Olfactory Detection Port for GC or GC-MS

PHASER
PHASER – Gas Chromatography Olfactory Port

PHASER is an advanced sniffing port, through which an analyst using his/her sense of smell can efficiently sense and identify flavor and fragrance components separated by a gas chromatographic column. A column effluent is directly transferred to a PHASER nose cone through deactivated fused silica tube allowing the operator to smell the compounds that exit the column.

One inlet, more analytical options

SilFlow® from SGE Analytical is an innovation in design and fabrication resulting in a highly efficient and reliable micro fluidic platform that improves your GC connectivity to enable maximum chromatography performance.

A four port SilFlow microchannel device is used to ensure a reliable split flow between the GC detector and the nose cone. In order to ensure a sharp smelling, makeup gas is added to the four port splitter.

Why PHASER?

- No-cold-spot design provides possibility to sniff high boiling compounds;
- Transfer line temperature up to 300 °C;
- Operator nose protection by adding moisturized air to sniffing port;
- Easy-connect SilFlow™ micro-channel device as column flow splitter;
- Sitting or standing while sniffing;
- Compact and easy-to-install on any type of GC;
- Voice recording with replay function and voice recognition;
**Split Manger software**

Standard with all PHASERS, a calculation program (splitManager) is supplied to make the correct capillary tubing’s in order to have a good split ratio between the nose and detector.

The Olfactory Voicegram is an option and is not supplied with all units.

**Olfactory Voicegram software**

- Import MS chromatogram
- Recording analog detector data during run by mouse click
- Aroma Palette
- Voice recording with replay function and voice recognition
Specifications

Controller Specification

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>96mm(W)×300mm(H)×230mm(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight:</td>
<td>approx. 7 kg</td>
</tr>
<tr>
<td>Power:</td>
<td>AC 240V, 50/60Hz, 300VA</td>
</tr>
<tr>
<td>Auxiliary gas:</td>
<td>He or N2</td>
</tr>
<tr>
<td>Flow control:</td>
<td>Mass-flow control valve</td>
</tr>
<tr>
<td>Flow range:</td>
<td>10 ml/min</td>
</tr>
<tr>
<td>Maximum operating pressure:</td>
<td>1.7 MPa</td>
</tr>
<tr>
<td>Auxiliary air:</td>
<td>Clean air</td>
</tr>
<tr>
<td>Flow range:</td>
<td>100 l/min</td>
</tr>
<tr>
<td>Maximum operating pressure:</td>
<td>1.0 MPa</td>
</tr>
<tr>
<td>Minimum operating pressure:</td>
<td>0.1 MPa</td>
</tr>
</tbody>
</table>

Transfer line Specification

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Line:</td>
<td>ø35×650 mm (optional: 1000 mm)</td>
</tr>
<tr>
<td>GC coupling:</td>
<td>ø15×100 mm</td>
</tr>
<tr>
<td>Transfer line temperature range:</td>
<td>up to 300˚C</td>
</tr>
</tbody>
</table>

The PHASER is standard supplied with all capillaries, 4 port microchannel connector, nuts and ferrules and SplitManager software in order to make the installation. Only a GC mounting plate kit is needed.

Available systems

G300020, PHASER System, 650 mm Transfer Line
G300021, PHASER System, 1000 mm Transfer Line
G300022, PHASER System, 650 mm Transfer Line and Voice software
G300023, PHASER System, 1000 mm Transfer Line and Voice software

Contact

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