Product Bulletin 202

Models 3725, 3725i, 3725-038 and 3725i-038 Preparative Scale Sample Injectors

- Available in stainless steel and biocompatible PEEK models
- Suitable for large sample volumes and high flow rates
- Patented Make-Before-Break (MBB™) design allows continuous flow
- Designed for sample purification and enrichment

PREPARATIVE SCALE SAMPLE INJECTION

Rheodyne’s preparative scale manual sample injectors for applications requiring larger scale sample volumes, high flow rates, and preparative scale columns. Applications include purification and enrichment of both natural products and synthetic compounds.

Models 3725(i) PEEK version and 3725(i)-038 stainless steel version have ports that accept 1/8” tubing that allow flow rates from 10 to 1000 mL/min with virtually no pressure drop. These preparative scale injectors can inject a volume range of 100 µL to 20 mL. A 10 mL sample loop and 1/8” RheFlex® fittings sets are supplied with each injector. An accessory PEEK Male to Female Adapter (P/N 6000-076) permits 1/16” tubing connection to preparative scale injector ports.

The “i” version injectors, containing a built-in position sensing switch, provide the chromatograph with a reproducible start signal.

MAKE-BEFORE-BREAK (MBB)

Models 3725(i) and 3725(i)-038 incorporate Rheodyne’s unique, patented MBB valve architecture that provides uninterrupted flow between the LOAD and INJECT positions. As the rotor seal grooves rotate to change from LOAD to INJECT, mobile phase flows through both one rotor seal groove and the MBB passage until the rotation stops and the loop connects the two rotor seal grooves. Continuous flow greatly reduces disruptive transient pressure shocks to your systems.

LOADING METHODS

These adaptable injectors can be loaded using partial-filling and complete-filling methods. Partial-filling allows the syringe to determine the sample volume. In complete-filling, since the sample loop determines the sample volume, the loop must be completely loaded three to five times for the highest reproducibility.

Fig. 1. Flow paths of the LOAD and INJECT positions of Models 3725(i) and 3725(i)-038 preparative scale sample injectors.
ACCESSORIES
Accessory PEEK 5/16-24 Male to 10-32 Female Adapter, accessory Mounting Panels, and other RheFlex Fittings sets, sample loops, and syringes are available. Visit www.rheodyne.com for detailed descriptions and part numbers.

SPECIFICATIONS
Maximum Operating Pressure:
3725(i) - 28 MPa (276 bar, 4000 psi);
3725(i)-038 - 34 MPa (345 bar, 5000 psi)

Maximum Operating Temperature:
50°C

Flow Passage Diameters:
1.0 mm (0.040")

Wetted Surfaces:
3725(i) - PEEK;
3725(i)-038 - stainless steel and PEEK

PEEK tubing pressure rating depends on dimensions, solvents, temperature, and duration of exposure. For details refer to Burst Pressure of PEEK Tubing table at www.rheodyne.com.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>3725</td>
<td>PEEK Dual Mode Preparative Injector</td>
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<tr>
<td>3725i</td>
<td>PEEK Dual Mode Preparative Injector with Switch</td>
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<tr>
<td>3725-038</td>
<td>Stainless Steel Dual Mode Preparative Injector</td>
</tr>
<tr>
<td>3725i-038</td>
<td>Stainless Steel Dual Mode Preparative Injector with Switch</td>
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</tbody>
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RheBuild™ Kits are available for all Rheodyne valves. Each kit includes all parts, tools, and instructions to maintain precision performance.

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<tr>
<th>Part Number</th>
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<tbody>
<tr>
<td>3725-999</td>
<td>RheBuild Kit for Models 3725, 3725i, 3725-038, 3725i-038</td>
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