# Pressure Reactor

2026

## *NEW!* Pressure Reactor

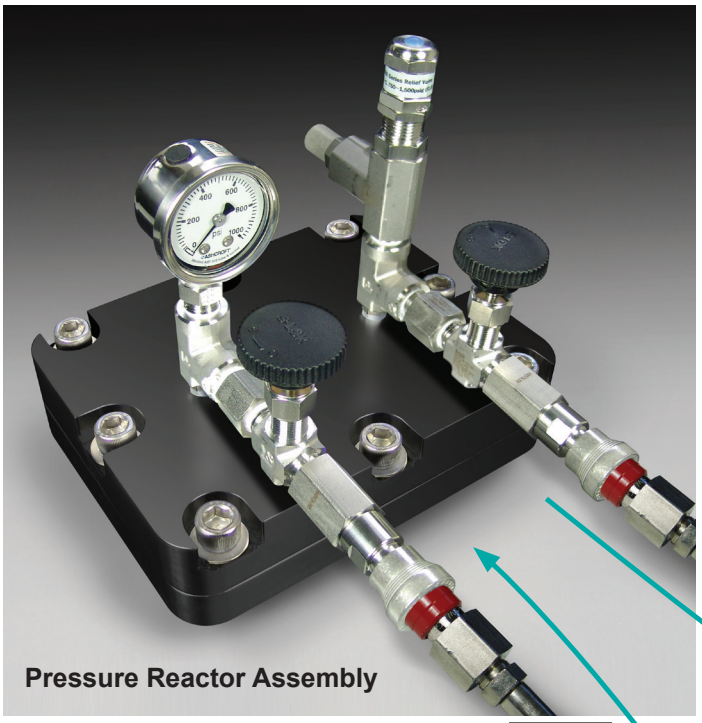
The Pressure Reactor is the latest innovation from Analytical Sales and Services, designed to bring pressurized gas chemistry into the high-throughput workflow. Building on the trusted sealing technology of our Gen II Para-dox® reactors, the Pressure Reactor enables users to safely and reliably pressurize an entire 96-well system—ideal for applications involving inert gases or other controlled atmospheres.

Whether you're developing catalysts, screening reaction conditions, or working with air- or moisture-sensitive compounds, the Pressure Reactor delivers a robust, flexible platform for parallel experimentation under pressure. Designed with compatibility and usability in mind, it's standard SLAS base integrates seamlessly with existing lab infrastructure and consumables to accelerate discovery without compromising control or safety.

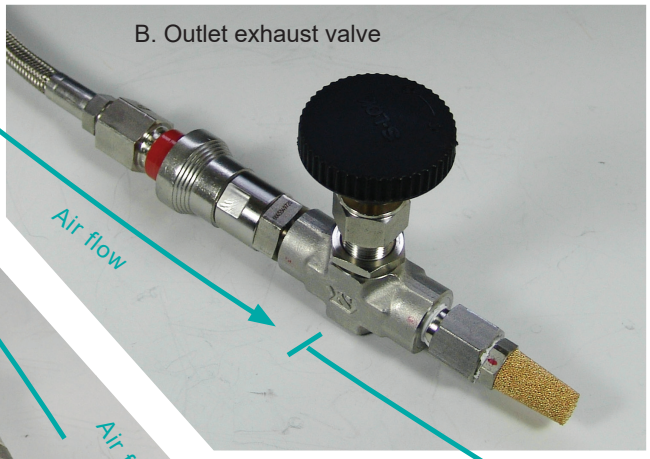
**Technical Bullet Points:**

- Designed for reactions up to 50 bar (725 psi) at room temp
  - Safety pressure relief valve prevents over-pressurization
- Available in 96 well format
- Uses standard 8x30 shell vials (884001)
- SLAS base (up to 1 inch) for compatibility with dry heaters and other existing lab infrastructure
- Dedicated inlet and outlet port
- Needle valves used on both ports for precise flow control
- Made with chemically compatible components:
  - Anodized aluminum reactor
  - Stainless steel fittings/components
  - Internal viton o-ring
- Uses standard, 4 bolt, Gen II Para-dox lid to seal vials
- Valved quick-disconnects to retain the pressure within hose when disconnecting from a tank or pressure reactor
- Hoses can be vented via their own dedicated exhaust valves *(see back side)*
- Integrated orifice restrictors reduce noise and prevent filling and emptying the system too quickly, avoiding sealing mat failure
- New pre-slit bonded PTFE sealing mat for improved seal and less swelling during pressurization and depressurization
  - Better performance than using separate orange rubber mat and PFA film of standard Para-dox block setup

| Cat. No. | Description | Qty |
|---|---|---|
| 773100 | Pressure Reactor | Each |
| 773967 | Preslit Silicone Mat with Blue PTFE liner, for High Pressure Reactor | 25 |

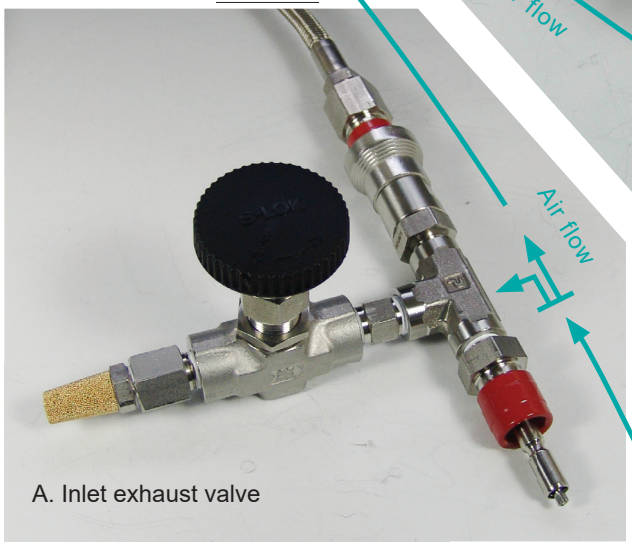


Hose




Air flow

Hose




Air flow

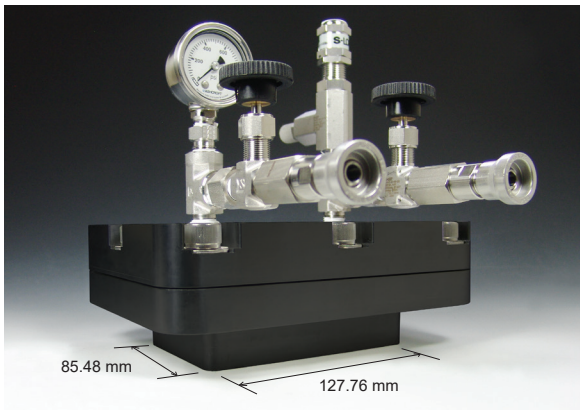
To glove box or hood

From supply tank (or other gas source)

## Pressure Relief Valves for Venting

A. Sits between supply tank (or other gas source) and the inlet port of the Pressure Reactor and connects via hoses. Allows high pressure air (or gas) to vent before disconnecting the hose from the inlet port.

B. Connects to the outlet port of the Pressure Reactor via hose. Allows venting of high pressure air (or gas) from the Pressure Reactor. Can be placed in a glove box or hood for safe pressure relief.




***SLAS base*** *(up to 1 inch) for compatibility with dry heater blocks and other existing lab infrastructure*

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