



# Tracer gas leak detectors

The widest offer of leak testing solutions,  
using helium and hydrogen

# Leak detectors

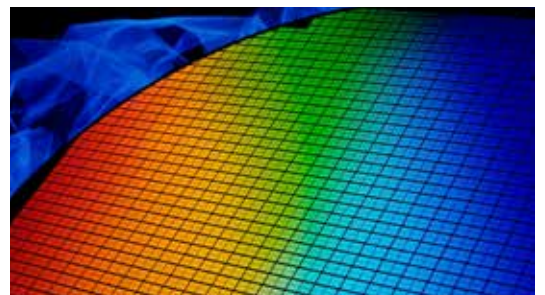
The widest offer of leak testing solutions, using helium and hydrogen

## Leak detectors for various needs:

Our portable leak detectors are used both for mobile leak detection „on site“, as well as for worldwide service jobs in a variety of different locations. They stand out above all due to their high performance combined with low weight.

The multipurpose leak detectors are used mainly for stationary applications to localize leaks and to check leak tightness. They are also movable thanks to dedicated carts. They are used in a wide range of industries, from heavy industry right up to large instruments in international research centers and are available with oil sealed or dry pumps.

High-performance leak detectors are used where extremely short cycle times are required. From testing of industrial components in high throughput production up to highly sensitive applications in vacuum and medical technology or in research and development.



### Customer benefits:

#### Portable:

- Ultralight and easy to operate
- Ideal for global servicing work
- Remote controlled for comfortable operation

#### Multipurpose:

- Suitable for a large variety of leak detection applications
- Powerful and dependable
- Simple design for easy operationg

#### High performance:

- Extremely short pump down times even on large volumes
- Designed for ultra sensitive leak detection limits whatever size and volume of the test parts
- High reliability in clean processes as well as rough environments

#### Modular:

- Easy and flexible integration into leak detection systems
- Low maintenance for continuous operation
- Broad selection of interfaces to answer all common industry standards

#### Sniffing:

- Ideal solution for sniffing applications, even in production
- Superior performance and fast testing in a compact design
- Visual management for the operators convenience thanks to color LEDs on the probe



**Portable:**  
ASM 310

**Multipurpose:**  
ASM 340  
ASM 340 D  
ASM 340 I

**High performance:**  
ASM 390  
ASM 392

**Modular:**  
ASI 35

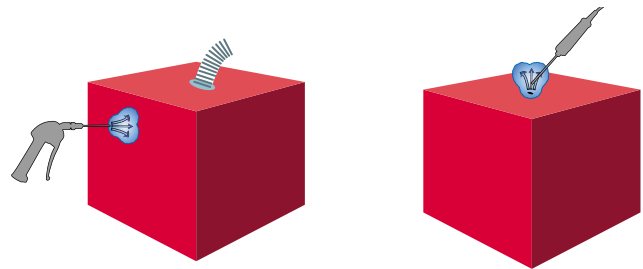
**Sniffing:**  
ASM 306 S

# Leak detectors

Six test methods for leak detection

## Leak localization

Applications in production and maintenance as well as quality control



### Method

#### Vacuum test: Spraying test

#### Sniffing test

For leak localization on parts under vacuum

For leak localization on pressurized parts

### Description

The leak detector evacuates the air inside the test part. After that, the tracer gas is sprayed on the external surface of the part. The detector measures the gas flow through the leak channel in the wall of the test part. The leak can be localized.

The test part is pressurized with tracer gas. After that, the sniffer probe is moved around the part. If a leak is present, the leak detector will detect the escaping tracer gas, allowing to locate the leak.

### Customer benefits

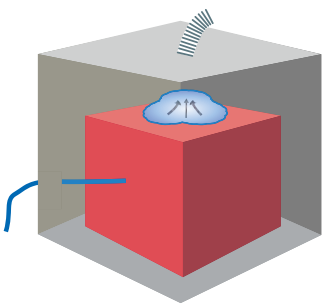
- Localization of the leak
- Very high sensitivity
- Easy to perform
- Local or integral test

- Localization of the leak
- Not necessary to put the test part under vacuum
- Easy to perform

	Vacuum test: Spraying test	Sniffing test	Integral vacuum test	Vacuum test: Bombing test	Integral test of enclosed parts under vacuum	Sniffing test: Integral test at atmospheric pressure
ASM 310	■	■				
ASM 340 / 340 D / 340 I	■	■	■		■	■
ASM 390 / 392	■	■	■		■	■
ASI 35		■	■		■	■
ASM 306 S		■				

**Integral test**

Industrial applications and quality control

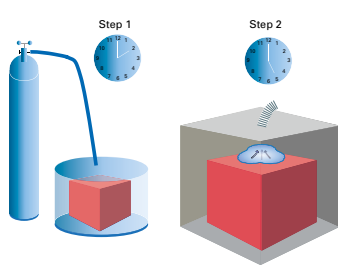


**Integral vacuum test**

Used in production environments

The test part is placed in a vacuum test chamber and filled with tracer gas. Should a leak be present, the tracer gas will escape from the part into the test chamber and will be measured by the leak detector.

- Very high sensitivity
- High throughput
- Easy to integrate into a production line
- Easy calibration
- High repeatability

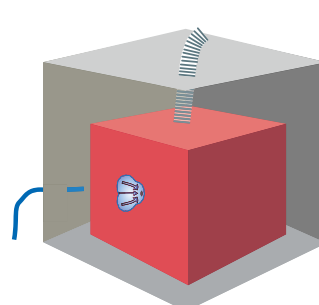


**Vacuum test:  
Bombing test**

The test part is sealed and cannot be evacuated or pressurized.

Place the test part in a specific chamber and pressurize it with tracer gas (bombing chamber). Should a leak be present, the tracer gas is forced into the part due to the gas pressure. After that, the part is placed in a vacuum chamber which is evacuated. Any tracer gas that was forced inside the part will now escape and be measured by the leak detector.

- The only solution to test sealed components with high sensitivity
- High repeatability

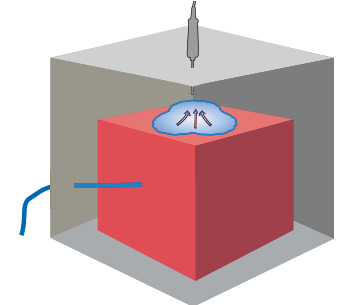


**Integral test of enclosed parts under vacuum**

It needs to be tested whether tracer gas can enter into the part.

