

**FlatLine Pulse Damper**

- Rupture-proof, no diaphragm—minimal risk of failure or leaks.
- Clean flush-out design—no sample carryover.
- Low internal volume—negligible effect on analyte bandwidth.



25340

The ASI FlatLine Pulse Damper combines performance and reliability in a simple, easy-to-use housing. Standard 10-32 inlet and outlet ports allow quick connection into virtually any HPLC system. Solid core technology provides reliable long-term operation without the downtime associated with ruptured or leaking membrane dampers. 600–700  $\mu\text{L}$  internal volume at ambient pressure. Maximum pressure: 6,000 psi (41,369 kPa)

Description	qty.	cat.#	price
FlatLine Pulse Damper, 1.5" W x 3.75" L	ea.	25340	

**MiniPulse Pulse Damper**

- Compact unit (2.5" x 1.5") can be placed almost anywhere.
- Small, 160  $\mu\text{L}$  dead volume at atmospheric pressure.
- PEEK™ unit can withstand pressures to 5,000 psi (34,474 kPa).
- 316 Stainless steel unit can withstand pressures to 6,000 psi (41,369 kPa).



25238

Improves system baseline stability while increasing the total system volume by only 160  $\mu\text{L}$ . The MiniPulse pulse damper is ideal for applications where minimizing the total system volume is critical. Stainless steel and PEEK™ options for a wide range of applications.

Description	qty.	cat.#	price
MiniPulse Pulse Damper, Stainless Steel	ea.	25238	
MiniPulse Pulse Damper, PEEK	ea.	25239	



25013

**LO-Pulse Pulse Damper**

The LO-Pulse Pulse Damper is a patented, wide-dynamic-range 316 stainless steel device that smooths pulsations and maintains constant flow at system pressures from 500 to 6,000 psi (3,447 to 41,369 kPa). The flow path volume is only 0.9 mL and the path is efficiently swept, eliminating solvent memory effects when changing mobile phases.

The LO-Pulse pulse damper also is available in a space-saving, economical kit that includes hardware for mounting the pulse damper on a bracket, or for installing feet on it for bench-top use.

Description	qty.	cat.#	price
Model LP-21 LO-Pulse Pulse Damper	ea.	25012	
Pulse Damper Kit	kit	25013	

**UHP Pulse Dampener**

The UHP Pulse Dampener provides minimal flow pulsation at system pressures up to 18,000 psi. Its low dead volume (220  $\mu\text{L}$  at atmospheric pressure) reduces overall system volume for UHP applications. The UHP Pulse Dampener has a stainless steel fluid path.

NEW!

**Specifications:**

Operating Pressure:	0–18,000psi
Pulsation Damping:	3:1 reduction in pulsation (dependent on pump characteristics and system volume and pressure)
Fluid Path Volume:	220 $\mu\text{L}$ (atmospheric pressure) +44 $\mu\text{L}$ (per 1,000psi system pressure)
Wetted Materials:	316 SS; PTFE; Teflon
Dimensions:	2.5" diameter x 2.0" high

Description	qty.	cat.#	price
UHP Pulse Dampener	ea.	26549	

**Solvent Debubbler**

Bubbles in an HPLC system can cause check valve malfunctions and pump cavitation, seriously affecting pump performance. The debubbler removes bubbles from the fluid stream before it enters the pump.



25014

Special geometry at the base of the housing allows bubbles entrained in the inlet fluid stream to rise and be trapped in the reservoir. The gas/liquid interface is easily visible through the translucent wall of the device. Loosening the airtight cap releases the trapped gas. The debubbler is fitted with a bracket and universal connecting tips.

Description	qty.	cat.#	price
Solvent Debubbler with Bracket	ea.	25014	