

Product Manual

Kamoer Fluid Tech (Shanghai) Co., Ltd.

Version: A/0

Product name	Smart Peristaltic Pump
Product model	NP04-KK360
Execution date	2025.10.18
Company name	Kamoer Fluid Tech (Shanghai) Co.,Ltd.

1. Product Overview

1.1 Product physical picture



1.2 Model definition

NP04-KK360-ST3-B-GB	NP	04	KK360	ST	3	B	GB
Product Model	Product Series	Number of Pump Heads	Pump Head Model	Motor Type	Number of Rotors	Number of Channels per Pump Head	Standard

Product Series: NP Multi-channel Series

Motor Type: ST: Stepper Motor

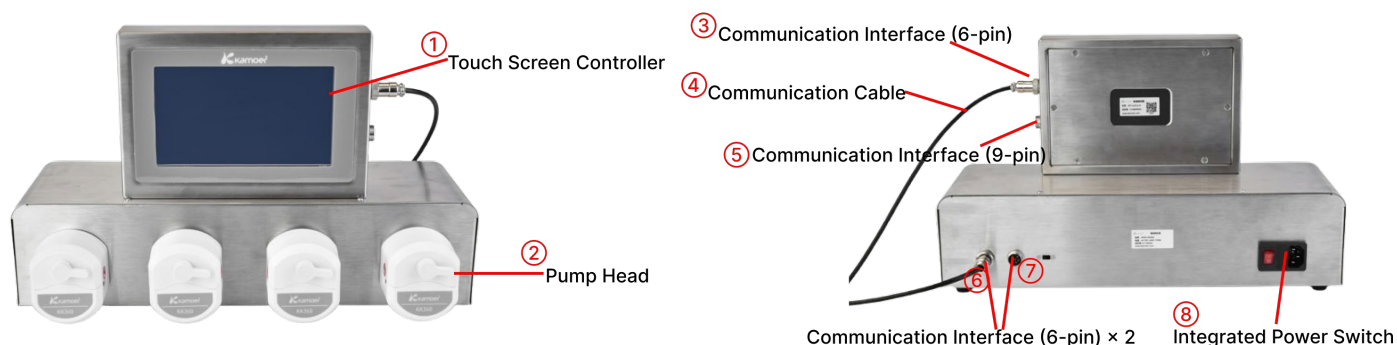
Number of Channels per Pump Head: B: Dual-channel

Standard:

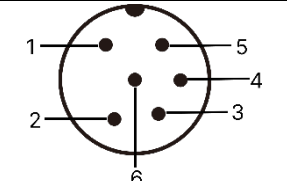
Standard	National Standard	American Standard	European Standard	British Standard	Australian Standard
Code	GB	US	EU	UK	AU



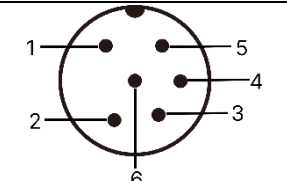
1.3 Interface definition



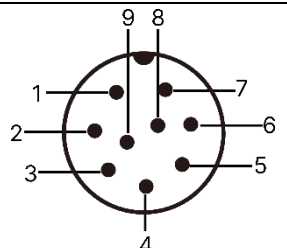
Definition of ③ and ⑥ Communication Interfaces (6-pin):

	PIN1	PIN2	PIN3	PIN4	PIN5	PIN6
	CANL	CANH	NC	NC	24V+	GND

Definition of ⑦ Communication Interface (6-pin):

	PIN1	PIN2	PIN3	PIN4	PIN5	PIN6
	CANL	CANH	NC	NC	NC	GND

Definition of ⑤ Communication Interface (9-pin):

	PIN1	PIN2	PIN3	PIN4	PIN5	PIN6
	NC	RS485 A	485 B	IN1	GND	OUT1
	PIN7	PIN8	PIN9			
	OUT2	NC	NC			

1.4 Optional Pump head (the more rotors, the smaller the pulse)

Pump head type	Pump tube wall thickness	Number of channels	Number of rotors	Picture
KK360	1.6mm	2	3 rotors	



1.5 Optional Pump pipe

Material	Code	Icon	Characteristic	Standards
Silicone tube	S		Low adsorption, good temperature resistance, not easy to age, low precipitates, etc., the chemical corrosion resistance decreases with the increase of temperature; Working temperature: -60°C~200°C.	RoHS Comply with food grade certification (GB4806.11-2016)
PharMed BPT	B		Has excellent resistance to general chemicals, as well as excellent acid, alkali, and oxide resistance. The product is opaque and resistant to ultraviolet radiation, helping to protect sensitive liquids; Working temperature: -60 °C~135 °C.	RoHS

1.6 Performance characteristics and typical applications

1.6.1 Performance characteristics

- The basic structure consists of 4 pump heads, which can be combined in a modular (building block) manner. Through stacked installation, the number of pump heads can be expanded to a maximum of 48
- A 7-inch touch screen enables convenient operation, and the menu-driven interface is clear and user-friendly
- It features three operating modes: internal control, external control, and communication control, meeting the needs of different users
- Independent channel flow calibration function
- Capable of controlling single-channel or multi-channel simultaneous priming (emptying)
- Allows setting of suck-back angle and suck-back time
- Provides functions for saving and recalling filling programs
- Offers a password function: protects the system parameters set by users to prevent incorrect operations
- Provides an online adjustment function, facilitating users to adjust liquid output online
- Supports control via RS485 communication
- Closed-loop stepper motor ensures precise control, low noise, and low heat generation



1.6.2 Typical Applications

- Food and beverage industry: Filling of products such as milk, coffee, fruit juice, and alcoholic beverages
- Pharmaceutical industry: Aseptic filling of products such as vaccines, oral liquids, and injection preparations
- Daily chemical industry: Filling of liquid cosmetics

