

Single Head Electrolyte Filling Pump Precision Ceramic Metering System

Item Number: YY04



Introduction

Single head electrolyte filling pump provides precise low volume metering for lithium ion batteries pharmaceuticals food chemicals and adhesive fluids with durable ceramic valve technology easy cleaning reliable programmable operation for demanding production environments and flexible OEM integration

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Application	Description	Key Benefit
Lithium-Ion Battery Manufacturing	Delivers controlled electrolyte quantities during cell filling and related battery production processes. The wide stroke range supports micro-volume dosing and adjustable process requirements.	Stable filling accuracy and compatibility with demanding electrolyte handling environments.
Pharmaceutical Filling	Provides precision metering for small-volume pharmaceutical liquids where repeatability and cleanable fluid paths are important.	Programmable operation and online cleaning help support consistent, efficient filling cycles.
Food and Beverage Processing	Handles micro-quantity filling tasks involving compatible food liquids and process fluids. The stainless-steel pump body provides a durable fluid-contact structure.	Reliable dosing with a robust construction suited to repeated operation.
Chemical Liquid Dispensing	Measures and transfers compatible acidic, alkaline, abrasive, or chemically active fluids. Ceramic valve components and stainless-steel construction support demanding fluid conditions.	Improved resistance to chemical reaction, wear, temperature, and corrosion-related challenges.
Adhesive and Glue Filling	Dispenses compatible glue and adhesive materials in controlled quantities for laboratory or production use. The positive-displacement mechanism supports repeatable output.	Consistent metering for applications where fluid quantity directly affects assembly or process quality.
OEM Filling Equipment	Integrates into specialized filling machines, laboratory platforms, and automated liquid-handling equipment. The programmable controller and stepper-motor drive provide a practical control interface.	Flexible system integration with digitally adjustable motion parameters.

Parameter	Specification
Product Item Number	YY04
Pump valve material	Aluminum oxide ceramic Al ₂ O ₃
Pump sleeve material	SUS304
Pump valve hardness	1800/HV0.5
Single-stroke range	0.05-3000ul
Stroke volume adjustment method	Gear adjustment
Maximum flow rate	750ml/min
Stroke accuracy	±3‰
Throughput speed	18-250r/min
Liquid inlet tubing	6.0x8.0mm

Parameter	Specification
Liquid outlet tubing	4.0x6.0mm
Tubing material	PE/PTEE
Overall dimensions	234x125x146mm
Weight	5.9kg
Control system	Programmable controller and touchscreen human-machine interface
Drive system	Single-axis 86-series stepper motor
Valve design	Special ceramic positive-displacement rotary plunger valve
Cleaning method	Online cleaning and disinfection through forward and reverse valve switching without disassembly
Fluid compatibility	Compatible with most fluids and designed for resistance to chemical reaction
Maintenance design	No dynamic sealing components or easily worn parts; pump body can be completely dismantled
Integration capability	Suitable for OEM use