Inside a test chamber, the part is connected to a leak detector and evacuated. The chamber is filled with tracer gas. Should a leak be present, the tracer gas will penetrate the part and be measured by the leak detector.

- High automation level possible
- Very high sensitivity
- High throughput
- High repeatability



**Sniffing test:  
Integral test at  
atmospheric pressure**

The test part can withstand overpressure and needs to be tested as a complete product.

The test part is pressurized with tracer gas in a simple accumulation chamber which is under atmospheric pressure. After an accumulation time, the detector analyzes the air inside the chamber and determines if an increase in the tracer gas concentration can be measured.

- Easy to integrate into a production line



# ASM 310

The portable tracer gas leak detector combining ultralight weight and superior performance



Capable of both vacuum and sniffing tests

Your added value



Small size with maximum sensitivity

## Perfect choice for leak detection in maintenance applications

Ever since the emergence of the tracer gas leak detection technology, portable employment of leak detectors was limited due to the weights and volumes of the units. The ASM 310 changes the rules. This unit combines superior performance, small footprint, compact size, user-friendliness, long maintenance intervals as well as light weight and portability without any compromises.

## Revolutionary advance

The ASM 310 leak detector offers high performance wherever needed in a design with only half the weight, half the footprint and half the size of standard desktop leak detectors.

Its clean, oil-free pumping system makes the ASM 310 the perfect choice for leak test maintenance of systems that do not tolerate any contamination. Moreover, it offers unrivaled performance in leak detection applications where portability is key:

- Highly sensitive leak detection in vacuum production systems for the semiconductor or coating industry
- Ease of use and measurement in confined spaces, such as accelerator systems for medical and R&D applications
- Convenient handling in industrial environments such as power stations and chemical plants
- A reliable travel companion, ideal for leak detection service providers



**Light and compact  
to ease your  
maintenance**



**Oil-free unit**



**Large and detachable  
color display for easy reading  
of test results**

### **Large touch display for convenient operation**

The performance of the ASM 310 is also felt in its bright and high resolution touch display. A clear color differentiation indicates when the unit is in standby or still measuring. Final test results will be displayed in green/red color according to the reject criteria defined. If you need to adapt the setting of the unit, you can easily access the main settings parameters via icons directly on the control panel. The large display also allows the results to be viewed on a real time scrolling graph, and you can switch from main screen to graph by swiping on the screen with your finger.

### **Customized settings and intelligent usage**

For advanced users, there is a more comprehensive settings menu to customize the display. The menu is password-protected to safeguard against tampering with the unit's settings. The control panel incorporates magnets, enabling it to be positioned on a metallic support for an even more convenient usage.

### **Easy data exchange**

The USB port on the side of the control panel will allow you to transfer test data from the internal memory of the leak detector. Records can be Bitmap or text files for easy documentation and post-processing of the leak test results.

# ASM 310

Technical data, order number,  
accessories

## ASM 310

**$1 \cdot 10^{-12}$  mbar·l/s**

Minimum detectable  
leak rate for He  
(vacuum leak detection)

**< 1s**

Response time  
(sniffing leak detection)



## Technical data

	ASM 310
Test methods	Vacuum and sniffing
Minimum detectable leak rate for He (vacuum leak detection)	$1 \cdot 10^{-12}$ mbar·l/s
Minimum detectable leak rate for He (sniffing leak detection)	$1 \cdot 10^{-7}$ mbar·l/s
Tracer gases	$^4\text{He}$ , $^3\text{He}$ , $\text{H}_2$
Maximum inlet test pressure	15 mbar
Roughing capacity	1.7 m <sup>3</sup> /h
Pumping speed for He at inlet	1.1 l/s
Inlet port	DN 25 ISO KF
Warm-up time (20°C)	< 2 min; < 3.5 with autocalibration
Response time (sniffing leak detection)	< 1 s
Interfaces	RS 232, I/O USB port for data transfer
I/O interfaces	Logical input Analog output (mantissa) Analog output (exponent)
Dimensions	350 x 254 x 414 mm (14 x 10 x 16 inches)
Weight	21 kg (46 lbs)
Universal voltage	90-240 V AC – 50/60 Hz
Maximum power consumption	300 VA
Selectable languages	English, French, German, Italian, Spanish, Portuguese, Russian, Japanese, Chinese, Korean

## Order number

	ASM 310
Order number	BSAA0200MM9A



**Accessories**

Accessories	Order number
<b>Country-specific power cables</b>	
UK	104411
Italy	104758
Switzerland	103718
<b>Remote control</b>	
RC10, wired/wireless	124193
<b>Sniffer probe</b>	
5 m hose length, rigid 9 cm nozzle	SNC1E1T1
10 m hose length, rigid 9 cm nozzle	SNC2E1T1
Other nozzle and tube lengths upon request	
<b>Helium spray gun</b>	
Standard	112535
"Elite-Kit" Spray gun with accessories in a compact case	109951
<b>Other accessories</b>	
Trolley	114820
Transportation case	119594



ASM 310 on a trolley



Remote control RC10

# ASM 340

Best-in-class leak detectors for fast, accurate and high reliability testing



**Fastest test time  
in its class**

**Your added value**



**Capable for both  
vacuum and sniffing  
tests**

## **Top performance in vacuum and sniffing leak detection**

The ASM 340 guarantees top performance in vacuum and sniffing leak detection for various industries, from maintenance functions to applications in production environments. This dependable leak detector can be used both for qualitative leak localization as well as quantitative measurement of leak rate. The ASM 340 is characterized by its reliable and powerful pumping system and is available in oil sealed or dry versions.

## **Accurate measurement and short test time**

All models provide accurate measurement and short test time thanks to high pumping speed. This makes them the ideal tool to get an optimized pump down time on test objects. High sensitivity, ultrafast response time and short recovery time are among the outstanding features of this compact multipurpose unit. Additionally, with its unrivalled performance in sniffing, the ASM 340 will be a great partner for leak localization on pressurized parts.

## **Customized for your individual needs**

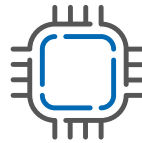
The ASM 340 is also available without backing pump, which allows the connection of other backing pumps in order to better adapt to your needs, e.g. when integrating into a leak detection system. In addition, all models of the ASM 340 series can be equipped with communication options. A complete range is available, from I/O to fieldbus options.



