

Laboratory Bottle Top Dispenser Chemical Resistant Reagent Liquid Dosing System

Item Number: JZ11



Introduction

Engineered for superior chemical resistance and high precision, this autoclavable bottle top dispenser provides reliable liquid handling across 0.5 to 50 ml volumes. Featuring inert fluoropolymer pathways, it ensures precise, repeatable reagent dosing across laboratory research and industrial workflows.

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Application	Description	Key Benefit
Battery Electrolyte Formulation	Precision dispensing of solvent mixtures, organic carbonates, and ionic liquid additives into glovebox synthesis vessels.	Prevents moisture intrusion and resists fluorinated solvent degradation during high-throughput electrolyte research.
Semiconductor Wet Chemistry	Transfer and aliquoting of corrosive etchants, acid washes, and stripping agents during wafer processing.	Inert PTFE/FEP fluid contact prevents metallic ion contamination and withstands aggressive acid mixtures.
Petrochemical and Fuel Analysis	Dosing of viscous hydrocarbons, standard fuels, and organic solvent diluents for distillation and spectrometry preparation.	Handles fluids with kinematic viscosities up to 500 mm ² /s without piston stalling or volumetric drift.
Ceramics and Advanced Materials	Metered addition of chemical binders, dispersants, and acid activators into powder slurries.	High-density fluid tolerance (up to 2.2 g/cm ³) ensures accurate delivery of dense mineral and salt solutions.
Pharmaceutical Quality Control	Continuous, repeatable dispensing of titrants, buffer standards, and high-purity reagents in GLP/GMP environments.	Autoclavable construction prevents microbial fouling, while ≤0.1% CV guarantees regulatory compliance.
Environmental Sample Digestion	Rapid batch dispensing of nitric, hydrochloric, and sulfuric acids into digestion tubes for heavy metal analysis.	Eliminates hazardous acid vapor exposure and increases throughput during sample preparation.
Academic Materials Research	Universal liquid handling for multi-user analytical chemistry and materials science laboratories.	Robust mechanical stops and clear graduations minimize operator error across varying user skill levels.

Model Identifier	Volume Range (ml)	Minimum Graduation (ml)	Accuracy Error (A ≤ ±%)	Accuracy Error (A ≤ ±μl)	Coefficient of Variation (CV ≤ %)	Precision Repeatability (CV ≤ μl)
JZ11-05	0.5 – 5.0	0.1	0.5%	25 μl	0.1%	5 μl
JZ11-10	1.0 – 10.0	0.2	0.5%	50 μl	0.1%	10 μl
JZ11-25	2.5 – 25.0	0.5	0.5%	125 μl	0.1%	25 μl
JZ11-50	5.0 – 50.0	1.0	0.5%	250 μl	0.1%	50 μl

Parameter	Specification Rating
Fluid Path Materials	Polytetrafluoroethylene (PTFE), Fluorinated Ethylene Propylene (FEP), Borosilicate Glass (BSG), Polypropylene (PP)
Maximum Operating Pressure	500 mbar
Maximum Kinematic Viscosity	500 mm ² /s
Maximum Fluid Density	2.2 g/cm ³
Maximum Fluid Operating Temperature	40°C

Parameter	Specification Rating
Sterilization Method	High-temperature steam autoclaving

Item Code / Standard	Description	Thread Adaptation
JZ11-AD-S40	Thread Adapter	45 mm to 40 mm (S40)
JZ11-AD-GL32	Thread Adapter	45 mm to 32 mm (GL32)
JZ11-AD-GL38	Thread Adapter	45 mm to 38 mm (GL38)
JZ11-AD-GL25	Thread Adapter	32 mm to 25 mm (GL25)
JZ11-AD-GL28	Thread Adapter	32 mm to 28 mm (GL28)
JZ11-BTL-1L	Square Reagent Bottle	1 Liter Capacity, Amber Glass (UV-Protecting)