

Back Pressure Regulators

Improve Detector Performance and Accuracy



Standard Back Pressure Regulator



Flow-Through Back Pressure Regulator

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Adding a back pressure regulator can improve detector performance by preventing bubble formation in the detector flow cell. Flow-through back pressure regulators are useful when multiple detectors are used and the downstream detector(s) require low back pressure. Back pressure regulators are also useful in post-column reaction lines and between detectors and fraction collectors in preparatory work. The regulator is superior to commonly used methods like small-bore tubing in which the pressure varies with flow rate.

SSI's standard and flow-through back pressure regulators offer many features. Both types are adjustable to accommodate a wide variety of conditions. The unique adjustment mechanism assures constant back pressure over a wide range of mobile phase viscosities and flow rates.

The standard model is fitted to the outlet of the fluid stream and is immersed in the waste reservoir. Available with 1/4-28 plastic flange type fitting or high pressure stainless steel SSI type fitting, the standard model adjusts from one to four atmospheres (15 to 60 psi).

In the flow-through design, the wetted parts are constructed of a solvent resistant, non-metallic, biocompatible material. It is adjustable from 5 to 150 psi.

Comparison of Back Pressure Regulators

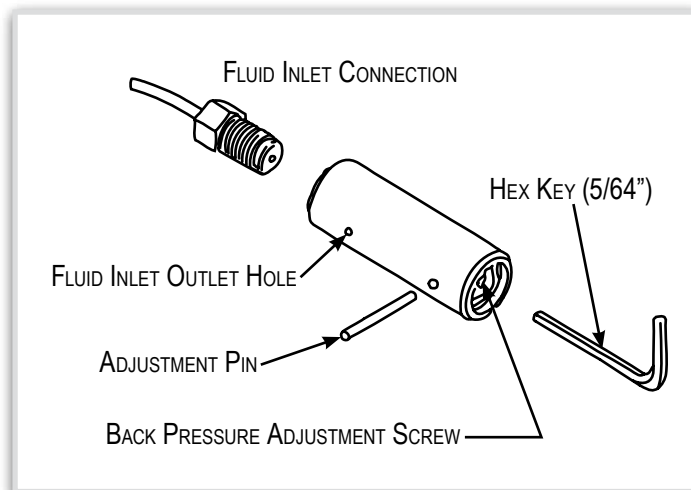
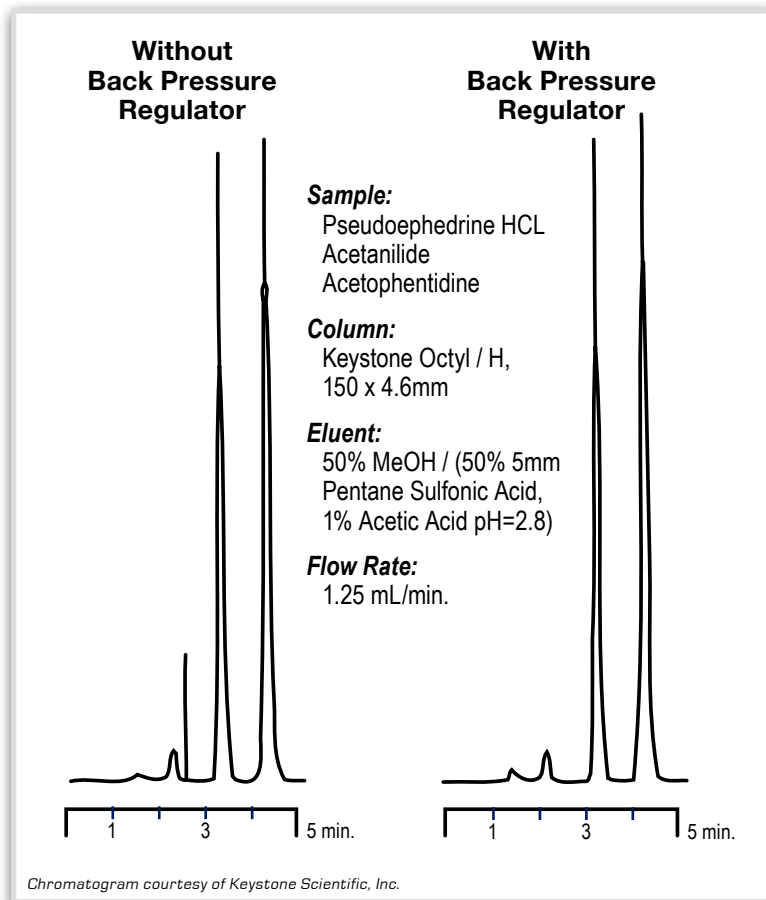
REGULATOR TESTED	RETENTION PEAK	WIDTH	PLATES	% EFFICIENCY LOSS
Control	151.2	3.20	12,368	-
SSI	151.2	3.30	11,630	5.97
Brand A	152.4	3.60	9,928	19.73
Brand B	152.6	3.58	10,066	18.62
Brand C	152.8	3.80	8,958	27.58

SSI's Flow-Through Back Pressure Regulator has the least loss of chromatographic efficiency of any major brand.

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The Standard Back Pressure Regulator is fitted to the outlet of the fluid stream.

Adding a Back Pressure Regulator stabilizes the baseline by eliminating air bubble spikes.

Ordering Information

DESCRIPTION	PART No.
STANDARD BACK PRESSURE REGULATOR, 1/16" O.D. TUBING, FLANGED SEAT 15-60 PSI ADJUSTABLE	020175
STANDARD BACK PRESSURE REGULATOR, 1/16" O.D. TUBING, HIGH-PRESSURE SEAT	020176
FLOW-THROUGH BACK PRESSURE REGULATOR, 5 mL INTERNAL VOLUME, 5-150 PSI ADJUSTABLE	060120
CPI INLET FILTER, 1/8", 10 M	250145
REPLACEMENT ELEMENT FOR ABOVE (PACKAGE OF 2)	250147
REPLACEMENT FERRULES, 1/8", TEFZEL	210144
SLIP-ON FILTER, 1/8", 10 M, UNIVERSAL TIP, STAINLESS STEEL	050141
REPAIR KIT FOR INLINE BACK PRESSURE REGULATORS	060119

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