**Proven vacuum technology  
components for high reliability  
and low maintenance**



**Easy and intuitive  
operation**



**Complete range of  
communication interfaces**

#### **Easy operation and smart functions**

The control panel is equipped with a large, bright and high-resolution color touch display, offering a new user experience. Therefore, no training for handling the ASM 340 is required. The configuration of your leak test is directly accessible on the main screen and the color management of the display improves the readability of the test results. The control panel is detachable with integrated magnets, improving ergonomics for leak detection in medium or large size parts.

#### **User-friendly post-processing of test data**

The ASM 340 offers the possibility to document your test reports. The data can be recorded and stored in the internal memory as bitmap or text files, ready to be transferred on an USB stick via a dedicated USB output.

#### **Extended range of accessories**

For even more versatility, an extended range of accessories is available to cover a wide variety of applications. When leak testing large objects, the wireless remote control RC10 can operate the leak detector remotely and display the test results. Sniffer probes with different hose length and tip sizes as well as dust filters with various mesh sizes are also available. In addition, dedicated carts have been designed to bring mobility to the ASM 340.

# ASM 340

Technical data, accessories,  
order number matrix

## ASM 340

**$1 \cdot 10^{-12}$  mbar · l/s**

Minimum detectable  
leak rate for He  
(vacuum leak detection)

**< 1 s**

Response time  
(sniffing leak detection)



## General technical data

	ASM 340
Test methods	Vacuum and sniffing
Minimum detectable leak rate for He (vacuum leak detection)	$1 \cdot 10^{-12}$ mbar · l/s
Minimum detectable leak rate for He (sniffing leak detection)	$5 \cdot 10^{-9}$ mbar · l/s
Tracer gases	$^4\text{He}$ , $^3\text{He}$ , $\text{H}_2$
Response time (sniffing leak detection)	< 1 s
Maximum inlet test pressure	25 mbar
Pumping speed for He	2.5 l/s
Inlet port	DN 25 ISO KF
Start-up time (20°C)	3 min
Response time (sniffing leak detection)	< 1 s
Interfaces (see ordering matrix)	RS-232, I/O, USB, Fieldbus
Dimensions (LxWxH)	547 x 375 x 389 mm (14 x 10 x 16 inches)
Selectable languages	English, French, German, Italian, Spanish, Portuguese, Russian, Japanese, Chinese, Korean

## Specific technical data

	ASM 340	ASM340 D (dry version)	ASM340 I
Backing pump	Rotary vane pump	Diaphragm pump	None
Roughing capacity	15 m <sup>3</sup> /h	3.4 m <sup>3</sup> /h	-
Weight	56 kg	45 kg	32 kg
Supply	100–110 V, 50/60 Hz 200–240 V, 50/60 Hz	Universal 100–240 V, 50/60 Hz	Universal 100–240 V, 50/60 Hz
Max. power consumption	850 W	600 W	350 W
Operating temperature	0–45 °C (vacuum) 0–40 °C (sniffing)	0–35 °C	0–40 °C

**Order number matrix ASM 340**

abcA02AdMe9f

<b>Leak detector</b>	<b>abc</b>
ASM 340	<b>JSV</b>
ASM 340 D (dry version)	<b>KSB</b>
ASM 340 I (without backing pump)	<b>MSX</b>

<b>Interface board</b>	<b>d</b>
Basic 15 Pins I/O	<b>0</b>
Basic 15 Pins I/O + Bluetooth	<b>1</b>
37 Pins I/O	<b>2</b>
37 Pins I/O + Ethernet <sup>1)</sup>	<b>4</b>
37 Pins I/O + Bluetooth	<b>5</b>
Profibus	<b>8</b>
Profinet	<b>9</b>

<b>Supply</b>	<b>e</b>
100–110 V; 50/60 Hz, US Power cable (only for ASM 340)	<b>L</b>
200–240 V; 50/60 Hz, EU Power cable (only for ASM 340)	<b>H</b>
Universal 100–240 V; 50/60 Hz (only for ASM 340 D + I)	<b>M</b>

<b>Personalization</b>	<b>f</b>
No	<b>A</b>
Japan (not available for ASM 340 D and ASM 340 I / supply voltage 90–130 V 50/60 Hz)	<b>B</b>

<sup>1)</sup> Ethernet will allow to create an additional COM port to operate the leak detector through a computer

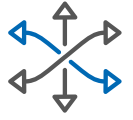
**Accessories**

	<b>Order number</b>
<b>Country specific power cables</b>	
UK	<b>104411</b>
Italy	<b>104758</b>
Switzerland	<b>103718</b>
<b>Sniffer probe</b>	
5 m hose length, rigid 9 cm nozzle	<b>SNC1E1T1</b>
5 m hose length, rigid 30 cm nozzle	<b>SNC1E2T1</b>
10 m hose length, rigid 9 cm nozzle	<b>SNC2E1T1</b>
5 m hose length, flexible 45 cm nozzle	<b>SNC1E4T1</b>
<b>Helium spray gun</b>	
Standard	<b>112535</b>
“Elite-kit” spray gun with accessories in a compact case	<b>109951</b>
<b>Remote control</b>	
RC 10, wired/wireless	<b>124193</b>
<b>Transport cart</b>	
2 wheels trolley with large drawer (not for ASM 340 I)	<b>122570</b>
4 wheels trolley (upper plate dedicated to ASM 340 and lower plate for external backing pump)	<b>On request</b>
<b>Inlet filters for dust</b>	
Brass, 20 µm, DN25/25 ISO KF	<b>105841</b>
Stainless steel, 15 µm, DN25/25 ISO KF	<b>127014</b>
<b>By-pass option</b>	<b>On request</b>

Further accessories can be found on our website at [www.pfeiffer-vacuum.com](http://www.pfeiffer-vacuum.com)

# ASM 390 and ASM 392

Mobile leak detectors optimized for rapid pump down and short response times on large test objects



High maneuverability and compact design

Your added values



Intuitive menu for easy operation

## Superior performance, fast testing

The ASM 390 and ASM 392 are the perfect leak detection solutions adapted to the semiconductor and display industries as well as to other demanding applications where rapid pump down and high sensitivity is key. Both models are fully Semi S2 compliant.

These leak detectors are fitted with a dry frictionless backing pump and a powerful high vacuum pump, making them the ideal tools for leak testing of various components in clean environments. Equipped with an additional turbopump, the ASM 392 will speed up your leak detection process to reduce the downtime of your production equipment.

## Robust, accurate and reliable

The ASM 390 and ASM 392 were developed to provide full confidence in leak testing regardless of the operator's knowledge. They deliver premium performances and accurate results in a minimal time, making them highly efficient in the field.





