

Product Manual

Kamoer Fluid Tech (Shanghai) Co., Ltd.

Version : A/2

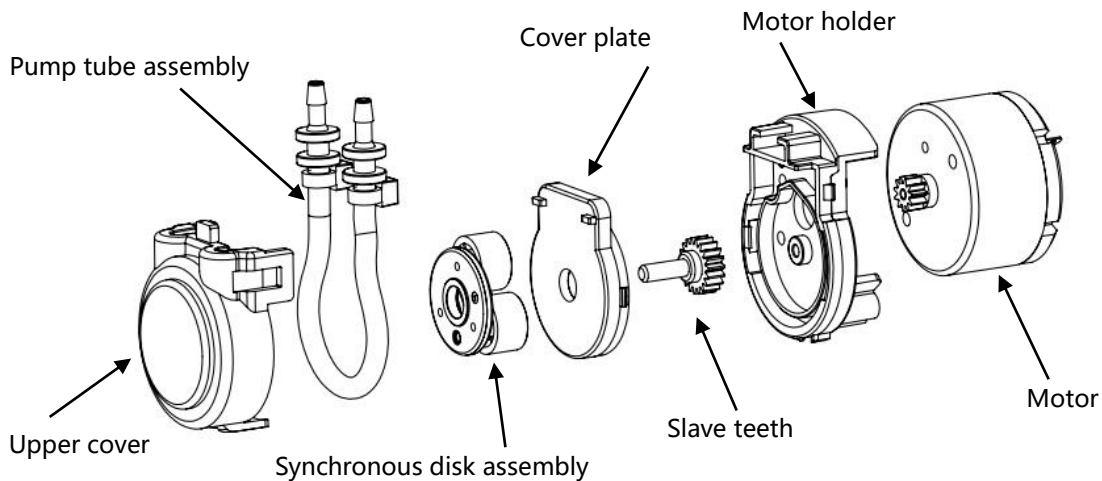
Product name	Micro peristaltic pump
Product model	KPRP20
Execution date	2022.11.21
Company name	Kamoer Fluid Tech (Shanghai) Co.,Ltd.

A. Product Overview

1. Product physical picture



2. Product assembly drawing



3. Model definition

KPRP20	D24	S	06
model	motor	cast	tube number

3.1 Motor

D6: 6V DC brushed motor D12: 12V DC brushed motor D24: 24V DC brushed motor

3.2 Applicable tube type

S: silicone tube



3.3 tube number

06#: 2mm×4mm inner diameter 2mm, outer diameter 4mm

3.4 Product material

Model	Cover	Cage	Rotor	Cover plate	Motor mount	Driven tooth
KPRP20	PC	PA	POM	PA	PA	POM

4. Performance characteristics, typical applications

4.1 Performance characteristics

- KPRP series peristaltic pump is a kind of peristaltic pump driven by DC brush motor
- Pump tube selection - the pump tube is S (silicone) tube, and the size of the pump tube is (06#)

peristaltic pump tube

- Small size, micro flow
- Installation method - the installation method is fixed through the board
- Suitable for pump tubing with a wall thickness of 1.0mm

4.2 Typical applications



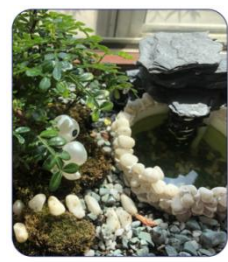
Household sweeping robot



aquarium titration



Auto hand sanitizer



DIY



5. Product Certification, Intellectual Property

CN 306085936 S

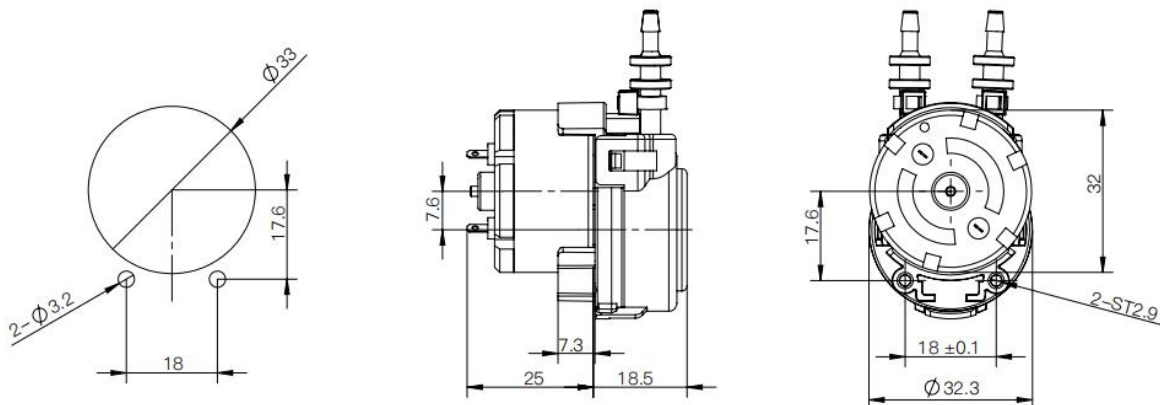
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- Hoses are resistant to liquid media Need to check chemical compatibility or conduct immersion tests, improper hose selection may cause hose damage quickly
- The working environment of the product should not exceed 45°C, and the humidity should not 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



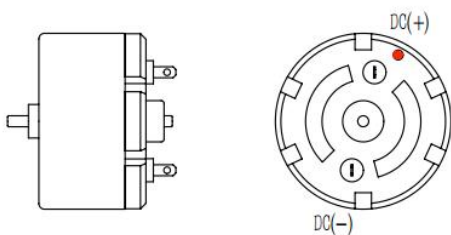
Recommended hole size



2. Technical Parameters

Project		Technical Parameters
Basic parameters	Motor type	DC brushed motor
	Flow range	50ml/min
	Noise	≤55dB
	Power	4W
	Control method	Switch control
	Weight	About 60g
	Rated voltage	6V/12V/24V
	Pump tube life	S: 200h
	Motor life	200 hours
Reference flow rate (unit: ml/min)		
Pump flow	Pump tube code	S06
	ID × OD	Metric: 2mm×4mm
	Pump tube material	silicone tube
	D6/current 0.4A	50ml/min
	D12/current 0.25A	50ml/min
	D24/current 0.15A	50ml/min
	Remark	The above parameters are measured at room temperature and standard atmospheric pressure at 20°C with pure water without pressure. Actually, there will be a certain error in the flow rate depending on the medium, the outlet pressure, the motor speed error, etc.; the actual will be due to the change of the speed and running time. The error, the data is for reference only. In addition, it can be customized according to customer needs.
Reference noise value	Under the ambient noise of 40dB, the measured distance of 50cm is less than 55dB	

3. Motor control



Note: According to the motor wiring diagram, the positive power supply is connected to positive, the negative power supply is connected to negative, and the motor is rotated counterclockwise (CCW).CW)



C. Adapter hose

Pump tube material	Characteristic	Standards compliant	Tube number
Silicone tube (S)	Low adsorption, good temperature resistance, good chemical corrosion resistance, life over 200h	RoHS Comply with food grade certification (GB 4806.11-2016)	06#

D. Optional accessories

Name	Specifications	Function introduction
Anti-floating sinking head	Diameter 6.0mm 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

