540 HPLC Pumps

New

- **Private label for OEMs, Small or Big**
- **Advanced pump performance designed for the chromatographer**
- **Reliable low cost solution**
- **Isocratic, Gradient or Metering fluid flow applications**
- **Available with integral wash pump option**
- **Modus RTU control**

ASI 540 Series HPLC Pump Features:

- **Intuitive Touchscreen display**
- **Available in Stainless Steel and Biocompatible PEEK**
- **Micro, Analytical, UPLC, Semi-Prep, Prep and Flash Prep available**
- **Self-priming Pump Head**
  Integral prime/purge for rapid solvent changes and self-priming
- **Patented Floating Pump Seal**
  Seal floats in *alignment* relative to piston for longer seal life
- **Solvent Compressibility Compensation**
  User can select from a library of 14 solvents
- **Easy Maintenance**
  All user serviceable components are accessed via the front panel
  Cartridge seal design makes seal replacement easy

ASI

Model 541 Isocratic Solvent Delivery, Model 540G Gradient System

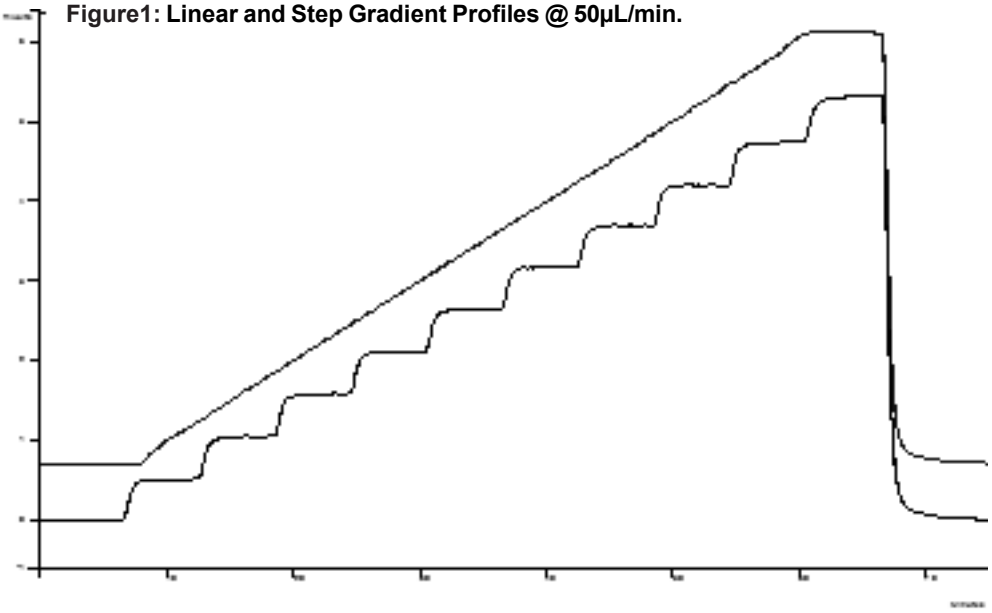
Part Numbers	Descriptions	Flow Range	Maximum Pressure
541-0004 & 540G-0004 541-0004B & 540G-0004B	Micro SST Micro Biocompatible PEEK	0.5 µL/min. - 4 mL/min.	7,000 PSI Max 4,000 PSI Max
541-004HP & 540G-0004HP	Micro SST UPLC	0.5 µL/min. - 250 µL/min. 250 µL/min. - 4 mL/min.	15,000 PSI Max 7,000 PSI Max
541-0010 & 540G-0010 541-0010B & 540G-0010B	Analytical SST Analytical Biocompatible PEEK	1 µL/min. - 10 mL/min.	7,000 PSI Max 4,000 PSI Max
541-0010HP & 540G-0010HP	Analytical SST UPLC	1 µL/min. - 1 mL/min. 1 mL/min. - 10 mL/min.	15,000 PSI Max 7,000 PSI Max
541-0040 & 540G-0040 541-0040B & 540G-0040B	Semi-Prep SST Semi-Prep Biocompatible PEEK	10 µL/min. - 40 mL/min.	3,500 PSI Max
541-0125 & 540G-0125 541-0125B & 540G-0125B	Prep SST Prep Biocompatible PEEK	10 µL/min. - 125 mL/min.	1,500 PSI Max
541-0300 & 541-0300B	Flash Chrome SST & Biocompatible PEEK	50 µL/min. - 200 mL/min. 200 mL/min. - 300 mL/min.	500 PSI Max 250 PSI Max

Accuracy	Micro: ±1% or 1 µL/min. (whichever greater) Others: ±1% or 2 µL/min. (whichever greater)
Precision	Micro: 0.25%, 0.10 mL/min. - 4 mL/min. @ 20°c Others: 0.25%, 0.10 mL/min. - 10 mL/min. @ 20°c
Pulsation	1% Δ P/P @ 1,500 PSI pressure
Dimension	6.75" W x 15.6" D x 6.75" H (Isocratic)
Weight	16 lbs. (Isocratic)
Power	AC 100 – 240 V 50/60 Hz, Fuse: 4A, 250 V

