

# Product Manual

**Kamoer Fluid Tech (Shanghai) Co., Ltd.**

Version : A/0

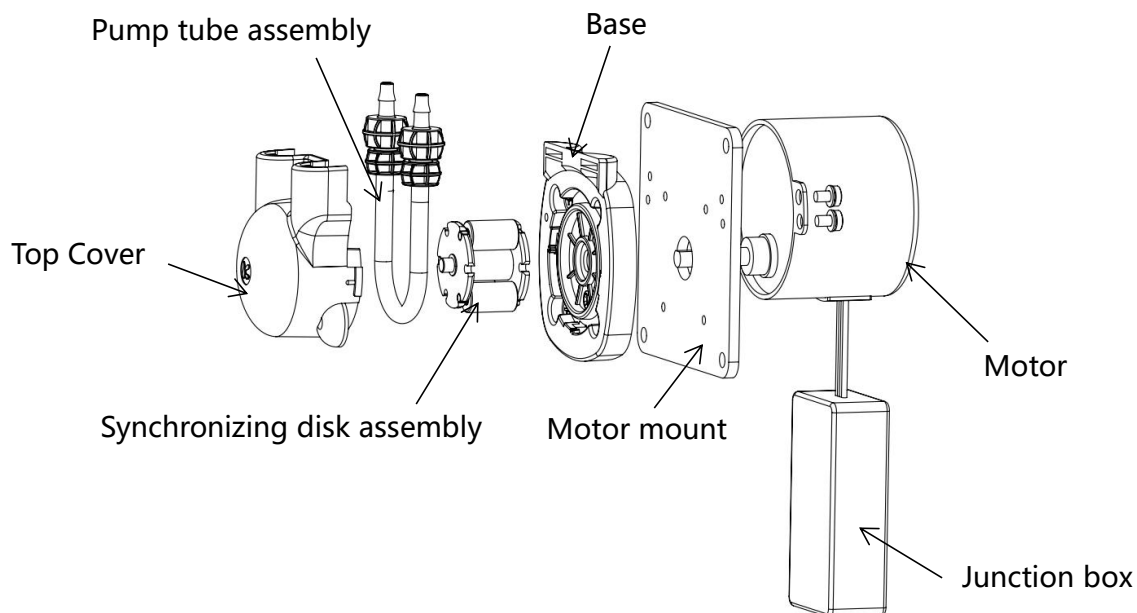
<b>Product name</b>	Micro peristaltic pump
<b>Product model</b>	KPAS100-AC
<b>Execution date</b>	2023.04.24
<b>Company name</b>	Kamoer Fluid Tech (Shanghai) Co., Ltd.

## A. Product Overview

### 1. Product physical picture



### 2. Product assembly drawing



### 3. Model definition

<b>KPAS100</b>	<b>AC</b>	<b>B</b>	<b>14</b>	<b>3</b>	<b>A</b>	<b>A</b>
Model	Motor model	Cast	Tube number	Number of rotors	Connector model	installation method

#### 3.1 Motor model

AC : synchronous motor

#### 3.2 Tube type

B : BPT pump tube

S : silicone tube



## 3.3 Tube number

Tube code	14#	19#	16#
<b>Metric (ID × OD)</b>	1.6mm×4.8mm	2.4mm×5.6mm	3.2mm×6.4mm
<b>Inch (ID × OD)</b>	1/16in×3/16in	3/32in×7/32in	1/8in×1/4in

## 3.4 Number of rotors

3 : 3 rotor

## 3.5 Connector type

A : Twist joint



B : Clamp (only suitable for 1.6\*4.8 tube type)



## 3.6 Installation method

A : Straight board (original installation)    L: L plate

## 3.7 Product material

Model	Cover	Motor mount	Rotor	Sync disk	Connector
KPAS100	PC	PA	Engineering plastics	POM	PP

# 4. Performance characteristics, typical applications

## 4.1 Performance characteristics

- ◆ KPAS100-AC series peristaltic pump is a synchronous motor-driven peristaltic pump is simply designed according to the principles of volumetric pump design.
- ◆ The pump tube is imported BPT (B) tube and silicone tube (S), which can be applied to different transmission liquid requirements, suitable for wall thickness 1.6mm pump tube, pump tube size can be selected (14 #, 19 #, 16 #) peristaltic pump tube to meet different flow requirements.
- ◆ 3-rotor transmission, moderate pulse.
- ◆ Wear plate fixed installation method, in addition to the pump head using quick-release type, pipe joint facing can choose any one of the direction of the upper and lower left and right.



- ◆ The transmission method adopts planetary friction reduction transmission.

## 4.2 Typical applications

- ◆ Flue gas analyzers, water quality online monitors, dishwashers, IVD and many other industries.

