SY-03B DK Syringe Pump

- SY-03B Dk series product is a kind of micro-syringe pump with multiple syringes working in parallel in high precision developed by Runze Fluid.
- Use a stepper motor to drive the syringe and the valve to aspirate and dispense quantitative liquid.
- Fully programmable pump module with open framework, which handling fluids from microliters to milliliters with extraordinary accuracy and precision. With functions in automatic pipetting, dilution and dispensing.
- Controlled by an external computer or microprocessor.

ZSB-SY03B DK - 60 - ①T1 - ②Z - ③PPS

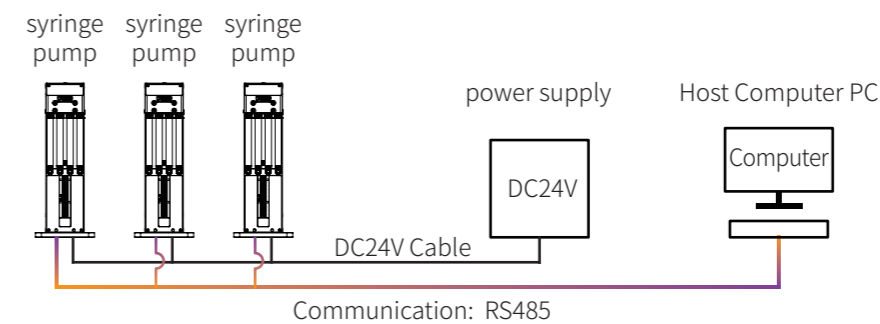| Model No. | Rated Stroke 60mm | Configuration | Solenoid valve | Valve material |

①		②		③	
T1	1-port	Z	without Solenoid valve	PPS	Valve material PPS
T2	2-port	F	with Solenoid valve	PEEK	Valve material PEEK
T4	4-port				
T6	6-port				
T8	8-port				

Technical Parameter (ASC II Code)

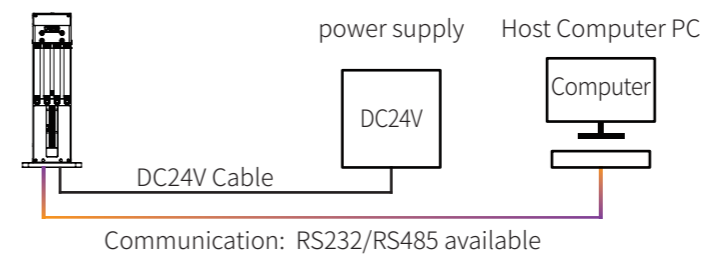|	
Accuracy	≤1%@100% rated stroke
Precision (Repeatability)	0.3%~0.5%@100% rated stroke
Rated stroke (control steps)	60mm(6000 steps standard mode; 48000 steps micro-step mode)
RPM Range	0.1rpm ~ 333rpm
Linear speed	0.01mm/s ~ 100mm/s(media: water ; 1 rated stroke=one time)
Running time (per rated stroke)	1.8s ~ 6000s(media: water ; 1 rated stroke=one time)
Resolution	0.01mm (per step)
Valve Type	Solenoid valve
Syringe configuration	25μl, 50μl, 100μl, 250μl, 500μl, 1ml, 1.25ml, 2.5ml, 5ml
Wetted material	Borosilicate glass, PTFE, FKM, PEEK(PPS)
Max. Pressure Rating	0.2Mpa
Actuator	Trapezoidal screw (Lead 6mm)
Connection	1/4-28UNF
Baud rate	RS232/RS485: 9600bps, 38400bps
Communication addres	Up to 15 individual addresses can be provided
Firmware	Programmable acceleration/deceleration, termination of movement, programmable piston speed, diagnostic query error, programmable clearance compensation, absolute position or relative position, change speed on the fly, programmable Non-Volatile Memory
Power supply	DC24V/3A
Operating temperature	5°C~55°C
Operating humidity	<80% relative humidity, non-condensing
Dimension (L*W*H)	65*150*261.3mm
Net weight	2.2kg

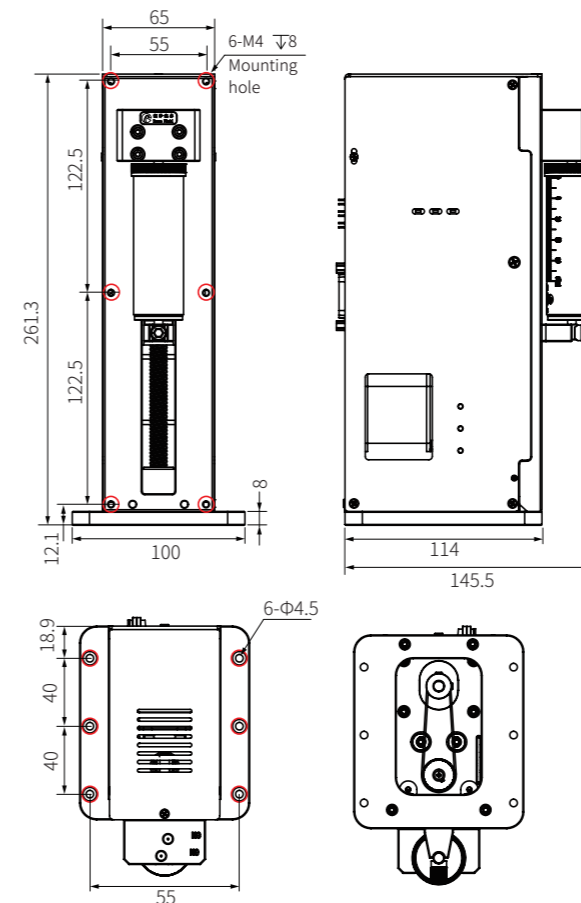## Wiring Diagram

Multiple syringe pumps controlled in parallel

syringe pump   syringe pump   syringe pump   power supply   Host Computer PC

DC24V   Computer

DC24V Cable

Communication: RS485

Single controlled

syringe pump

power supply   Host Computer PC

DC24V   Computer

DC24V Cable

Communication: RS232/RS485 available

Dimension (unit: mm)

Product Structure

- Valve
- 3-way solenoid valve
- K60 Gastight Syringe
- push rod
- hand tighten screw
- push rod seat