

SP 3500

NEW MODEL

Dual Syringe Pump for Addition and pH Control

A high-precision, dual-syringe dosing system engineered for continuous, pulse-free reagent delivery — operating standalone via the on-board control pad or integrated with the Polstat 3500.



0.1 - 12

mL / min flow range

< 1 %

accuracy at full stroke

25 mL

dual-syringe capacity

0.7 MPa

max pressure rating

KEY FEATURES & CAPABILITIES

01 Continuous, Pulse-Free Flow

Alternating dual-syringe operation maintains uninterrupted dispensing — one fills while the other delivers.

02 Precise Reagent Dosing

Stepper-motor-driven syringes provide accurate addition control and pH maintenance for sensitive reactions.

03 Wide Flow Rate Range

Configurable from 0.1 mL/min to 12 mL/min depending on syringe size and operating mode.

04 Multi-Valve Reactor Support

Each reactor block can route through multiple valves, enabling flexible fluid paths and parallel processing.

05 Optimised Cleaning Workflow

A guided, low-solvent cleaning routine reduces consumable use and minimises system downtime.

06 Industrial Connectivity

Ethernet and RS-485 interfaces integrate cleanly with external controllers and lab automation stacks.

— COMPLETE SPECIFICATIONS

Engineering at a glance

Verified performance, materials, and operating envelope.

■ PERFORMANCE

Flow Rate	0.1 - 12 mL/min
Accuracy	≤ 1 % @ 100 % rated stroke
Precision (Repeatability)	0.3 % - 0.5 % @ 100 % rated stroke
Number of Syringes	2 (independent, alternating)
Syringe Volume	25 mL
Dispensing Volume Range	25 mL
Max Pressure Rating	0.7 MPa

■ POWER & PHYSICAL

Input Voltage	220 V AC, 50 Hz
Mounting	Bench top
Dimensions (W × L × H)	170 × 245 × 275 mm
Weight	~ 11 kg

■ MATERIALS & CONNECTIVITY

Wetted Materials	Borosilicate glass, PTFE, Sapphire, PCTFE
Valve Model	M06
Connection	1/4 - 28 UNF
Communication	Ethernet, RS-485
Control	PiLAB Software / Control Pad
Control Pad	7" LCD Display
Installation Zone	NFLP

■ ENVIRONMENTAL CONDITIONS

Ambient Temperature	5 °C - 40 °C
Humidity	< 80 % RH, non-condensing

— DEPLOYMENT OPTIONS

Flexible by design

1 STANDALONE On-board 7" Control Pad

Operate independently with the integrated control pad — ideal for plug-and-go reagent dosing without an external host or PC.

2 INTEGRATED With the Polstat 3500

Pairs seamlessly with the Polstat 3500 via PiLAB Software for full reactor workflow automation and centralised process control.

NOTE For ordering information and customised configurations, please contact our sales team. All specifications are subject to change without notice.

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