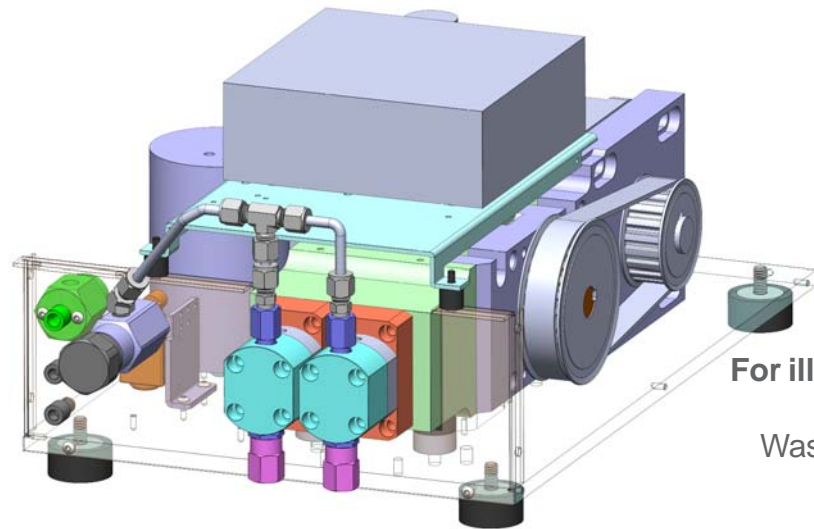
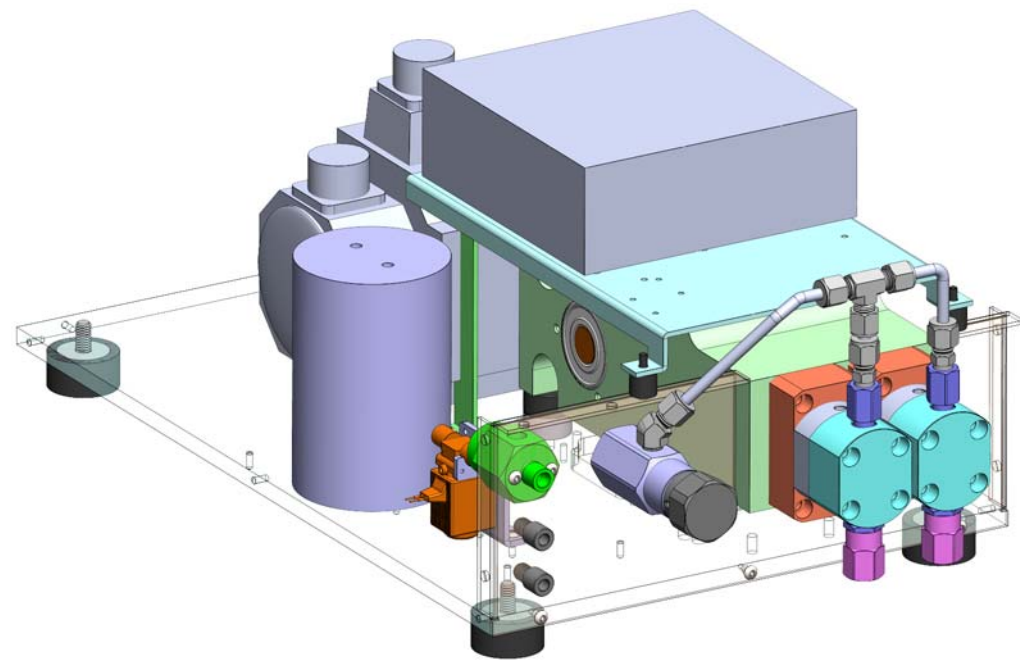


Typical OEM configuration

We will make a custom configuration per your specification



For illustration only, pump configured with Hydraulic module, Wash Pump, Damper and ServoController on Base Plate



Analytical Scientific Instruments US, Inc.
3023 Research Drive Richmond CA 94806 USA
www.hplc-asi.com Phone: 510-669-2250 info@hplc-asi.com

ASI Analytical Scientific Instruments US

Copyright © 2026 ASI - Analytical Scientific Instruments US, Inc.
Rev. 2_19_2025

545 Star Prep Pumps *New*

- Advanced pump performance designed for Prep chromatography
- Reliable low cost solution with state-of the art Modbus RTU control
- Isocratic, Gradient or Metering fluid flow applications
- Available with integral wash pump option



ASI 545 Series Features:

- ❖ Intuitive Touchscreen display
- ❖ USB-serial connection
- ❖ Computer GUI and Modbus RTU communications via USB or RS485
- ❖ Available in Stainless Steel, Titanium and Biocompatible PEEK
- ❖ 150 mL/min., 250 mL/min., 500 mL/min. and 1,500 mL/min. available
- ❖ Self-priming Pump Head
Integral prime/purge for rapid solvent changes and self-priming
- ❖ Solvent Compressibility Compensation
User can select from a library of 15 solvents
Fourteen additional user-configured solvents
- ❖ Easy Maintenance
All user serviceable components are accessed via the front panel
Cartridge seal design makes seal replacement easy