**Fast start-up**



**Fully Semi S2 compliant**



**High roughing capacity**



**High sensitivity and accurate measurements**



**Low maintenance requirements**

### **Ergonomic and highly maneuverable**

ASM 390 and ASM 392 share the same platform and are uniquely ergonomic with a convenient size and height, a secondary handle in the front, a fully rotatable, removable display, an inlet in the front for easy connection to test ports and unrivaled maneuverability for access to all testing areas, even in tight spaces.

### **Smart and user-friendly**

Thanks to a wide, clear color touch display panel, an integrated toolbox with modular compartments and storage space for vacuum bellows, you will be amazed how easy leak detection can be when you have all necessary accessories at the point of use.

### **Applications**

- Semiconductor industry
- Large area coating
- Solar industry
- Accelerators
- Vacuum components – feedthroughs, valves, bellows, expansion joints
- Laser technology
- Ultra-pure media supply
- Electronics
- Aeronautics
- Medical technology

# ASM 390 and ASM 392

Technical data,  
order numbers, accessories

## ASM 390/392

**$1 \cdot 10^{-12}$  mbar·l/s**

Min. detectable leak rate  
for Helium  
(vacuum leak detection)

**< 1 s**

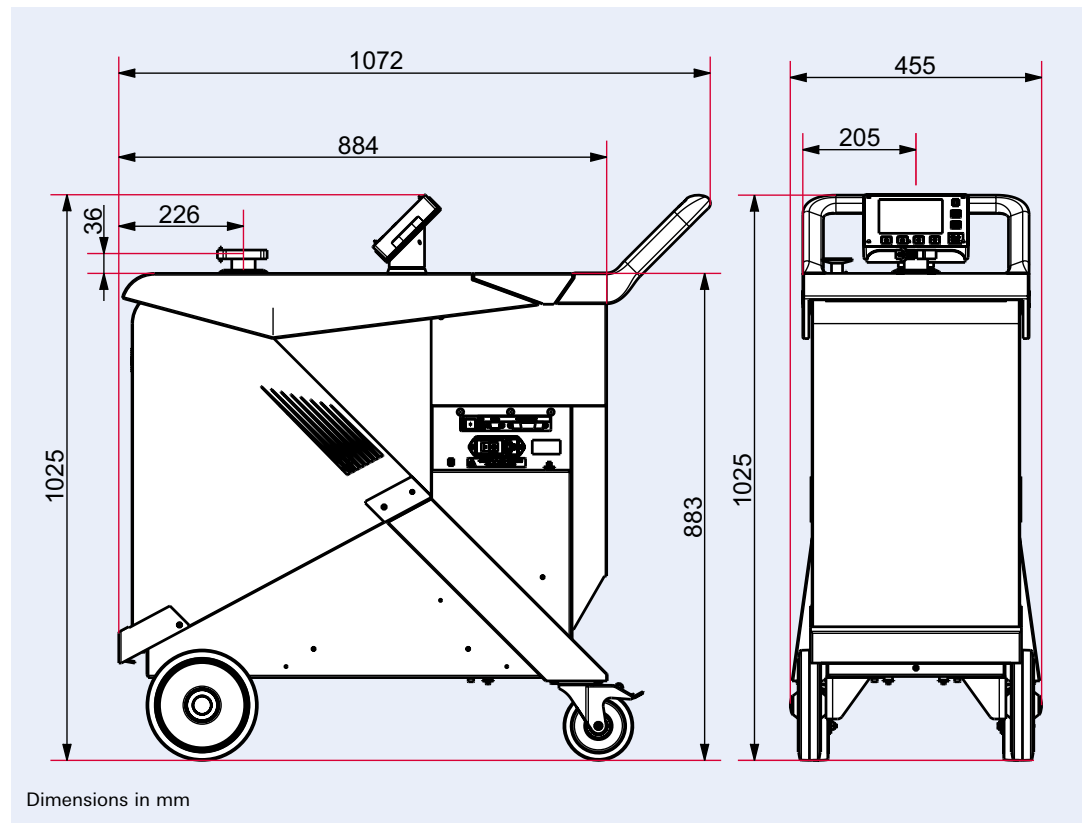
Response time



## Technical data

	ASM 390	ASM 392
Detectable gases	$^4\text{He}$ , $^3\text{He}$ , $\text{H}_2$	
Min. detectable leak rate for Helium (vacuum leak detection)	$1 \cdot 10^{-12}$ mbar·l/s	
Min. detectable leak rate for Helium (sniffer leak detection)	$1 \cdot 10^{-8}$ mbar·l/s <sup>1)</sup>	
Helium pumping speed	10 l/s	25 l/s
Backing capacity	35 m <sup>3</sup> /h	
Maximum inlet test pressure	20 mbar (and additional massive mode)	
Start-up time (20°C) without calibration	2 min	
Inlet flange	DN 40 ISO-KF	
Response time	< 1 s	
Interface	RS-232, I/O, Ethernet (consult operating instructions for more details)	
Noise level	≤ 55 dB (A)	
Operating temperature	10–35 °C	
Supply voltage	100–240 V, 50/60 Hz	
Power consumption	800 W	
Power consumption max.	1,600 W	
Weight	125 kg	130 kg
Dimensions (LxWxH)	1,072 x 455 x 1,025 mm	

## Dimensions



**Order number matrix ASM 390/392**

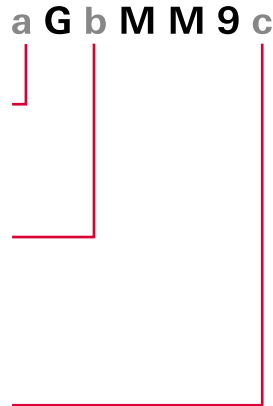
<b>Version</b>		<b>a</b>
ASM 390	<b>CSGB01</b>	
ASM 392	<b>ESGB02</b>	

<b>Interface board</b>		<b>b</b>
Basic 15 pins I/O	<b>0</b>	
37 pins I/O	<b>2</b>	
37 pins I/O + Ethernet <sup>1)</sup>	<b>4</b>	

<b>Customization on exhaust</b>		<b>c</b>
None (Standard)	<b>A</b>	
Exhaust DN 25	<b>B</b>	
Exhaust DN 40	<b>C</b>	



<sup>1)</sup> Ethernet will allow to create an additional COM port to operate the leak detector through a computer

