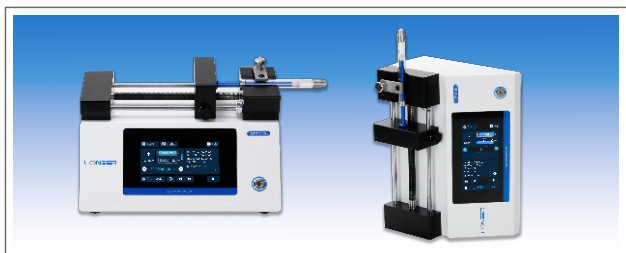


Laboratorial Syringe Pump

LONGER

A Halma company

ASP100 Series Digital Syringe Pump



- Experience unmatched ease of use with a high-resolution color LCD and an intuitive full-touchscreen interface.
- Delivering liquids with exceptional accuracy and a pulseless flow, perfect for handling small volumes.
- Fine-tune the flow rate in real time, optimizing the pump parameters even while in operation.
- Provided with ready-to-use Labview drivers and demos for streamlined automation and effortless integration with other lab equipment.



Product Model	ASP11-1A	ASP11-1AP	ASP11-2AP	ASP12-1B	ASP12-2B
Work mode	Single infuse, multiple infuse			Single infuse, multiple infuse, single withdraw, infuse/withdraw(Continuous), withdraw/infuse(Continuous)	
Number of syringes	1	1	2	1	2
Syringe options	0.5μL-60mL			0.5μL-150mL	
Flow rate for reference	3.3pL/min-120.0mL/min	0.9pL/min-29.5mL/min		3.3pL/min-226.0mL/min	
Stroke	110mm			140mm	
Pusher advance per microstep	0.0326μm/microstep	0.0088μm/microstep		0.0326μm/microstep	
Linear speed	0.416μm/min-180mm/min	0.1126μm/min-35.4mm/min		0.416μm/min-180mm/min	
Linear speed resolution	0.416μm/min	0.1126μm/min		0.416μm/min	
Linear travel accuracy	≤±0.35% (When travel≥30% of stroke)				
Linear travel CV	CV≤0.03% (When travel≥30% of stroke)				
Linear force (Max.)	320N(Can be set 20%-100%)				
Built-in syringe	Common syringe brands and models on the market				
User-defined syringe	Store 20 user-defined syringes: travel≤110mm, 6.75mm≤OD≤31mm			Store 20 user-defined syringes: travel≤140mm, 6.75mm≤OD≤43mm	
Calibration	Improve flow rate/ volume precision and accuracy by calibrating the user-defined syringe				
Display	4.3 inch LCD for parameters and pump status				
Parameter method	20 parameter methods can be stored and easily recalled				
Control mode	Touchscreen control, external control, communication control, footswitch control, Labview control				
External control	Two control inputs: switch signals or level signals for start/stop and emergency stop Two status outputs: can be configured as start/stop, direction or fault alarm				
Communication control	RS485, Modbus RTU or Longer OEM protocol				
Real-time adjustment	The flow rate can be adjusted while the pump is running				
Audible alert	Beep sound can indicate keypad clicks, nearing completion of work, work completion, and fault alarm				
Indicator light	Green-running, Blue-standby, Red-Warning				
Screen lock	The touch screen can be locked to prevent misoperation				
Vertical display	The display will rotate 90 degrees to support vertical operation				
Pump status when power up	Stop				
Fast forward/backward	Infuse or withdraw at full speed				
EMC	NB CE/UKCA certified				
Dimensions (LxWxH)	240mm×180mm×137mm			280mm×212mm×160mm	
Power supply for adapter	AC 90V-260V			AC 90V-260V	
Power supply for pump	DC24V/15W	DC24V/10W		DC24V/15W	
Temperature	0 - 40℃				
Humidity	≤80%RH, No condensation				
Weight	2.8kg	2.9kg	2.85kg	3.65kg	3.65kg

Product Model		ASP11-1A	ASP11-1AP	ASP11-2AP	ASP12-1B	ASP12-2B
Syringe	Syringe ID (mm)	Flow rate for reference				
0.5μL	0.10	0.0033nL/min-0.0014mL/min	0.0009nL/min-0.0003mL/min	0.0033nL/min-0.0014mL/min	0.0033nL/min-0.0014mL/min	
5μL	0.35	0.040nL/min-0.0173mL/min	0.0108nL/min-0.0034mL/min	0.040nL/min-0.0173mL/min	0.040nL/min-0.0173mL/min	
10μL	0.50	0.0816nL/min-0.0353mL/min	0.0221nL/min-0.0069mL/min	0.0816nL/min-0.0353mL/min	0.0816nL/min-0.0353mL/min	
25μL	0.80	0.2090nL/min-0.0904mL/min	0.0566nL/min-0.0178mL/min	0.2090nL/min-0.0904mL/min	0.2090nL/min-0.0904mL/min	
50μL	1.10	0.3951nL/min-0.1710mL/min	0.1070nL/min-0.0336mL/min	0.3951nL/min-0.1710mL/min	0.3951nL/min-0.1710mL/min	
100μL	1.60	0.8360nL/min-0.3617mL/min	0.2263nL/min-0.0711mL/min	0.8360nL/min-0.3617mL/min	0.8360nL/min-0.3617mL/min	
250μL	2.30	1.7275nL/min-0.7475mL/min	0.4676nL/min-0.1470mL/min	1.7275nL/min-0.7475mL/min	1.7275nL/min-0.7475mL/min	
500μL	3.25	3.4493nL/min-1.4925mL/min	0.9336nL/min-0.2935mL/min	3.4493nL/min-1.4925mL/min	3.4493nL/min-1.4925mL/min	
1mL	4.72	7.2752nL/min-3.1479mL/min	1.9692nL/min-0.6191mL/min	7.2752nL/min-3.1479mL/min	7.2752nL/min-3.1479mL/min	
5mL	13.10	56.041nL/min-24.248mL/min	15.169nL/min-4.7689mL/min	56.041nL/min-24.248mL/min	56.041nL/min-24.248mL/min	
10mL	16.60	89.987nL/min-38.937mL/min	24.357nL/min-7.6575mL/min	89.987nL/min-38.937mL/min	89.987nL/min-38.937mL/min	
20mL	19.00	117.89nL/min-51.009mL/min	31.909nL/min-10.032mL/min	117.89nL/min-51.009mL/min	117.89nL/min-51.009mL/min	
30mL	23.00	172.75nL/min-74.748mL/min	46.759nL/min-14.700mL/min	172.75nL/min-74.748mL/min	172.75nL/min-74.748mL/min	
60mL	29.14	277.30nL/min-119.98mL/min	75.056nL/min-23.597mL/min	277.30nL/min-119.98mL/min	277.30nL/min-119.98mL/min	
100mL	31.00	-	-	313.82nL/min-135.79mL/min	313.82nL/min-135.79mL/min	
150mL	40.00	-	-	522.50nL/min-226.08mL/min	522.50nL/min-226.08mL/min	



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