

## speX SPE – Positive Pressure Manifold

Takahe Analytical Instruments speX manifolds delivers positive pressure in 1 ml or 3 ml column formats. The system utilizes a consistent, uniform flow of positive pressure to move both low and high viscosity liquids through SPE columns. Each port of the speX manifold independently maintains constant pressure, increasing the overall reproducibility of analytes recoveries. This unique design allows for partially populated racks to be used without sacrificing extraction efficiency.

### Uniform Flow

Unlike vacuum manifolds where faster flowing wells and columns dry before the processing run is complete, the independent ports of the speX manifolds deliver consistent output. This allows the same motive force to be applied to every cartridge, regardless of the contents.

### Ideal for Viscous Samples

speX Positive Pressure manifolds allow for gas pressures of up to 100 psi, enabling greater pressure and force to be used with viscous samples. Smooth and immediate flow responses are achieved by adjusting gas pressure up or down through a regulator and a rotameter.

### Features and Advantages

- Uniform flow from sample to sample for SPE, Protein Precipitation and Supported Liquid Extraction
- Improved reproducibility, accuracy and extraction efficiency, even with viscous samples
- Parallel processing for increased sample throughput
- Easy to set-up and use with just a gas source
- Built-in safety features ensure ease of use and safe operation
- Available in convenient 48, 96, 144 position



### speX Self Adjusting Mechanism

The rack of the speX moves on 4 rods like a swing and this enables the manifold to snugly fit to the manifold gasket. Any inconsistencies in height are thus addressed.

### speX for Bio Analytical and testing lab Studies

The speX is optimized for bio analytical studies and is designed for 1 ml and 3 ml cartridges for 48 / 96/ 144 position. In addition, the unique design allows for between 1 and multiple columns to be processed without empty ports affecting flow rates. The modular rack system accommodates Ria Vial or 12X75mm collection vessels to be used with each cartridge size.

### Modular Rack System

speX uses a stackable collection rack and extraction rack; Racks only fit the system in one direction, ensuring consistent processing throughout.

### Ease of Use

The speX is easily incorporated into laboratory work flow. Simply stack column rack and collection racks on the platform tray using the positioning markers and slide the tray under the gasket until it hits the stop. Rocker switch pressed moves the manifold gasket to the platform for compression of column. All the moving parts are covered for protection. A single switch moves the rack up or down.