

High Purity Ptfе Faucet Corrosion Resistant Polytetrafluoroethylene Drum Valve Customizable Lab Chemical Fluid Control

Item Number: PL-CP49



Introduction

Procure high-purity PTFE faucets and valves designed for extreme chemical resistance and reliable fluid transfer from industrial drums. Our customizable polytetrafluoroethylene solutions ensure leak-proof performance in demanding laboratory and processing environments where standard hardware fails completely. Contact us.

[Learn More](#)

Application	Description	Key Benefit
Bulk Chemical Dispensing	Transferring concentrated sulfuric or hydrochloric acid from industrial plastic drums to process vessels.	Prevents valve corrosion and eliminates hazardous leak points during high-volume transfer.
Semiconductor Processing	Handling ultra-high purity (UHP) chemicals and photoresists used in wafer fabrication and cleaning.	Maintains sub-ppb purity levels by preventing ion leaching and particulate shedding.
Pharmaceutical Synthesis	Controlling the flow of aggressive reagents and solvents in reactor setups and pilot plant environments.	Ensures chemical compatibility across diverse reaction profiles and prevents cross-batch contamination.
Trace Analysis Lab	Dispensing standards and high-purity reagents for ICP-MS or HPLC sample preparation workflows.	Guarantees the integrity of analytical results by providing a completely non-reactive fluid path.
Waste Stream Management	Managing the drainage and sampling of toxic or corrosive waste stored in large-scale plastic collection tanks.	Resists the unpredictable nature of mixed chemical waste, ensuring safe and reliable containment.
Food and Beverage	Transferring concentrated flavorings, oils, or acidic cleaning agents in food-grade production lines.	Complies with high-purity standards while resisting the sanitization chemicals used in CIP processes.
Petrochemical Sampling	Drawing samples of aggressive fuels, catalysts, or additives for quality control testing.	Durable construction allows for frequent operation in oily and abrasive environments without failure.

Specification Category	Parameter Details for PL-CP49
Model Identifier	PL-CP49
Primary Material	100% Virgin Polytetrafluoroethylene (PTFE) / Customizable PFA Options
Construction Method	Precision CNC Machined from Solid Rod Stock
Chemical Compatibility	Universal (Acids, Bases, Solvents, Oxidizers) - Per Customer Specification
Operating Temperature Range	Fully Customizable (Standard range up to 250°C)
Pressure Rating	Custom Engineered to Application Requirements
Connection Type	Customizable (NPT, BSP, Flange, or Barrel Thread Adaptations)
Internal Bore Diameter	Tailored to Specific Flow Rate Requirements
Sealing Type	Plug Valve, Needle Valve, or Ball Valve Configurations Available
Dimensions	Custom Fabricated to Client Dimensional Blueprints