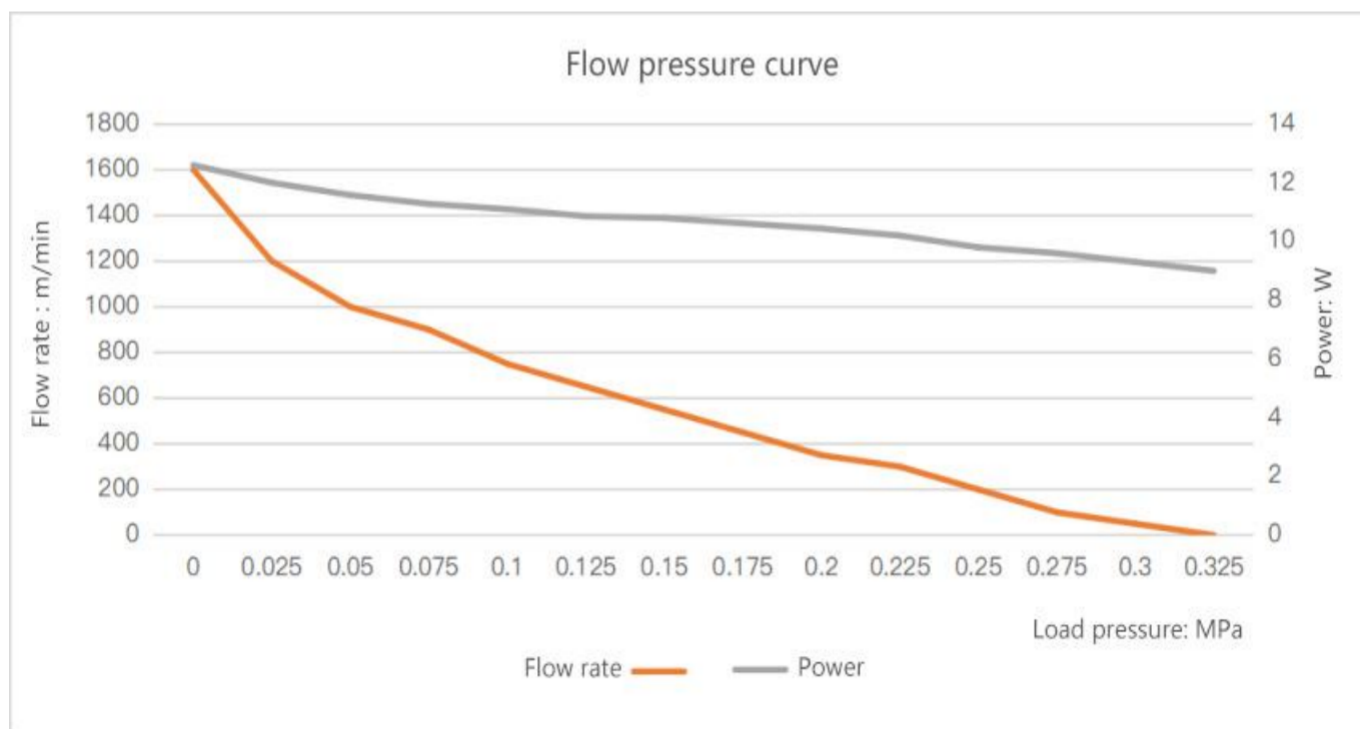
KLLP1000 (B series)



KLLP1000 (C series)



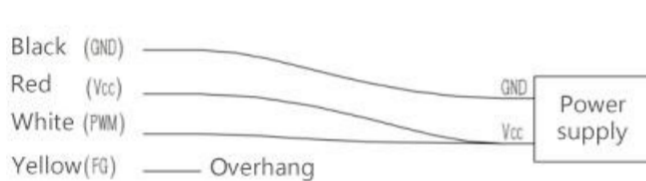
4. Flow curve



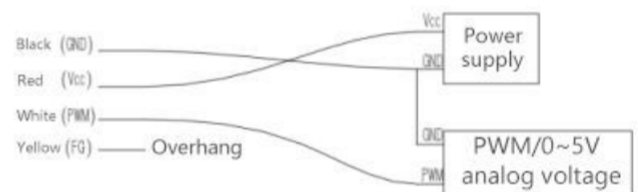
5. Motor control

Red line	Yellow line	Blue line (white line)	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

- PWM and 0-5V two speed regulation methods, PWM speed regulation: 10KHZ ~ 30KHZ, amplitude: 5V.
- Control ratio 0-10% does not turn, 11%-100% speed range.
- Analog voltage speed regulation: voltage 0-5V, 0-0.5V motor does not rotate, 0.6-4.5V speed regulation range.
- The speed feedback of the yellow line is connected to the oscilloscope probe or the host computer. 1 pulse/rotation speed (rev/min) = FG signal * 60
- Full speed operation: connect the positive pole to the red wire and the blue wire (white wire); connect the negative pole to the black wire
- There are two kinds of speed control cables, blue and white, and the performance is the same.



Work at full speed



Speed work

C. Optional accessories

Name	Specifications		Quantity	Function introduction
Parallel matching takeover	4mm×6mm PU tube		0.3m	Suitable for parallel installation to obtain large flow transmission
	5/32 Y-joint		2	

Special declaration: The company reserves the right to improve the appearance and technical specifications of the product without prior notice.

