

# High Purity Pfa Ptfе Flare Stop Valves Customizable 2-Way 3-Way Reducing Fluoropolymer Fluid Control Solutions

Item Number: PL-CP24



## Introduction

Engineered for semiconductor and chemical processing, these customizable PFA flare stop valves offer zero-leakage performance and high-purity fluid handling. Available in 2-way and 3-way configurations, they ensure zero heavy metal leaching for critical laboratory and industrial processes.

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Application	Description	Key Benefit
Semiconductor Manufacturing	Handling of ultra-high purity (UHP) chemicals during wafer cleaning and etching processes.	Prevents metallic contamination at the parts-per-trillion level.
Trace Metal Analysis	Used in laboratory sample preparation systems where reagent purity is critical for ICP-MS results.	Eliminates background noise caused by heavy metal leaching.
Pharmaceutical Synthesis	Controlling the flow of aggressive solvents and reactive intermediates in bulk drug manufacturing.	FDA-compliant material contact surfaces with no extractables.
Chemical Distribution Systems	Managing the bulk transfer of concentrated acids and alkalis in industrial facility piping.	Extreme corrosion resistance ensures long-term safety and reliability.
Environmental Monitoring	Sampling and transport of groundwater or wastewater containing volatile organic compounds.	Non-reactive surfaces prevent sample adsorption and cross-contamination.
Custom Laboratory Setups	Bespoke fluidic manifolds for specialized research in battery testing or hydrothermal synthesis.	Flexible CNC customization allows for non-standard porting and sizing.
Photovoltaic Production	Fluid control in solar cell chemical vapor deposition and etching lines.	Resists the abrasive and corrosive nature of solar-grade chemicals.

Feature	Specification Details (PL-CP24 Base)
<b>Model Identifier</b>	PL-CP24 Series
<b>Primary Materials</b>	High-Purity PFA (Perfluoroalkoxy), PTFE (Polytetrafluoroethylene)
<b>Connection Types</b>	Flare (Standard), Threaded (NPT/G), or Custom Socket
<b>Configuration Options</b>	2-Way (Straight), 3-Way (L-pattern/T-pattern), Multi-port Manifolds
<b>Sizing Options</b>	1/4", 3/8", 1/2", 3/4", 1" (Custom reducing sizes available)
<b>Seal Type</b>	Integrated High-Performance Soft Seal
<b>Leaching Profile</b>	Zero Heavy Metal Precipitation; Ultra-low extractables
<b>Manufacturing Process</b>	Full CNC Precision Machining from Solid Billet
<b>Operating Pressure</b>	Subject to configuration and temperature (Contact for specific ratings)
<b>Operating Temperature</b>	Up to 200°C (Depending on material grade and application)
<b>Media Compatibility</b>	All acids, bases, solvents, and high-purity deionized water

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**Customization  
Capability**

Full bespoke design including non-standard dimensions and porting