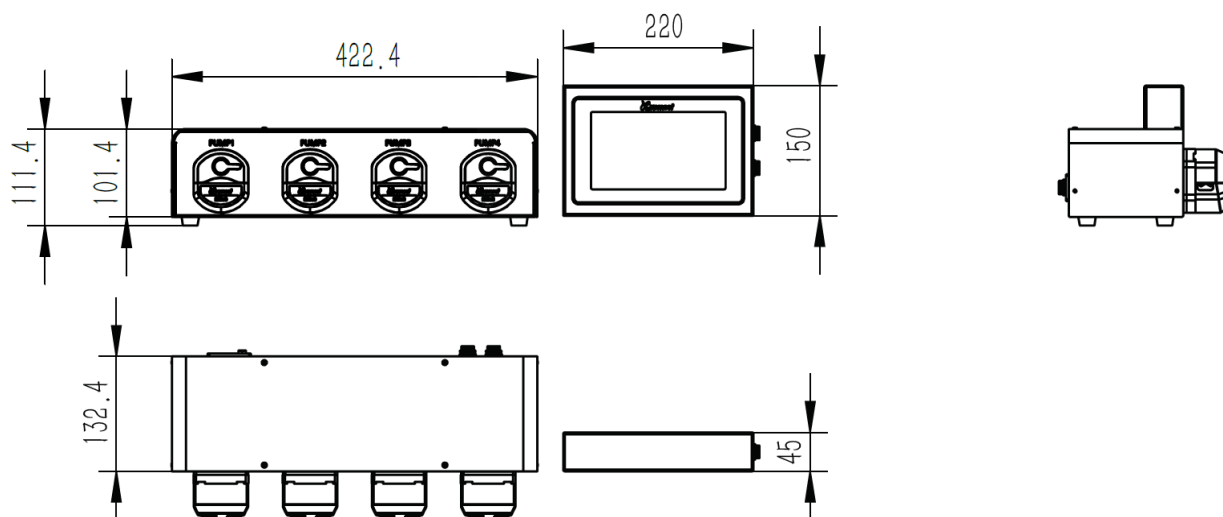
1.7 Daily Maintenance and Precautions

- If you are transferring a specific solution, please contact the manufacturer to confirm the chemical compatibility of the pump tube, so as to match a suitable pump tube.
- Even with compatible pump tubes already adapted, it is still necessary to replace the tubes regularly according to the frequency of use and the characteristics of the medium (such as corrosiveness, particulate matter) to avoid leakage or flow reduction.
- Before use, check the operating voltage, connect the power supply in accordance with the requirements of the product parameter table, and inspect whether the power cord and plug are in good condition and the grounding is reliable to prevent electrical failures.
- Regularly check whether the roller bearings operate smoothly; lubricating grease can be applied to the synchronous disk to improve performance.
- The product must be used within the specified working environment range; a harsh working environment will cause premature damage to the product.
- The risk of liquid leakage accidents caused by hose rupture depends on the liquid medium and your specific application conditions.
- Excessive overload operation may cause premature damage to the product.
- Due to the influence of the fit tolerance of parts, the mechanical noise generated during operation may vary.



2. Product specification

2.1 Product Size



2.2 Product main material

Motor Housing	Display Screen Housing	KK360 Pump Head				
		Front/rear shell	Base	Motor Base	Rotor	Synchronous Disk
304 Stainless Steel	304 Stainless Steel	Modified Polymer Material	Modified Polymer Material	Aluminum	Engineering Plastic	Modified Polymer Material

2.3 Technical Parameters

Project		Technical parameters
Basic parameters	Operating Voltage	AC110V~240V
	Power	<75W
	Weight	Approximately 6.5Kg (including pump head)
	Motor Type	42-Series Closed-Loop Stepper Moto
	Motor Service Life	Not Less Than 6000 Hours
	Number of Channels	4 Pump Heads per Unit, Expandable to 48 Pump Heads
	Operating Environment	Temperature: 0°C~40°C, Relative Humidity: <80%RH (No Condensation)
	Language Setting	Chinese, English



	Mode Setting	Fixed-Volume Filling Mode							
	Control Method	7-Inch Touch Screen Control, RS485 Control (Modbus Protocol), Foot Pedal Control							
	Pump Head	3-Rotor KK360 (Pump Head)							
	Rotational Speed Range	0.1-350 rpm (revolutions per minute)							
	Speed regulation resolution	0.1 rpm							
	Reference Noise Level	≤ 60dB (the horizontal distance between the test product and the noise meter is 0.5 meters)							
Pump pipe flow rate	Code	B13	B14	B19	B16	S13	S14	S19	S16
	Pump pipe material	BPT Tube				Silicone Tube			
	Inner diameter * outer diameter (mm)	0.8*4	1.6*4.8	2.4*5.6	3.2*6.4	0.8*4	1.6*4.8	2.4*5.6	3.2*6.4
	Single-Channel Reference Flow Rate (ml/min)	15	55	110	180	14	55	110	180

Note: The above parameters are measured under the conditions of 20°C room temperature, standard atmospheric pressure, pure water, and no pressure. In practice, there may be a certain error in the flow rate due to factors such as different media, different outlet pressures, and motor speed errors. The data is for reference only. In addition, customization can be provided according to customer requirements.

3. Instructions for placing an order

3.1 Overall unit

Name	Material number
NP04-KK360; National Standard	CA.01.20.0009

3.2 Accessory

Parts name	Type	Accessories picture	Function introduction
Power Cord	Standard Configuratio		
Screen-Host Connection Cable (10.09.0531)	Standard Configuration		
Foot Switch (10.09.0518)	Optional Configuration		Control the pump's start and stop via the foot switch

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