**Order numbers accessories**

<b>Accessories</b>	<b>Order number</b>
<b>Bottle holder for ASM 390 and ASM 392</b>	<b>126561</b>
<b>Remote control</b>	
RC10 (wired/wireless operation, color touch screen)	<b>124193</b>
Basic with 5 m cable	<b>106688</b>
<b>Locking clamp DN 40 KF</b>	<b>118801</b>
<b>Standard sniffer probe<sup>2)</sup></b>	
5 m hose length, rigid 9 cm nozzle	<b>SNC1E1T1</b>
<b>External communication box ECB-Wifi</b>	<b>125902</b>
<b>Helium spray gun</b>	
Standard	<b>112535</b>
Spray gun "Elite" with accessories in a case	<b>109951</b>
<b>Inlet filters for dust<sup>2)</sup></b>	
Brass, 20 µm, DN 40/40 ISO-KF	<b>105842</b>
Stainless steel, 15 µm, DN 40/40 ISO-KF	<b>on request</b>

<sup>2)</sup> Other configurations available, please contact your local Pfeiffer Vacuum support

# ASI 35

## Modular tracer gas leak detector



Vacuum and sniffing mode for helium and hydrogen

Your added value



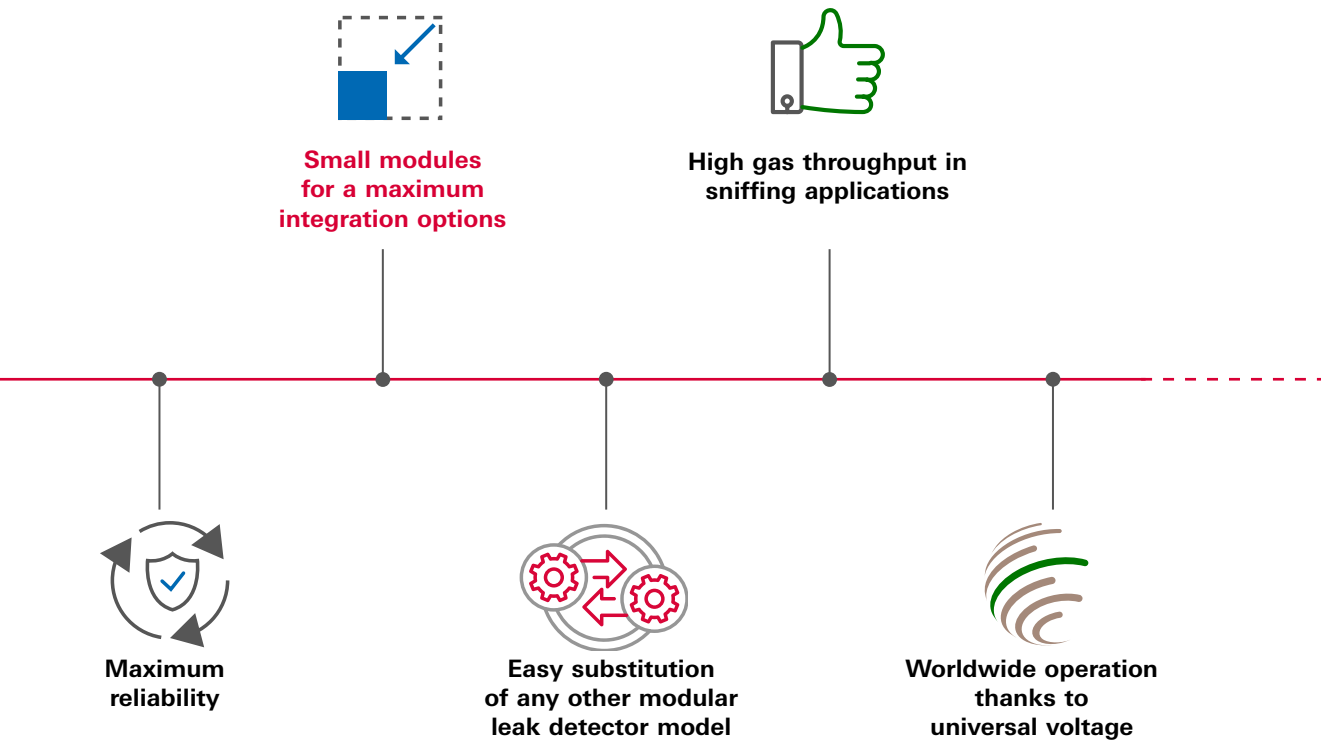
Short cycle times

### The perfect solution

The ASI 35 is the perfect leak detection solution dedicated to leak detection machine builders and end-users. This unit combines high performance, reliability, and repeatability with maximum uptime. The ASI 35 provides maximum performance for tracer gases helium and hydrogen in integral and localizing test methods or a combination of both. Therefore, it offers flexibility in the testing of demanding samples with minimum signal background and crosstalk, guaranteeing fast overall cycle times.

### Flexible and versatile

Due to its modular design, the ASI 35 is optimized for minimum space requirements and maximum integration options. The vacuum module can be installed in any orientation and all other modules are compatible with 1/2 19 inch rack format. The user interface becomes optional as the unit can be controlled by PCs or PLCs. Only two cables are needed to connect the vacuum and electronic modules, making the ASI 35 the easiest modular leak detector to set up.



#### **Dependable, fast, and sensitive**

Further advantages of the ASI 35 are its high helium pumping speed and low maintenance turbopump, its dual independent long life filaments as well as its state-of-the-art electronics. These features guarantee a long-lasting trouble-free operation. The leak detection system can be designed for testing in various operational modes for vacuum or sniffing tests with the highest sensitivity level. The ASI 35 sustains very high throughput, ensures the accuracy and reproducibility of the measurement results and allows ultra fast cycle time as short as 1 second. Thanks to its unrivalled performances in sniffing, the ASI 35 is the perfect leak detector for such specific systems, especially if multipoint sniffing is needed.

