

Custom Polytetrafluoroethylene Ptfе Constant Pressure Dropping Funnel Corrosion Resistant Fluid Control Assembly With Conversion Stopper Compatibility

Item Number: PL-CP97



Introduction

High-performance PTFE constant pressure dropping funnel designed for corrosive chemical transfer. Featuring superior chemical resistance, 0.1MPa pressure stability, and full customization options, this assembly ensures precise fluid control in demanding industrial laboratory and pilot plant environments.

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Application	Description	Key Benefit
Pharmaceutical Synthesis	Addition of aggressive catalysts or reagents during API (Active Pharmaceutical Ingredient) production.	Prevents contamination and withstands corrosive organic solvents.
Semiconductor Etching	Handling and dosing of high-purity hydrofluoric acid and etching solutions for wafer processing.	Total resistance to HF, which would dissolve standard laboratory glassware.
Battery Research	Controlled delivery of electrolytes and corrosive lithium salts into experimental battery cells.	Maintains chemical purity and prevents moisture ingress through airtight seals.
Petrochemical Testing	Introduction of volatile hydrocarbons and acidic additives into pressurized reactor systems.	Ensures safe operation under 0.1MPa pressure with zero risk of spark or shatter.
Trace Metal Analysis	Preparation and delivery of ultra-pure mineral acids for sample digestion and ICP-MS analysis.	Lowest trace metal background levels due to the high-purity PTFE material.
Specialty Chemical Production	Dropping corrosive monomers into polymerization vessels under controlled temperature and pressure.	Consistent flow rates ensure uniform polymer chain growth and product quality.

Specification Category	Parameter Details (Item Number: PL-CP97)
Material Construction	100% High-Purity Virgin Polytetrafluoroethylene (PTFE)
Pressure Rating	Maximum Operating Pressure: 0.1 MPa
Temperature Range	Continuous Service: -200°C to +260°C
Chemical Resistance	Universal (Except molten alkali metals and elemental fluorine at high temp)
Joint Compatibility	Supports Standard Taper Joints & Custom Conversion Stoppers
Flow Control	Integrated Precision-Machined PTFE Needle/Plug Valve
Fabrication Method	Full Custom CNC Machining from Solid Billet
Volume Capacity	Fully Customizable (Produced to Client Specifications)
Surface Finish	High-Smoothness, Non-Stick Interior for Minimal Retention
Standard Compliance	Manufactured for High-Purity Industrial Laboratory Standards