

Product Manual

Kamoer Fluid Tech (Shanghai) Co., Ltd.

Version : A/5

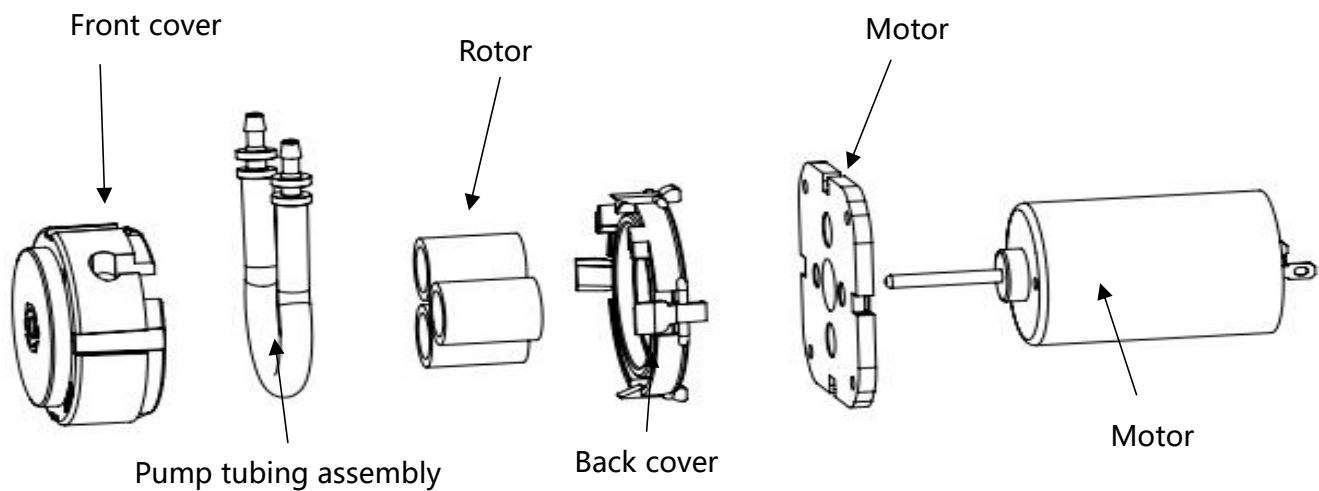
Product name	Micro peristaltic pump
Product model	KSP16
Execution date	2022.11.21
Company name	Kamoer Fluid Tech (Shanghai) Co., Ltd.

A. Product Overview

1. Product physical picture



2. Product assembly drawing



3. Model definition

KSP16	12	L	N	19
Model	Motor model	Installation method	Cast	Tube number



3.1 Motor model



Straight brush motor
12 12V DC brushed
24 24V DC brushed



L-plate brushed motor
12 L 12V DC brushed
24 L 24V DC brushed

3.2 Installation method

Empty: standard installation

3.3 Tube type

N: Norprene

3.4 Tube number

19#: 2.5mm×5.4mm 16#: 3.2mm×6.4mm 40#: 4mm×7.2mm

3.5 Product material

Pump head model	Front cover	Back cover	Rotor	Motor board	Connector
KPS16	POM	POM	PET	PA	PP

4. Performance characteristics, typical applications

4.1 Performance characteristics

- ◆ KSP16 series peristaltic pump is a DC brush motor 12V/24V, different voltage options are available
- ◆ The pump tube is imported Norprene (N) tube with a wall thickness of 1.6 mm, other pump tubes can be customized
- ◆ Applicable to pump tubes of various specifications to meet different transmission needs
- ◆ The pump is small in size, compact in structure and good in cost performance
- ◆ Installation methods: L-board fixing and veneer through-board fixing to suit different usage occasions
(see the installation diagram for details)



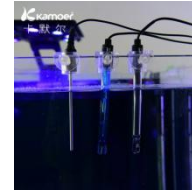
4.2 Typical applications



Water quality analyzer



Nutrient solution ratio



Aquarium water change

Analytical instruments: water quality analyzer, nutrient solution ratio, aquarium water change