#### **Easy worldwide operation**

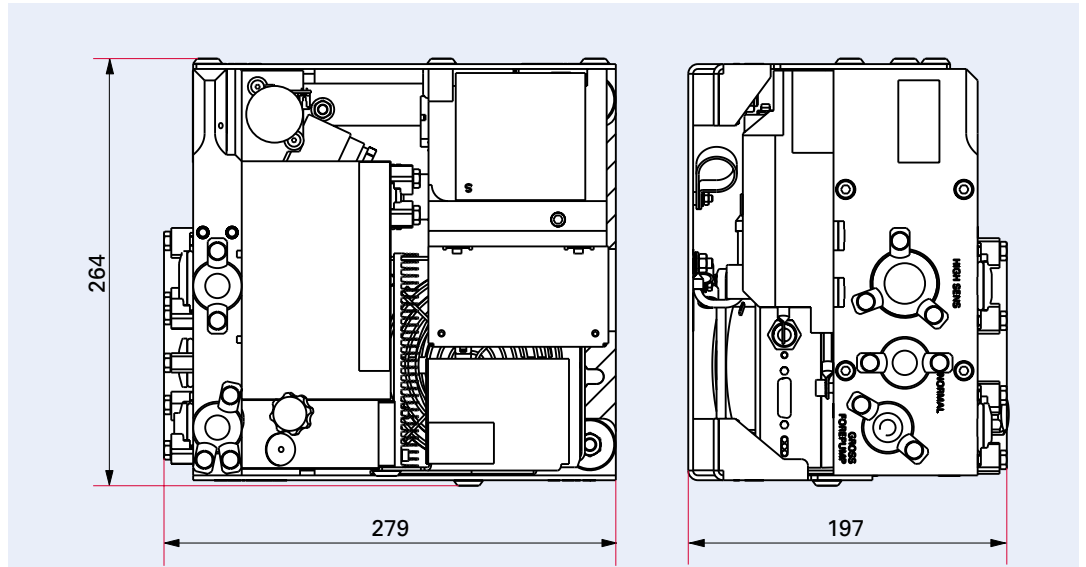
The electronic module is suitable for universal voltage, making the ASI 35 easy to integrate into systems designated for worldwide operation. The leak detector is designed for working conditions in ambient temperatures of up to 45 °C. The easy mechanical integration is complemented by a wide range of interfaces, allowing data acquisition and complete external control of the system. Thanks to customized I/O configuration, a basic leak detection system can also be considered without PC or PLC. The optional control panel with color touch display provides easy operation through intuitive settings and software menus for both leak detection machine builders and end-users.

# ASI 35

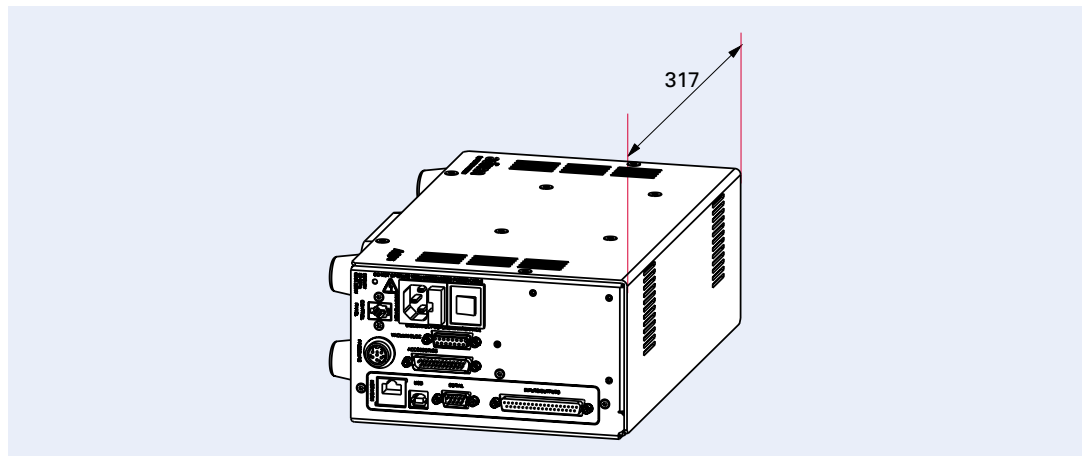
Dimensions, technical data,  
order matrix

## Dimensions

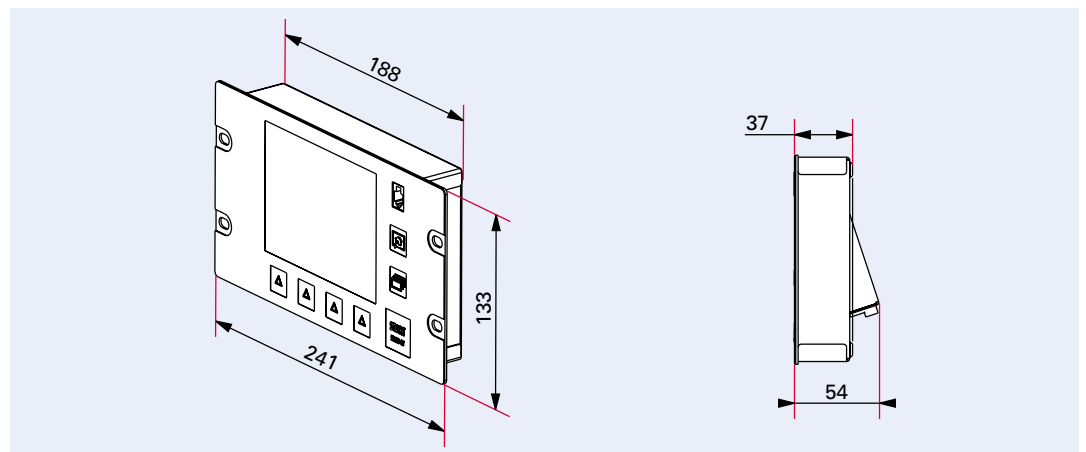
Vacuum module



Elektronic module



Control panel



Dimensions in mm




**Technical data**

<b>ASI 35</b>	
Test methods	Vacuum and sniffing leak detection
Minimum detectable leak rate for He (vacuum leak detection)	3.5 · 10 <sup>-8</sup> mbar l/s (gross leak test mode) 1 · 10 <sup>-10</sup> mbar l/s (normal leak test mode) 5 · 10 <sup>-12</sup> mbar l/s (high sensitivity test mode)
Minimum detectable leak rate for He (sniffing leak detection)	1,5 · 10 <sup>-8</sup> mbar l/s
Tracer gases	<sup>4</sup> He, <sup>3</sup> He, H <sub>2</sub>
Maximum inlet test pressure	18 mbar (gross leak test mode) 1 mbar (normal leak test mode) 0.2 mbar (high sensitivity test mode)
Pumping speed for He	6 l/s (high sensitivity test mode) 1.8 l/s (normal leak test mode)
Start-up time	< 3 min
Vacuum connections	DN 25 ISO-KF; DN 16 ISO-KF
Interface (see the order matrix for complete options configuration)	RS-232, Ethernet, Profibus, USB
I/O interface	6 digital inputs (allocated functions configurable) 3 analog outputs (configurable: helium signal log, mantissa, exponent, inlet pressure) 5 relay outputs (allocated functions configurable) 4 transistor (open collector) outputs (allocated functions configurable)
Dimensions: L x W x H / Weight	
Vacuum module:	279 x 264 x 197 mm / 15 kg
Electronic module:	216 x 317 x 111 mm / 5 kg
Control panel:	241 x 54 x 133 mm / 1.3 kg
Universal Voltage	90–240 V AC; 50/60 Hz
Maximum power consumption	300 W
Operating temperature	10–45 °C

