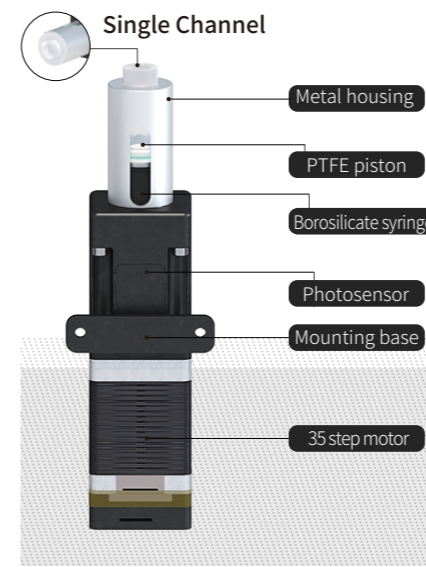


SY-09 Syringe Pump



- Compact size, easy mounting, space-saving, long service life
- An industrial Syringe Pump with high precision & high performance in micro-liquid transferring self-developed by Runze Fluid.
- Make step motor move in clockwise or counterclockwise by receiving instructions from the host computer. The circular motion is converted into linear motion by the trapezoidal screw to make the piston move up and down which applied in medical analysis equipment, chromatographic analyzers, food and beverages detection and analysis system, water quality on-line analyzer, petroleum detection equipment and biopharmaceutical extraction devices

Product Structure



Product Function

Address setting	Address settable via serial port
Baud rate setting	RS232/RS485/CAN baud rate settable
CAN destination address setting	When multiple devices controlled in paralleling, any device can be set with priority address
Speed setting	3ml: from 1 rpm to 600 rpm 8ml: from 1 rpm to 300 rpm (There are difference for gas, liquid and models)
Subdivision setting	subdivision 2-32 are settable
Reset interior data	Factory reset
Parameter query	Query address, speed, subdivision, baud rate, etc.
Version query	Query current firmware version
Motor direction	CW/CCW settable
Reset	Return piston to the origin/home position
Strong stop	Strong stop the running motor
Motor status query	Detect current motor status

ZSB-LS - 1.8 - 1 - 3 - M - Q

Model No. 1.8° Step angle Screw Lead 1mm Volume With code disk With Driver

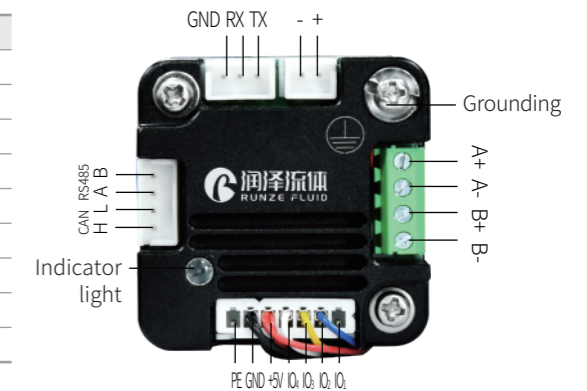
3	Volume 3ml
8	Volume 8ml

Technical Parameter

Accuracy	≤1%@100% (rated stroke)	
Precision (Repeatability)	0.3%-0.7%@100% (rated stroke)	
Service life	3 million times no leakage (media: water; 1 rated stroke = one time)	
Volume	3ml	8ml
Rated Stroke (control steps)	18mm(3600steps)	19.2mm(3840steps)
Maximum speed	600rpm	300rpm
Linear speed	0.017-10mm/s	0.017- 5mm/s
Running time (per rated stroke)	1.8-1080s	3.84-1129s
Resolution	0.005mm/0.833μl	0.005mm/2.083μl
Syringe ID	14.55mm	23.03mm
Actuator	Trapezoidal screw (Lead 1mm)	
Wetted Material	Borosilicate glass, PCTFE valve head, PTFE piston	
Max. Pressure	Positive: 0-0.8Mpa, Negative:0-0.06Mpa, (retention time based on test)	
Channel	Single channel	
Connection	1/4-28UNF	
Baud rate	RS232/RS485: 9600bps / 19200bps / 38400bps / 57600bps / 115200bps CAN: 100Kbps/200Kbps/500Kbps/1Mbps	
Address & Parameter setting	Via Communication	
Rated power	15W	
Power supply	DC24V/3A	
Operating temperature	5°C~55°C	
Operating humidity	≤ 80% relative humidity, non-condensing	
Dimension (L*W*H)	51*41.5*155.2mm	51*41.5*157.2mm
Net Weight	0.56kg	0.62kg

Driver Port Definition

Port	Description	Port	Description
+	DC24V Positive	A+/A-	Phase A wiring
-	DC24V Negative	B+/B-	Phase B wiring
TX	RS232 Data Input	IO ₁	NC
RX	RS232 Data Output	IO ₂	Encoder Phase A
GND	RS232 GND	IO ₃	Encoder Phase B
H	CANH	IO ₄	IO ₄ Optocoupler signal
L	CANL	+5V	Power positive
A	RS485A	GND	GND
B	RS485B	PE	Grounding



Dimension (unit: mm)