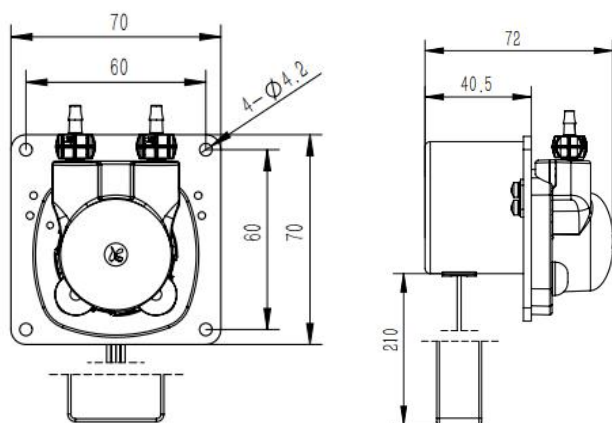
## 5. Notes

- ◆ Hose is resistant to liquid media need to query chemical compatibility or immersion experiments, improper hose selection may lead to hose damage very quickly.
- ◆ Product working environment should not exceed 45 °C, humidity does not exceed 70% (no condensation), poor working environment will lead to premature damage to the product.
- ◆ Fluid leakage accidents caused by hose rupture depends on the liquid medium and your specific application conditions.
- ◆ High overload work may lead to premature damage to the product.

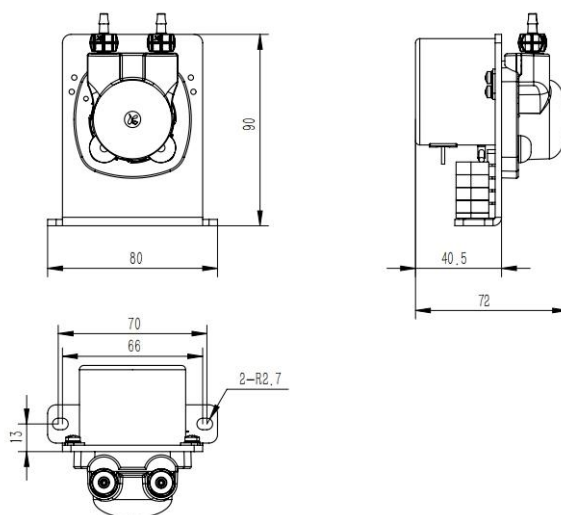
## B. Product specification

### 1. Product Size

Model A



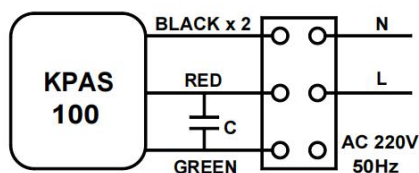
Model L



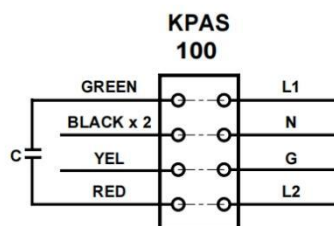
## 2. Technical Parameters

Project		Technical Parameters						
Basic parameters	Motor type	Synchronous motor						
	Flow range (±10%)	4-15ml/min						
	Power	6W						
	Control method	Switch control						
	Weight	A: About 296g			L : about 3 06 g			
	Rated voltage	AC 220V -240V (50/60Hz) AC						
	Pump tube life	BPT: 1000 h			S: 200 h			
	Motor life	800 hours						
Pump flow	Reference flow rate (unit: ml/min)							
	Pump tube code	B14	B19	B16	S14	S19	S16	
	Metric system: ID×OD	1.6mm×4.8mm	2.4mm×5.6mm	3.2mm×6.4mm	1.6mm×4.8mm	2.4mm×5.6mm	3.2mm×6.4mm	
	Inch: ID × OD	1/16in×3/16in	3/32in×7/32in	1/8in×1/4in	1/16in×3/16in	3/32in×7/32in	1/8in×1/4in	
	Pump tube material	BPT			S			
	Rotating speed	40 rpm						
	Flow	4.2ml / min	8.5ml/min	15.5 ml/min	4.2ml / min	8.5ml/min	15.5 ml/min	
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 55dB						

## 3. Motor control



A type



L type

The product is divided into two models A and L. After opening the protective box, the A model is connected to N (black wire end) and L (red wire end) respectively, and then cover the protective box to connect the power supply. L models directly connected to the terminals at the bottom of the L board, respectively, access L1/12 (two options), N (zero wire), G (ground wire).



## C. Adapter hose

Pump tube material	Characteristic	Standards compliant	Tube code
Silicone tube (S)	Low adsorption, good temperature resistance, good resistance to chemical corrosion, life over 200 h	RoHS Comply with food grade certification (GB 4806.11-2016)	14# 19# 16#
BPT tube (B)	Resistance to common chemicals, acid and alkali and oxidation resistance life over 1000 h	RoHS	14# 19# 16#

## D. Optional accessories

Name	Specifications		Function introduction
Anti-floating sinking head	Diameter 6mm Diameter 2.5mm		Place the inlet of the pump tube completely in the liquid to ensure that the peristaltic pump tube can fully absorb the liquid

