

Product Manual

Kamoer Fluid Tech(Shanghai) Co., Ltd.

Version : A/6

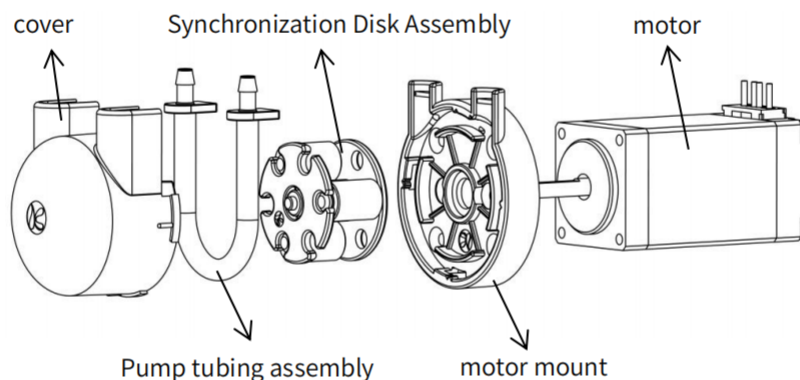
Product name	Micro peristaltic pump
Product model	KAS
Execution date	2022.06. 21
Company name	Kamoer Fluid Tech (Shanghai) Co.,Ltd.

A、Product Overview

1. Product picture



2. Product assembly drawing



3. Model definition

Model	Motor model	Cast	Tube number	Number of rotors
KAS	SE	B	06	3

3.1 Motor model

SE: 24V stepper motor SF: 12V stepper motor

3.2 Tube type

B: BPT pump tube S: Silicone tube

3.3 Tube number

04#: 1.0mm×3.0mm, ID 1.0mm, OD 3.0mm

06#: 2.0mm×4.0mm, ID 2.0mm, OD 4.0mm

08#: 2.5mm×4.5mm, ID 2.5mm, OD 4.5mm

10#: 3.0mm×5.0mm, ID 3.0mm, OD 5.0mm

3.4 Number of rotors

3:3 Rotor

Model	Cover	Motor mount	Rotor	Sync disk	Connector
KAS	PC	PA	Engineering plastics	POM	PP



 Precise And Reliable Fluid Transfer	<h1>Product Manual</h1>	File No. : CPBZ-KAS-01
		Version No.: A6
	Name : Peristaltic Pump	Model : KAS
Effective Date: 2022-06-21		

4. Performance characteristics, typical applications

4.1 Performance characteristics

- ◆ KAS series peristaltic pump is a stepper motor driven peristaltic pump
- ◆ Pump tube selection: the pump tube is imported BPT (B) tube and silicone tube (S), which can be applied to different transmission liquid requirements

- ◆ Pump tubing size optional (04#, 06#, 08#, 10#) peristaltic pump tubing to meet different flow requirements

- ◆ Easy and quick replacement of pump tubing
- ◆ 3 rotors, moderate pulse
- ◆ Positive and negative rotation can be achieved through control
- ◆ Transmission mode: planetary friction reduction transmission
- ◆ pump tubing with wall thickness 1.0 mm

4.2 Typical applications

- ◆ Food and drink
- ◆ Medical diagnosis
- ◆ Analytical Instruments
- ◆ Inkjet ink
- ◆ Washing clear
- ◆ Environmental Instruments
- ◆ Experimental research
- ◆ Industrial machinery
- ◆ White goods
- ◆ Biochemical analysis

4.3 Known Risk Notification

- ◆ Hoses are resistant to liquid media. Need to check chemical compatibility or conduct immersion tests, improper hose selection may cause hose damage quickly

- ◆ The working environment of the product should not exceed 45°C, and the humidity should not exceed 70% (no condensation). The harsh working environment will cause premature damage to the product

