Industrial Syringe Pump SP1-CX、MSP1-CX

LONGER
PRECISION FLUID TRANSFER





- Mainly used in OEM equipment and instruments, especially for lab automation systems and IVD application
- Rotating valve, and misc. accessories available
- RS485, RS232 or CAN bus communication interface
- CE certified, RoHS compliant

	SP1-CX	MSP1-CX
Main Spec		
Accuracy	≤1.0 % (syringe ≥1 mL)	
Precision	CV≤0.05% at full stroke (with syringe ≥ 500uL)	CV≤0.05% at full stroke (with syringe ≥1mL)
Wetted material	Borosilicate glass, PTFE, PFA, CTFE, ETFE, UHMW-PE	
Dimension (L×W×H)	114mm x 65mm x 254mm	110mm x 44.4mm x127mm
Weight	2.15 kg	1.0 kg
Power supply	DC 24V, 1.5A (peak)	
Syringe and Drive		
Syringe fitting	1/4"-28 thread	
Syringe	50uL, 100uL, 250uL, 500uL, 1mL, 2.5mL, 5mL, 10mL, 25mL	50uL, 100uL, 250uL, 500uL, 1mL, 2.5mL, 5mL
Syringe material	Borosilicate glass, stainless steel plunger with PTFE coating, PTFE or UHMW-PE plunger tip	
Resolution (standard mode)	6000 steps with 0.01mm in 1 step	3000 steps with 0.01mm in 1 step
Resolution (microstep mode)	48000 microsteps with 1.25um in 1 microstep	48000 microsteps with 0.625um in 1 microstep
Travel	60mm	30mm
Time for full stroke	1.26s-1200s	
Drive system	Ball screw drive with optical encoder	
Valve & Valve Drive		
Turn Time	≤250ms between adjacent ports	
Valve options	Standard: 3-port valve, optional: 3-port distibution valve, 4-port valve, T-valve, Y-block	
Max pressure	0.68MPA	
Fitting	1/4"-28 thread	
Communication		
Interface	RS485, RS232, CAN bus, external control input and output	
Protocol	Data terminal, OEM protocol (serial) or CAN	
Baud rate	RS485 or RS232: 9600bps or 38400bps CAN bus: 100 KB, 125 KB 250 KB, 500 KB or 1MB	
Format	Data bit: 8; parity: none; stop bit: 1; half duplex (RS232/485)	
Firmware		
Topology group	Up to 15 pumps in one group, support group control and individually addressed	
Upgrade firmware online	" One Click" by customer through PC Utility	
Homing Algorithm	Plunger home position is identified by motor stall, which will reduce the dead volume of the system	
Halt function	For better interactive control, "h" command is used to halt execution of the command string during plunger movement. To resume execution with "R" or "r" command	
Microstep mode	Set microstep mode for smoother motion with 48000 microsteps per stroke, 1/8 microstepping or 1/16 microstepping	
Programmable parameter	Programmable ramps, cut-off velocity, plunger speeds, backlash compensation, programmable work-flow command set , delays and loops, terminate moves, diagnostics, absolute and relative positions	
Environmental		
Operating temperature	Recommended: 15℃-40℃ , use low temperature syringe for low temperature application	
Operating Humidity	<80% RH, no condensation	
Storage temperature	-20℃-65℃	
Storage Humidity	<80% RH, no condensation	

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Peristaltic Pump
Laboratorial Syringe Pump
Industrial Syringe Pump
Precise Gear Pump
Piston Pump
Pump System
OEM



* Please determine the product material according to fluid media and environment.

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