5. Product Certification, Intellectual Property

CN205117687U



RoHS certification



CE certification



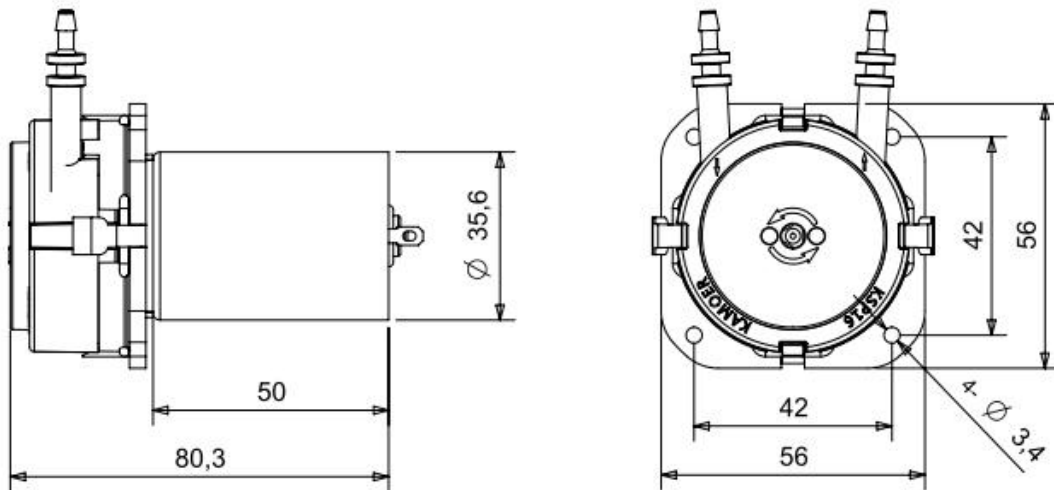
- ◆ Hose is resistant to liquid media need to query chemical compatibility or conduct immersion experiments, improper hose selection may lead to hose damage soon.
- ◆ Product working environment should not exceed 45 °C, humidity does not exceed 70% (no condensation), the harsh working environment will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



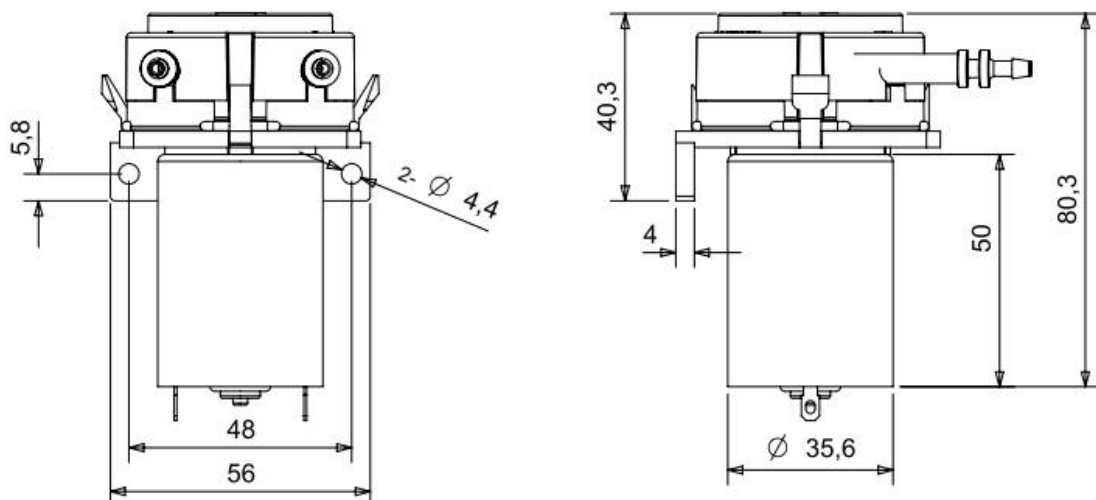
B. Product specification

1. Product Size

Straight board installation



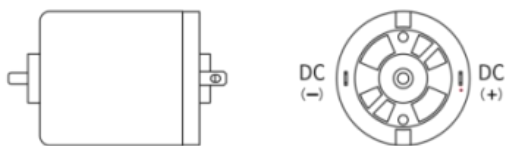
L plate installation



2. Technical Parameters

Project		Technical Parameters		
Basic parameters	Motor type	DC brushed motor		
	Flow range	90ml/min-300ml/min		
	Noise	≤65dB		
	Power	9W		
	Control method	Switch control		
	Weight	About 215g		
	Rated voltage	12V/24V		
	Pump tube life	N: 1000h		
	Motor life	800h		
	Reference noise value	In a quiet room with an ambient noise of 35 dB , the product is 50 cm away from the noise tester , and the noise is 60dB		
Pump flow	Reference flow rate (unit: ml/min)			
	Pump tube code	N19	N16	N40
	ID × OD	Metric: 2.4mm×5.6mm Inch: 3/32 in×7/32 in	Metric: 3.2mm×6.4mm Inch: 1/8 in×1/4 in	Metric: 4.0mm×7.2mm Inch: 5/32 in×9/32 in
	Pump tube material	N		
	12V/current: 0.75 A	≥ 90ml /min	≥ 150ml / min	≥ 230ml/min
	24V/current: 0.35A	≥ 100ml/min	≥ 170ml/min	≥ 260ml /min
Supplementary Note	The above parameters are measured with pure water without pressure at room temperature and standard atmospheric pressure at 20°C. Actually, there will be certain errors in the flow rate due to different media, different outlet pressures, and DC motor speed errors. The data are for reference only. In addition, it can be customized according to customer needs			


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.



C. Adapter hose

Pump tube material	Characteristic	Standards compliant	Tube code
N tube (N) 	Good UV resistance, wide range of chemical resistance, life over 1000h	RoHS FDA	19#, 16#, 40#

D. Optional accessories

Name	Specifications		Function introduction
Straight connector	3/32		2.4mm×5.6mm hose can be connected externally
Straight connector	1/8		3.2mm×6.4mm hose can be connected externally
Straight connector	5/32		4mm×7.2mm hose can be connected externally

