

# Rpm-01 Syringe Pump



- High precision continuous liquid transferring instead of peristaltic pump
- Compact size compact size, easy mounting, space-saving
- High Repeatability, long service life, maintenance-free
- Wetted material borosilicate glass and PTFE, corrosion resistance, biocompatible, non-contamination
- NMB stepper motor, long service life, high accuracy, reliability and stability
- RS232/RS485/CAN communication driver optional

**RPM-01 - D - 42 - 1 - W01**

Model No.      single side 42 stepper motor      Volume      Optocoupler/Drive Optional

①		②	
1	1ml	W00	Without optocoupler & drive
2	2ml	W01	With optocoupler & without drive
3	3ml	Y02	With optocoupler & drive

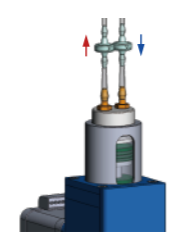
## Technical Parameter

Rated volume	1ml	2ml	3ml
Resolution	1ml	2ml	3ml
Accuracy	±1%@100% reciprocal stroke		
Precision (Repeatability)	0.3%~0.7%(100% stroke)		
Pressure rating	Max. 0.3Mpa		
Service life	3 million times no leakage (media: water; 1 rated stroke=one time)		
Max. speed	120rpm		
Min. speed	1rpm/min		
Flow range	1 - 360ml/min		
Actuator	Eccenter		
Wetted material	Borosilicate glass, PTFE piston/outlet		
Connection	1/4-28UNF		
Communication	RS485/RS232/CAN		
Power supply	DC24V/1.5A		
Operating temperature	5°C-55°C		
Operating humidity	<80% relative humidity, non-condensing		
Dimension(L*W*H)	98.3*42*116.4mm		
Net weight	0.8kg		

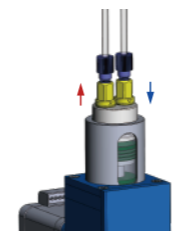
## Motor Parameter

42 stepper motor			
Max. power	9.2W	Resistance	3.8Ω±0.38
Step angle	1.8°	Inductance	5.2mH REF
Phase	2	Insulation	100m Ω MIN
Phase voltage	4.2V	Max. Temp	80°C MAX
Phase current	1.1A	Insulation grade	B

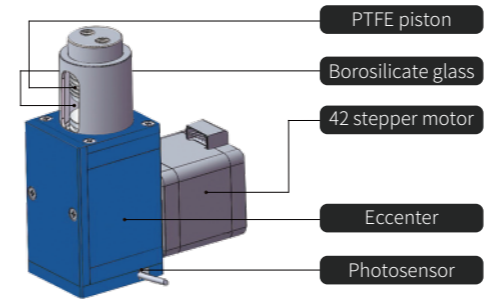
**Flexible Tube Connection**  
Barbed check valve  
+ Male-to-barb adapter



**Rigid Tube Connection**  
Threaded check valve  
+ Flangeless fittings



## Product Structure



## Component

RPM-01 eccentric syringe pump was made of PTFE piston, borosilicate syringe, 42stepper motor, eccentric inset, crank web, pushrod, Panasonic photosensor, other mechanical parts.

## Classification

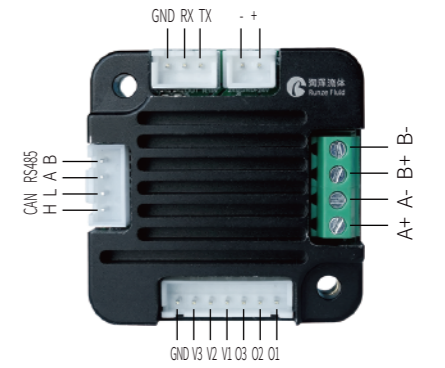
Rpm-01-D 1ml 2ml 3ml syringe pump aspiration and discharge 1ml 2ml 3ml when motor runs 1 circle (360°)

## Panasonic photosensor (optional)

Inset Panasonic photosensor (optional) helps to protect the syringe pump from collision and anti external interference.

## Driver Port (optional)

Port	Description	Port	Description
H	CANH	B+/B-	Phase B wiring
L	CANL	A+/A-	Phase A wiring
A	RS485 A	O1	Photosensor wiring port
B	RS485 B	O2	
GND	GND	O3	
RX	RS232 data output	V1	
TX	RS232 data input	V2	
-	DC24V negative	V3	
+	DC24V positive	GND	



## Dimension (unit: mm)