OEM inquiries welcome

ASI Performance Data

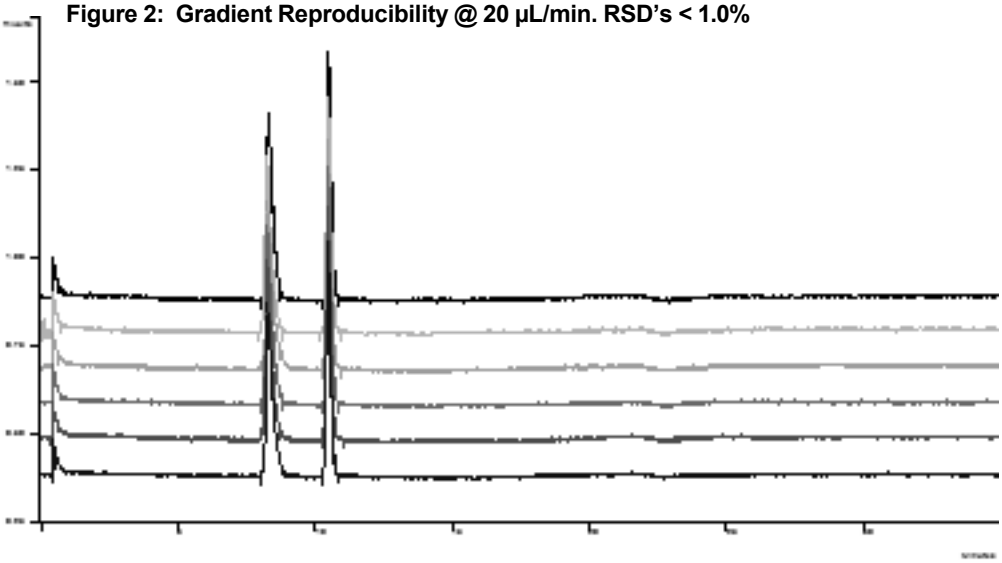
Figure1: Linear and Step Gradient Profiles @ 50µL/min.



HPLC System:
ASI Micro Head
Detection: UV214
Mixer: *ASI HyperShear* In-Line 25 µL

HPLC Conditions:
MP: A = H_2O, B = H_2O doped with 0.05% red dye
Flow Rate: 50µL/min
Step Gradient: 0 to 100% B in 60 min., 10% steps
Linear Gradient: Same, 4 min. T0 hold

Figure 2: Gradient Reproducibility @ 20 µL/min. RSD's < 1.0%



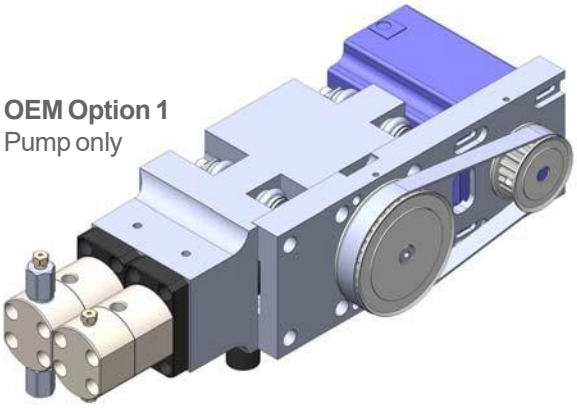
HPLC System:
ASI Micro Head
Detection: UV214
Mixer: *ASI HyperShear* In-Line 25 µL

HPLC Conditions:
MP: A = H_2O, B = H_2O doped with 0.05% red dye
Flow Rate: 20µL/min Gradient: 5 to 95% B in 20 min
Sample: Methyl and Ethyl Parabens

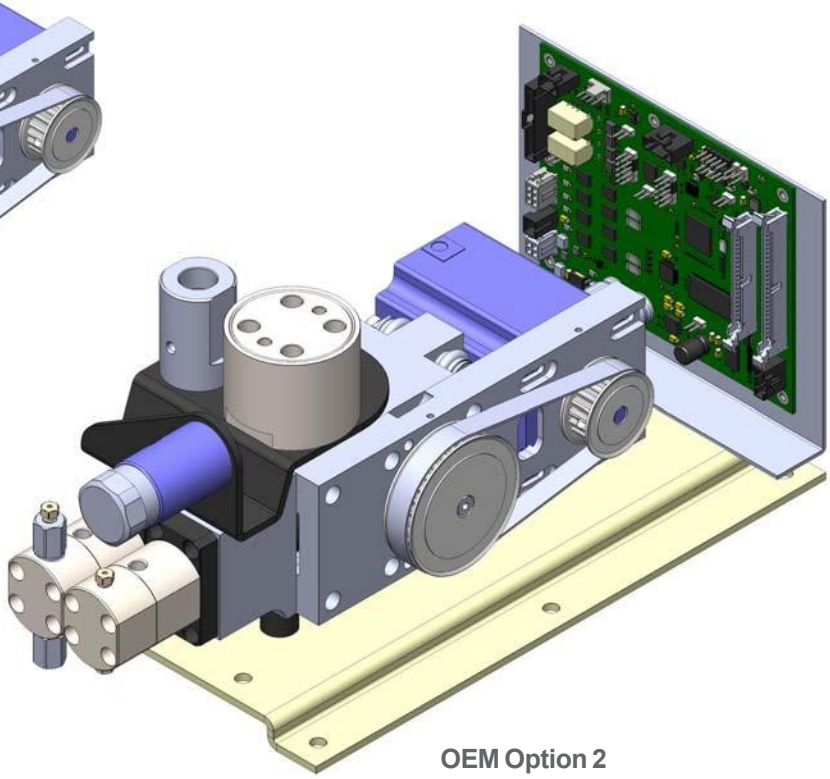
What can we engineer for YOU?

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.

Option 1 and Option 2 below are typical OEM configurations. We will make a custom configuration per your specification.



OEM Option 1
Pump only



OEM Option 2
Pump plus Hydraulic module and Pump-controller

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