

“Jailbreak” Column Heater for Easy-Spray source

Use any of your favorite columns!



- Plug-and-Play directly into the Easy-Spray source and is supported by the trap-column bracket on the source.

- Temperature is controlled by the Easy-Spray source with the same precision as that of the OEM Easy-Spray columns.

Simple, flexible and low-cost



- Pack your own columns or use any fused silica capillary column with an integrated spray emitter. For specialty columns with its own fitting at one end, please see our PST-ES-IO series

- The high voltage for nanospray comes from the source and is applied through a liquid junction - Supply your own fitting or purchase as a set with our easy to connect magnetic HV coupler.

PST-ESR-xx, xx=10-25 cm

PST-ESR-xxB, xx=26-50 cm, bendable

PST-ESR-xxT with a PEEK Tee liquid junction

PST-ESR-xxU with a uPLC-compatible metal union

PST-ESRxx-RU heater with a reducing metal union compatible with NanoViper® fittings - a trademarked product of Thermofisher.

PST-ES-HV Adaptor insert for a spray emitter without heater. Optional -T, -U and -RU



We thank J. Wilkens of UCSF and Hyoungjoo Lee of VAI for allowing to use these pictures.

Butterfly Portfolio Heater for nanoLC-MS

Heats analytical column, vented trap column, filter, fittings, transfer lines, spray tip, >50 cm long columns...

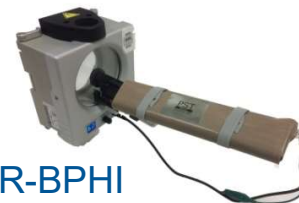


PST-BPH-xx xx=10-30 cm

Needs a column heater controller, PST-CHC or PST-CHC-RC

PST-BPH-xx, xx=10, 15, 20, 25, 30 cm x 4 cm or 6 cm

Other dimensions available



PST-ESR-BPHI

Electrically Insulated Butterfly heater with emitter adapter for the Easy-spray source

PST-ES-BPHI –Insulated Heater only

Ordering Information:

(610) 876.6081 info@phoenix-st.com www.phoenix-st.com

Coming soon! Pencil Box Heater and Temperature Controller compatible with both the Nanoflex and the Easyspray sources

NanoLC Column Heater and Temperature Controller



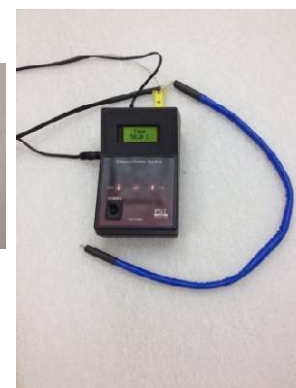
- Improve reproducibility, mass transfer and dramatically reduce run pressures and carry-overs.
- Designed specifically for nano/microspray applications to increase resolution and throughput.
- Temperature range between ambient and 100 °C, with stability control to 0.2 °C
- Lengths available between 6 to 25 cm for most styles. Specify when ordering. Inquire about custom lengths.

Model numbers:

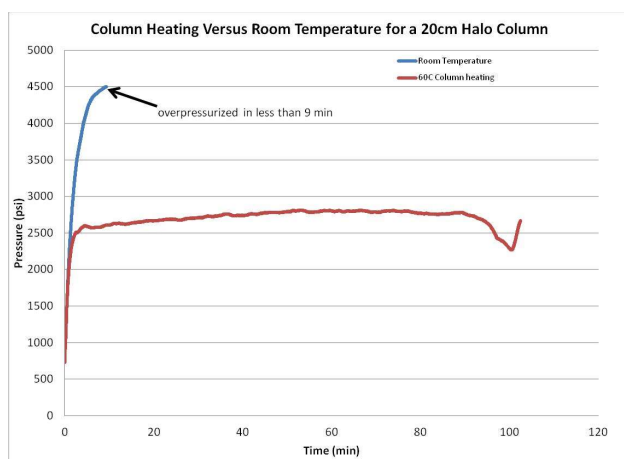
- PST-ESR-xx Column heater for the Easy-Spray® source. Use your own columns! xx=12-25 cm; xxU= with liquid junction union, xxT=with liquid junction Tee.
- “Butterfly” Portfolio Heater – Our most versatile heater, available as 20 cm x 4 cm and 15 cm x 4 cm heaters. For other dimensions, please inquire.
- PST-BCH heater with 0.5” diameter for a commercial PEEKsil column with end fittings. Can be inserted into the CaptiveSpray™ source.
- PST-CH-xxU: our popular “pencil” heater for bare fused silica
- PST-CH-xxUB: Bendable “pencil” heater, xx= 15-50 cm
- PST-CHC column heater controller
- PST-CHC-RC: Column heater controller with contact closure-controlled (LC or MS) switching between two temperatures. Controller has decimal point read out.



PST-ESR – compatible with the Thermo Easy-Spray source. Pack your own columns!



PST-CH-50UB with PST-CHC



Acknowledgment: We thank Stephen Master, MD, PhD, Assistant Professor of Pathology at the University of Pennsylvania School of Medicine for the permission to publish this data.

PST-CHC-RC:

- Run an analysis at around room temperature, but rinse the column at a higher temperature to eliminate carry-over.
- Run at a low temperature for the first part of a gradient to maximize coverage of hydrophilic peptides, and switch to a higher temperature at the last part of the gradient for better coverage and peak shapes of hydrophobic peptides.
- Remote shut-down of the column heater at the end of all the analyses.

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