ASI

Preliminary 545 Prep Scale Pump Specifications

Part Numbers	Flow Range	Pmax
545-0150HP	0.100 mL/min. - 25 mL/min.	10,000 PSI
	25 mL/min. - 100 mL/min.	6,000 PSI
	100 mL/min. - 150 mL/min.	4,000 PSI
545-0150	0.100 mL/min. - 100 mL/min.	6,000 PSI
	100 mL/min. - 150 mL/min.	4,000 PSI
545-0250HP	0.200 mL/min. - 50 mL/min.	10,000 PSI
	50 mL/min. - 150 mL/min.	6,000 PSI
	150 mL/min. - 250 mL/min.	4,000 PSI
545-0250	0.200 mL/min. - 250 mL/min.	4,000 PSI
545-0500	4.00 mL/min. - 500 mL/min.	2,000 PSI
545-1500	10.0 mL/min. - 1,500 mL/min.	500 PSI

Pulsation:	1% Δ P/P *
Flow Precision:	0.25%, 10 - 100 mL/min.*
Flow Accuracy:	\pm 100 μ L/min. or \pm 1% of selected flow rate whichever is greater*
Gradient Accuracy:	\pm 1% with aqueous acetone/water, at 5 - 95%, 100 mL/min.*
Wetted Materials:	316 Stainless Steel, PEEK, Titanium, PTFE or UHMW, YSZ Ceramic, Sapphire & Ruby

*All specifications are under load conditions of 500 PSI & temperature of 20° Celsius.

Dimensions: 11.5" W x 20.75" D x 11.25" H

Weight: 65 lbs.

Power: International AC input 220/240VAC & 50/60Hz

545 Gradient Options

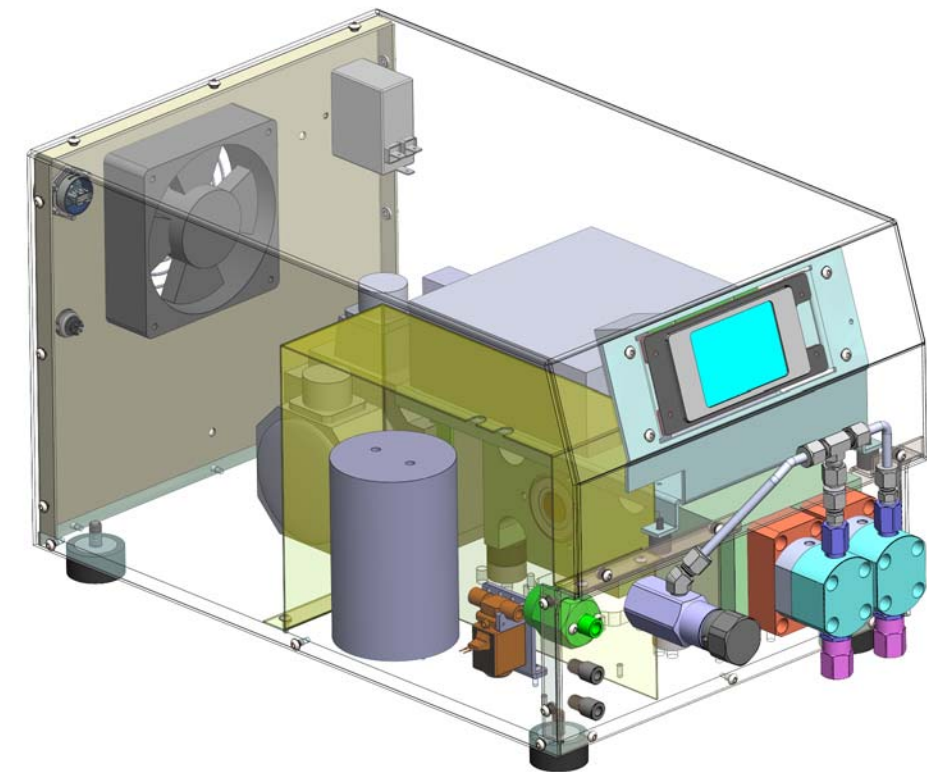
545 pumps are different than 540 pumps in that they are intended to be stand-alone metering pumps. In order to make gradients a gradient option must be purchased. There are two options:

- Low pressure proportioning valve controller:** This includes a separate gradient controller and a proportioning valve assembly that generates a gradient by proportioning the solvents at the inlet of a single pump. The advantage is its simplicity and cost.
- Hi pressure gradient controller:** This is a separate gradient controller which controls multiple 545 pumps (one pump for each solvent) to generate a high pressure gradient. The advantage of high pressure gradients is their accuracy/precision.

What can we engineer for YOU?

ASI has supplied custom OEM pump assembly solutions for

Proteomics-LCMS
 Process Instrumentation
 Pharmaceutical Manufacturing
 Supercritical Fluid Chromatography
 Preparative Chromatography
 Biotech and SEC/GPC Systems



Pump Assembly in chassis

Wash Pump and Damper are available for custom configuration

See next page for illustration of a typical OEM configuration

We will make a custom configuration per your specification