**ASI 35**

**1.5 · 10<sup>-8</sup> mbar l/s**  
Minimum detectable leak rate for He (sniffing leak detection)

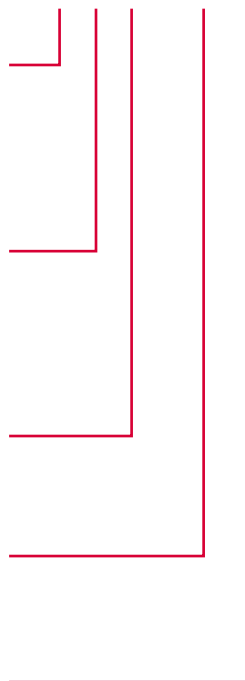
**<sup>4</sup>He, <sup>3</sup>He, H<sub>2</sub>**  
Tracer gases



**Order matrix ASI 35**

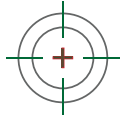
<b>Industrial control panel and associated cable length</b>	<b>a</b>
Without control panel	0
1.8 m	1
5 m	2
10 m	3
<b>Cable length for electronic module</b>	<b>b</b>
1.5 m	1
3.5 m	2
5 m	3
10 m	4
<b>Sniffing</b>	<b>c</b>
Without	X
With	S
<b>Internal calibration</b>	<b>d</b>
Without	0
With	1
<b>Interface board</b>	<b>e</b>
37 Pins I/O	2
37 Pins I/O + Ethernet	4
Profibus	8
Profinet	9

**S a b c 0 d 0 e MM9A**



# ASM 306 S

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



High sensitivity  
for precise and  
error-free measurements

Your added value



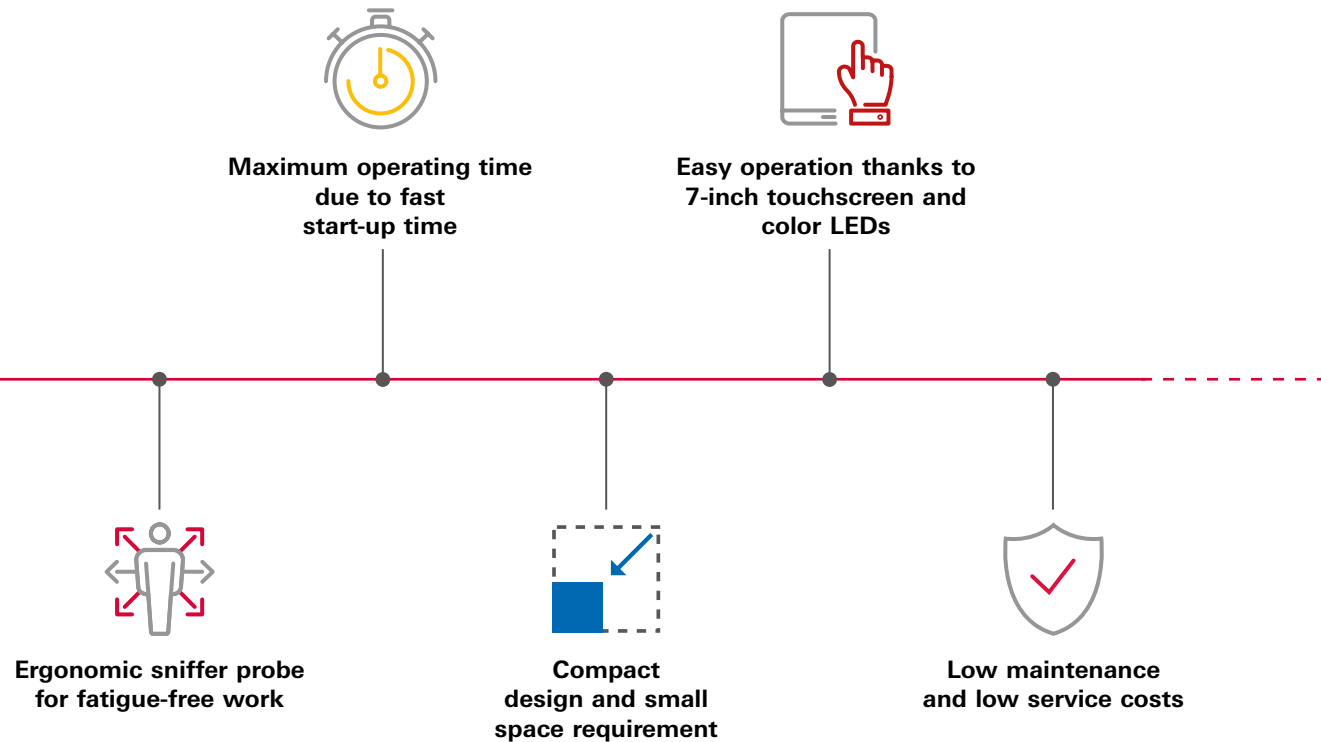
Robust design  
for stability and  
reliability

## 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 step 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 design 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.

