

# Product Manual

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

Version : A/1

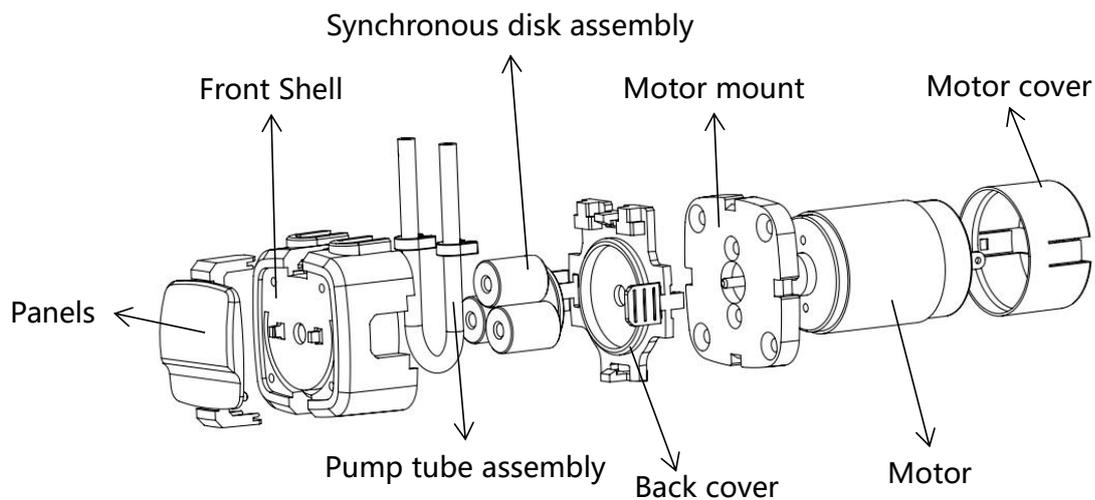
<b>Product name</b>	Micro peristaltic pump
<b>Product model</b>	KXF
<b>Execution date</b>	2022.03.10
<b>Company name</b>	Kamoer Fluid Tech (Shanghai) Co.,Ltd.

## 一、 Product Overview

### 1. Product physical picture



### 2. Product assembly drawing



### 3. Model definition

<b>KXF</b>	<b>DA</b>	<b>B</b>	<b>04</b>
Model	Motor model	Cast	Tube number

#### 3.1 Motor model

DA: 24V DC brushed motor      DC: 12V DC brushed motor      DE: 6V DC brushed motor

#### 3.2 Tube type

B: BPT pump tube      S: Silicone tube



### 3.3 Tube number

Tube number	ID × OD
01#	0.4mm × 3.0mm
02#	0.6mm × 3.0mm
04#	1.0mm × 3.0mm
06#	2.0mm × 4.0mm
08#	2.5mm × 4.5mm
10#	3.0mm × 5.0mm

### 3.4 Product material

Model	Front shell	Back cover	Rotor	Cage	Motor mount
KPP	POM	POM	Engineering plastics	PA	PA

## 4. Performance characteristics, typical applications

### 4.1 Performance characteristics

- KXF series peristaltic pump is a kind of peristaltic pump driven by DC brush motor, with 24V/12V/6V motor, which can provide different voltage options
- 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 (01#, 02#, 04#, 06#, 08#, 10#) to meet different flow requirements
- This peristaltic pump can be adapted to ordinary DC brushed motors
- The pump body comes with a hole mounting plate, no need to add it separately
- 3-rotor transmission, moderate pulse
- Installation method is fixed through the plate, and the pump head adopts quick release type, and the direction of the tube joint can be selected in any direction of up, down, left, and right
- Transmission mode-planetary friction reduction transmission
- Pump tubing with wall thickness 1.0 mm



## 4.2 Typical applications

Analytical instruments: trace element analyzer, chemiluminescence analyzer, miniature water quality automatic monitoring station, digital printing machine



Ion Chromatograph



Auto car wash



Five classification blood analyzer



Hypochlorite water generator

## 5. Product Certification

CN304514582S



ROHS certification



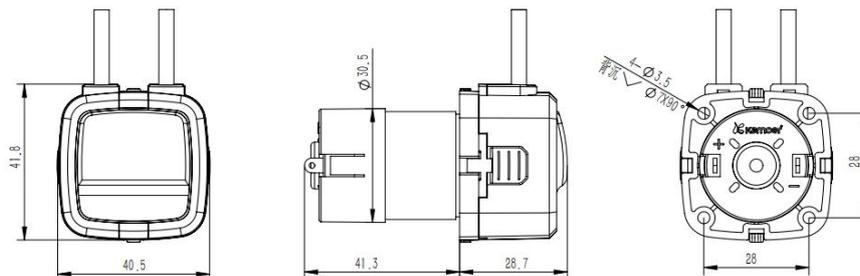
CE certification



- 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

## 二、Product specification

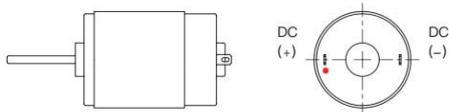
### 1. Product Size



## 2. Technical Parameters

Project		Technical Parameters										
Basic parameters	Motor type	DC brushed motor										
	Flow range	2-80ml/min										
	Noise	≤60dB										
	Power	5W										
	Control method	Switch control										
	Weight	About 100g										
	Rated voltage	6V/12V/24V										
	Pump tube life	S : 200h BPT : 1000h										
	Motor life	800 hours										
<b>Reference flow rate (unit: ml/min)</b>												
Pump flow	Pump tube code	S01	S02	S04	S06	S08	S10	B04	B12	B06	B08	
	ID × OD (mm)	0.4×3	0.6×3	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					
	DA/current: 0.12A	≥2	≥4	≥10	≥38	≥59	≥75	≥11	≥21	≥34	≥48	
	DC/current: 0.25A	≥2.6	≥4.5	≥10	≥37	≥55	≥70	≥10	≥22	≥33	≥47	
	DE/current: 0.53A	≥3	≥5	≥10.5	≥36	≥60	≥80	≥11	≥25	≥38	≥48	
Precautions	Remark	The above parameters are measured with pure water without 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 some errors in the flow rate. The data are for reference only, and can be customized according to customer needs.										
	Reference noise value	Under the ambient noise of 35dB, the measured distance is 45dB at a distance of 50cm										

## 3. Motor control



Note: According to the motor wiring diagram, the positive pole of the power supply is connected to the positive, the negative pole is connected to the negative.

## 三、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 200 h	RoHS Comply with food grade certification (GB 4806.11-2016)	01# 02# 04# 06# 08# 10#
BPT tube (B)	Resistance to common chemicals, acid and alkali and oxidation resistance life over 1000 h	RoHS FDA	04# 12# 06# 08#



## 四、Optional accessories

name	Specifications		Function introduction
connector	1/16 Straight Pagoda Connector		1mm×3 mm hard tube or similar flexible tube can be connected externally
	3/32 straight connector		2 mm×4 mm hard tube or similar flexible tube can be connected externally
	1/8 straight connector		3mm×5 mm hard tube or similar flexible tube can be connected externally
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

