### OPERATOR INTERFACE

1. Inlet port pressure analog display
2. Control and menu selection indicators (ON when activated)
3. Auto-calibration START/ABORT control key
4. Sniffing mode ON/OFF control key
5. Auto-zero ON/OFF control key
6. Cycle START/STOP control key
7. Control keys (4 keys)
8. Standby ON/OFF indicator
9. Evacuation ON/OFF indicator
10. Test ON/OFF indicator
11. Helium signal analogic display
12. Helium signal analogic scale ON/OFF indicator
13. Helium signal Zero scale ON/OFF indicator
14. Correction factor COR indicator (applied to digital display)
15. Units ON/OFF indicator
16. Helium signal digital display
17. Alphanumeric display (4 lines x 20 characters)
18. Parameter function keys (1 key per display line)
19. Modification access keys (4 keys)
20. NEXT : next display/parameter circular function
21/22. Plus or minus value adjustment, parameter selection, audio volume adjustment keys
23. RESET of previously displayed values (cancels temporary inputs)
24. Menu selection access keys (4 keys)
25. SET POINT menu selection key
26. SPECTRO calibration and analyzer cell configuration menu selection key
27. MAINTENANCE menu selection key
28. OTHER menus selection key (test mode selection, inlet VENT selection, date/time)
29. Remote control connection (accessory)
30. Graphic interface selection key
31. Color touch screen

### DETECTOR CONNECTIONS

- **Gas line (option)**
- **Pump exhaust**
- **Remote control (accessory)**

### HELIUM SIGNAL ANALOG DISPLAY

- **Bargraph zoom on the reject point**
- **Display a greater resolution of the He signal around the reject point.**

### TEST CYCLES

**Hard vacuum test mode**
- Leak detector in hard vacuum mode: connect the part or assembly to be test to the detector.

**Sniffing test mode**
- Leak detector in stand-by mode: connect the long distance sniffer probe to the quick connector.

### ASSISTANCE TO THE TEST

- **Cycle end**
- **Automatic control of the roughing and measure timers.**

- **Memo function**
- **Memorization of the latest He signal measured after de-priming the CYCLE key at the end of the cycle.**

- **Bargraph zoom on the reject point**
- **Display a greater resolution of the He signal around the reject point.**

- **Helium pollution prevention**
- **Device that prevents the unit from getting polluted with Helium.**

- **Helium background suppression**
- **Automatic zero function.**
**USER INTERFACE LEVEL**

The detector offers 4 user interface levels for this section to accommodate any application requirements.

<table>
<thead>
<tr>
<th>Level</th>
<th>Setting and maintenance part</th>
<th>User part</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This level has very limited information on the alphanumeric display (LCD). This level is generally selected for production types of applications.</td>
<td>No access to control keys (Cycle key excluded)</td>
</tr>
<tr>
<td>2</td>
<td>This level allows the operator to visualize some parameters without the possibility of making any changes. Same as Level 1, this level is usually selected for production types of applications.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Same as Level 2 but with possibility to set some parameters. This level is generally selected for maintenance applications.</td>
<td>Access to all the control keys</td>
</tr>
<tr>
<td>4</td>
<td>This level allows access to all the parameters and is generally used for settings all the parameters. Note: When switching from level 3 to any other level, the switch can be performed without using the password. This level is generally used for R&amp;D applications.</td>
<td></td>
</tr>
</tbody>
</table>

To know your user interface level and to change it [C 120](#).

**CALIBRATION**

**Internal**

The internal calibration is automatically activated during the start-up process. It doesn’t require any operator action. Thanks to the initial auto-calibration, the leak detector is immediately operational. The result of the auto-calibration process is displayed.

Internal auto-calibration request: it can be started by the operator whenever needed (the unit has to be off-cycle).

**External**

The external auto-calibration allows direct readout in cases of operation with an auxiliary pumping system.

**AIR INLET**

**Purpose**

At the inlet of the detector, 2 functions are proposed to the operator:

- Connection to the vent air function, connection to the gas line (ASM 182 TD+ only).

The indicator “vent off” vented (closed) indicates that the venting valve is not activated (vent off) at the end of the cycle. The setting by default is “vent off” (valve closed).

**Connection to the gas line option:**


**ZERO FUNCTION**

**Purpose**

The zero function offers the operator the possibility to detect small leaks that are smaller than the helium background. The zero function could be activated manually by the operator or automatically (He background suppression).

**Manual activation of the zero function**

Connect the part or installation to be tested.

On the digital display, the leak detector He background displays.

The digital display becomes 0.0E-00. On and after this time, it will display only He variation.

**Manual deactivation of the zero function**

**Automatic activation/deactivation of the Helium background suppression**

Refer to the User’s Manual.

**Audio alarm**

The audio alarm offers 2 modes of operation. They are both linked to the zero function.

**Zero function not activated**

The audio alarm start when the He signal exceeds a fixed set point: this set point is programmable.

**Zero function activated**

The audio alarm is modulated with respect to the position of the helium background.

**START-UP**

**Purpose**

1 - Connect the main cable from the detector to the proper power outlet.

2 - Depress the main switch to position “1”. On the control panel, the indicators lights flash.

3 - The following screens are shown on the LCD.

4 - When the TMP pump reaches its nominal speed, the unit auto-calibrates itself.

5 - When calibration is completed, the unit is ready to start a cycle.

**INTERNAL MAINTENANCE OPERATIONS**

**Frequency**

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<thead>
<tr>
<th>Operation</th>
<th>See chapter</th>
</tr>
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<tbody>
<tr>
<td>2000 h(1) or 3 years(2)</td>
<td>Change the RVP 2021 rotary vane pump oil. Replace the cartridge (oil mist eliminator).</td>
</tr>
<tr>
<td>4000 h(1) or 6 months(2)</td>
<td>Clean the vacuum lines, the valves and the gauges with alcohol - Dust the electronic boards and the fans - Clean filters (inlet filters, air inlet filter)</td>
</tr>
<tr>
<td>8000 h(1) or 1 year(2)</td>
<td>Sniffer probe filter replacement if used.</td>
</tr>
<tr>
<td>12000 h(1)</td>
<td>Puri gauge adjustment. Replace the seal in the RVP 2021 rotary pump.</td>
</tr>
<tr>
<td>16000 h(1) or 2 years(3)</td>
<td>Regrease the molecular pump MDP 5011. Regrease the turbomolecular pump TMP 5154.</td>
</tr>
<tr>
<td>20000 h(1) or 1 years(3)</td>
<td>Recalibration/exchange of the internal calibrated leak.</td>
</tr>
<tr>
<td>500 000 cycles</td>
<td>Complete service of the RVP 2021 rotary vane pump.</td>
</tr>
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</table>

**Audio alarm**

**FREQUENCY**

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**PFEIFFER VACUUM**

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