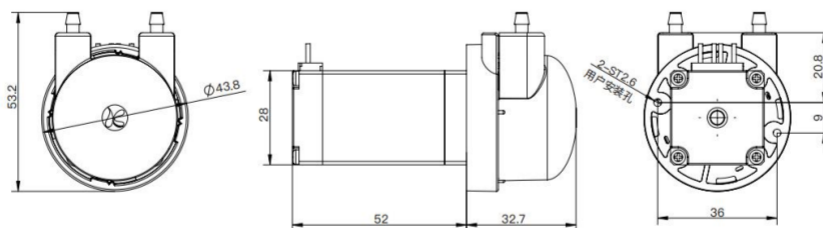
- ◆ Fluid leakage accidents due to hose ruptures depend on the fluid medium and your specific application conditions

- ◆ High overloading may result in premature failure of the product



B、Product specification

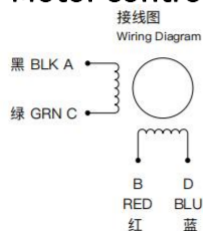
1. Product Size



2. Technical Parameters

Items		Technical Parameters							
Basic parameters	Motor type	stepper motor							
	Flow range	11.5ml/min~71.5ml/min							
	Power	20W							
	Control method	stepper driver							
	Weight	about 235g							
	Rated voltage	24V							
	Pump tube life	S: 200h BPT: 1000h							
	Motor life	6000 h							
Pump flow	Reference flow rate (unit: ml/min)								
	Pump tube code	S04	S06	S08	S10	B04	B12	B06	B08
	ID×OD (mm)	1×3	2×4	2.5×4.5	3×5	1×3	1.5×3.5	2×4	2.5×4.5
	Pump tube material	Silicone tube				BPT			
	Rotating speed	250 rpm							
	SE/SF current: 1.2A	12	27	44.8	71.5	11.5	23	27	42
Precautions	Remark	The above parameters are measured with pure water and no pressure at room temperature and standard atmospheric pressure at 20°C. Actually, depending on the medium, the outlet pressure, the motor speed error, etc., there will be certain errors in the flow rate, and the data are for reference only. In addition, it can be customized according to customer needs .							
	Reference noise value	Under the ambient noise of 35dB, the measured distance of 50cm is less than 53dB							

3. Motor control



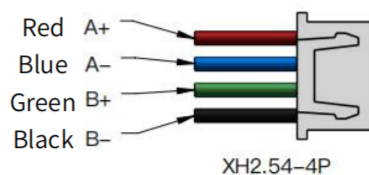
连接器针位vs.引线颜色
Pin NO. vs. Lead Wire Colour

PIN NO.	颜色 Color
1	红 RED
2	蓝 BLU
3	绿 GRN
4	黑 BLK

励磁顺序vs.旋转方向
Exciting Sequence vs. Direction of Rotation

STEP	A	B	C	D	
1	+	+	-	-	
2	-	+	+	-	
3	-	-	+	+	
4	+	-	-	+	



从安装面看为顺时针方向
Clockwise view from mounting side





Phase	Step angle	Starting current	Insulation class
2	1.8°	1.0A	B



C、Adapter hose

Pump tube material	Characteristic	Standards compliant	Tube number
Silicone tube (S) 	Low adsorption, good temperature resistance, good resistance to chemical corrosion, life over 200h	RoHS Comply with food grade certification (GB 4806.11-2016)	04# 06# 08# 10#
BPT tube (B) 	Resistance to common chemicals, acid and alkali and oxidation resistance life over 1000h	RoHS	04# 12# 06# 08#

D、Optional accessories

Name	Specifications		Function introduction
Anti-floating sinking head	Path 6 diameter 2.5		Place the inlet of the pump tube completely in the liquid to ensure that the peristaltic pump tube can fully absorb the liquid
Peristaltic pump stepper drive	MODBUS - RTU		Can realize built-in and external potentiometer speed regulation, can realize MODBUS RS485 communication and 0V~10V analog speed regulation, realize electric and trigger two start and stop modes, subdivision maximum 32, drive current can be set (0.7A, 1.2A, 1.7A, 2.2A, 2.7A, 2.9A, 3.2A, 4.0A)

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

