ASM 306 S

Helium and hydrogen sniffer leak detector
for easy and accurate full-time sniffing operations
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Our know-how

Pfeiffer Vacuum is one of the world’s leading providers of vacuum and leak testing solutions. In order to complete our leak detection product portfolio, we are introducing a breakthrough unit addressing any industrial sniffing applications, especially refrigeration and air conditioning. Leakage control using sniffing measurements before the final refrigerant gas charge, is one of the latest steps of the production process. Thus it requires the highest testing reliability to increase productivity and quality levels. The ASM 306 S will help you to meet those challenges.

Superior performance and fast testing

Based on over 50 years of know-how in leak detection, you will get all the advantages of a proven technology regarding sensitivity, accuracy and repeatability. The ASM 306 S has been designed to offer fast and repeatable measurements, whether helium or hydrogen is used as tracer gas. This unit offers the fastest recovery in case of big leaks to maximize uptime.

Compact design

The ASM 306 S offers a compact and rugged design with limited footprint to be easily installed at any workplace. It is also the perfect choice for an integration into a production line whether for manual or automated operation.

Applications

- Cooling systems such as refrigerator and air conditioner
- Heat exchangers
- Valves and manifolds
- Gas circuit components
- Storage tanks, expansion vessels

Air conditioning
Customer benefits

- Helium and hydrogen tracer gases
- High sensitivity and accurate measurements
- Intuitive menu for easy operation
- Fast start-up
- Fast recovery in case of pollution
- Compact design and small footprint for easy integration into your production line
- Integrated toolbox
- Latest generation of tactile HMI with a large touch screen
- Low maintenance requirements
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Smart and user-friendly

The main display of the ASM 306 S offers easy readability with its 7 inches size, fully tactile and high resolution screen. This display is also removable and equipped with magnets at the rear to allow to be fixed on any metallic surface for the operator’s convenience. The test information is visible directly on the probe for easy visual management, with color LEDs lightning up in real time in accordance to the display, so that operators can focus on test parts. Its software is available in 10 different languages.

The ASM 306 S can be completed with a 2 years lifetime calibrated leak with both helium and hydrogen. The calibrated leak can be installed in a dedicated compartment at the front of the unit.

Ergonomic and rugged sniffer probe

Co-designed with the user in mind, the ergonomics of the sniffer probe has been a major focus allowing the operator to be able to hold the sniffer probe during their entire working shift. The high flow probe will help you pinpoint any leaks easily without missing any of them and without generating false alarms.

The two white LEDs on the front of the probe allow to illuminate the test area for a more precise leak localization.

The probe exists with various hose lengths to easily adapt to your application and the cable can be exchanged independently from the probe itself.

Specific attention has been placed on the robustness of the complete ASM 306 S, including the probe and its cable to offer a long lifetime with optimized suction flow and to provide you a full-time sniffing unit with low cost of ownership.

Applications

Refrigeration

RAC components assembly
ASM 306 S options

Calibration with calibrated leak inside the frame or external

Measurement ok

Measurement close to reject point

Leak detected

ASM 306 S accessories

Sniffer probe

Trolley
# ASM 306 S

Helium and hydrogen sniffer leak detector
for easy and accurate full-time sniffing operations

## Technical data

<table>
<thead>
<tr>
<th>Features</th>
<th>ASM 306S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detectable gases</td>
<td>Helium and hydrogen</td>
</tr>
<tr>
<td>Min. detectable leak rate for 4He</td>
<td>$1 \cdot 10^{-7}$ mbar l/s</td>
</tr>
<tr>
<td>Min. detectable leak rate for H$_2$</td>
<td>$5 \cdot 10^{-7}$ mbar l/s$^1$</td>
</tr>
<tr>
<td>Start up time</td>
<td>2 min</td>
</tr>
<tr>
<td>Response time</td>
<td>&lt; 1 s</td>
</tr>
<tr>
<td>Sniffer probe flow</td>
<td>300 sccm ± 10%</td>
</tr>
<tr>
<td>Noise level</td>
<td>55 dB (A)</td>
</tr>
<tr>
<td>Interface</td>
<td>RS-232, I/O, Fieldbus options</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>10–40 °C</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>100–240 V, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption max</td>
<td>300 VA</td>
</tr>
<tr>
<td>Weight</td>
<td>22 kg</td>
</tr>
<tr>
<td>Dimensions (L x W x H)</td>
<td>350 x 305 x 421</td>
</tr>
</tbody>
</table>

$^1$ The best sensitivity is achieved after degassing

## Dimensions

Dimensions in mm
## Accessories

### Hybrid sniffer probe
- **2 m hose length, rigid nozzle**: PRB2H02HA
- **5 m hose length, rigid nozzle**: PRB2H05HA
- **10 m hose length, rigid nozzle**: PRB2H10HA

### Hybrid cables
- **2 m length**: A604523
- **5 m length**: A602086
- **10 m length**: A602106

### Replacement filters for hybrid probes
- **Tip filters**: 127829S
- **Small particles filters**: 128051

### Calibrated leaks
- **100% Helium, value between 4-6 \( \times 10^{-5} \) mbar l/s**: 127388
- **100% Hydrogen, value between 4-6 \( \times 10^{-5} \) mbar l/s**: 127387

### Trolley
- **114820**

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### Order number matrix

<table>
<thead>
<tr>
<th>Interface board</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic 15 pins I/O</td>
<td>0</td>
</tr>
<tr>
<td>37 pins I/O</td>
<td>2</td>
</tr>
<tr>
<td>37 pins I/O + Ethernet(^1)</td>
<td>4</td>
</tr>
</tbody>
</table>

\(^1\) Ethernet will allow to create an additional COM port to operate the leak detector through a computer.

Other Fieldbus communication options on request.
VACUUM SOLUTIONS FROM A SINGLE SOURCE
Pfeiffer Vacuum stands for innovative and custom vacuum solutions worldwide, technological perfection, competent advice and reliable service.

COMPLETE RANGE OF PRODUCTS
From a single component to complex systems:
We are the only supplier of vacuum technology that provides a complete product portfolio.

COMPETENCE IN THEORY AND PRACTICE
Benefit from our know-how and our portfolio of training opportunities!
We support you with your plant layout and provide first-class on-site service worldwide.