### Smart and user-friendly

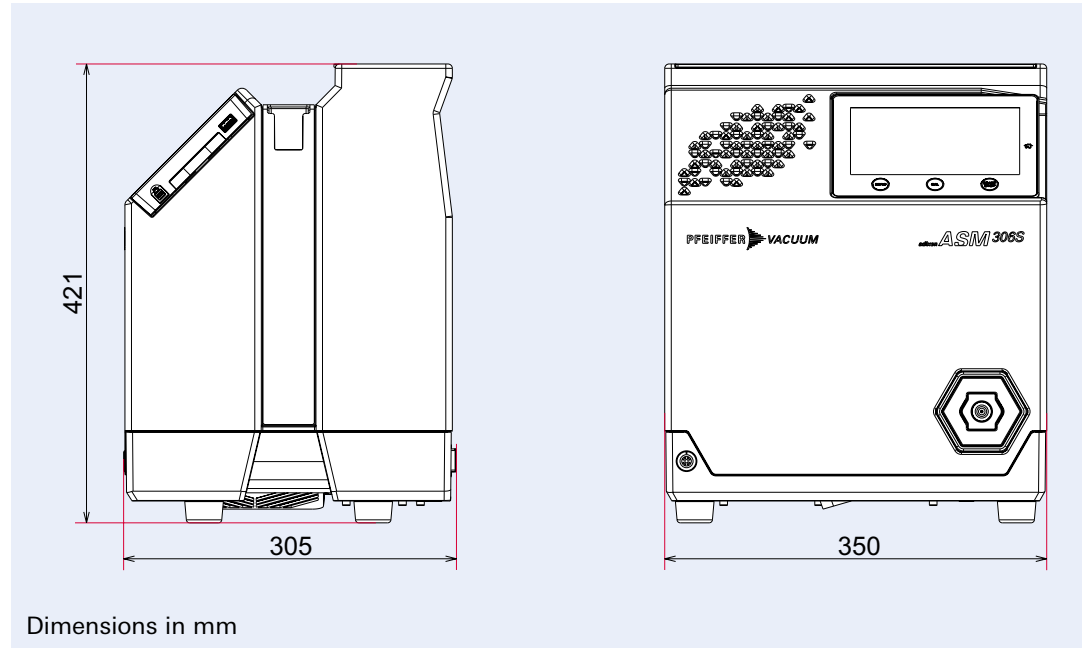
The main display of the ASM 306 S offers easy readability with its 7 inches size, fully tactile and high resolution screen. This display is also removable and equipped with magnets at the rear to allow to be fixed on any metallic surface for the operator's convenience. The test information is visible 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.

# ASM 306 S

Dimensions, technical data,  
order numbers, accessories

## Dimensions



## ASM 306

**$1 \cdot 10^{-7}$  mbar·l/s**

Min. detectable  
leak rate for  $^4\text{He}$

**< 1 s**

Response time  
(Sniffer leak detection)



## Technical data

	ASM 306 S
Detectable gases	Helium and hydrogen
Min. detectable leak rate for $^4\text{He}$	$1 \cdot 10^{-7}$ mbar·l/s
Min. detectable leak rate for $\text{H}_2$	$5 \cdot 10^{-7}$ mbar·l/s <sup>1)</sup>
Start up time	2 min
Response time	< 1 s
Sniffer probe flow	300 sccm $\pm$ 10%
Noise level	55 dB (A)
Interface	RS-232, I/O, Fieldbus options
Operating temperature	10–40 °C
Supply voltage	100–240 V, 50/60 Hz
Power consumption max	300 VA
Weight	22 kg
Dimensions (LxWxH)	350x305x421

<sup>1)</sup> The best sensitivity is achieved after degassing

**Order number matrix ASM 306 S**

**RSAS00AaMM9A**

<b>Interface board</b>	<b>abc</b>
Basic 15 pins I/O	<b>0</b>
37 pins I/O	<b>2</b>
37 pins I/O + Ethernet <sup>1)</sup>	<b>4</b>
Profibus	<b>8</b>
Profinet	<b>9</b>

<sup>1)</sup> Ethernet will allow to create an additional COM port to operate the leak detector through a computer

**Order numbers accessories**

<b>Accessories</b>	<b>Order number</b>
<b>Hybrid sniffer probe</b>	
2 m hose length, rigid nozzle	<b>PRB2H02HA</b>
5 m hose length, rigid nozzle	<b>PRB2H05HA</b>
10 m hose length, rigid nozzle	<b>PRB2H10HA</b>
<b>Hybrid cables</b>	
2 m length	<b>A604523</b>
5 m length	<b>A602086</b>
10 m length	<b>A602106</b>
<b>Replacement filters for hybrid probes</b>	
Tip filters	<b>127829S</b>
Small particles filters	<b>128051</b>
<b>Calibrated leaks</b>	
100% Helium, value between $4-6 \cdot 10^{-5}$ mbar l/s	<b>127388</b>
100% Hydrogen, value between $4-6 \cdot 10^{-5}$ mbar l/s	<b>127387</b>
<b>Trolley</b>	<b>114820</b>

# Accessories

## Universal accessories for ASM leak detectors

### Accessories

Various accessories are available for Pfeiffer Vacuum leak detectors. Please refer to the overview below.

### Remote control

The remote control allows to control and display values of the leak detector from a distance. The RC10 can be wireless with an external Bluetooth dongle (part of the delivery) or can be connected with 5 m wire to the detector.



Accessories	Order number
<b>Remote control</b>	
RC 10, (wired/wireless operation, color touch screen)	124193

### Sniffer probe<sup>1)</sup>

Sniffer probe for leak detection in sniffing mode.

Easy connection to the leak detectors by external coupling.

Accessories	Order number
<b>Sniffer probe</b>	
5 m hose length, rigid 9 cm nozzle	SNC1E1T1
10 m hose length, rigid 9 cm nozzle	SNC2E1T1
5 m hose length, flexible 15 cm nozzle	SNC1E3T1
10 m hose length, flexible 15 cm nozzle	SNC2E3T1

Other nozzle and hose lengths available on request.

<sup>1)</sup> Only the SNC1E1T1 is suitable for the ASM 310.

### Spray gun

For connection to a gas bottle or gas line for easy tracer gas spraying.

Accessories	Order number
<b>Spray gun</b>	
Spray gun, standard	112535
Spray gun „Elite“ with accessories in a case	109951



### Bombing chambers

Chambers equipped with valve and pressure measurement, for bombing test on sealed components

Accessories	Order number
<b>Bombing chambers</b>	
Bombing chamber 10 bar (ø 150 mm, l = 200, V = 3.5 l)	786396
Bombing chamber 25 bar (ø 100 mm, l = 800, V = 6.4 l)	786397

### Calibrated leak

Helium calibrated test leak from  $10^{-10}$  to  $10^{-5}$  Pa m<sup>3</sup>/s, with helium reservoir.



**Inlet filter**

Connected to the inlet flange, these dust filters prevent large amounts of dust from entering the leak detector.

Accessories	Order number
<b>Inlet filter</b>	
Stainless steel, 15 µm, DN 25/25 ISO-KF	127014
Stainless steel, 15 µm, DN 25/40 ISO-KF	127013
Stainless steel, 15 µm, DN 40/40 ISO-KF	127012
Stainless steel, 5 µm, DN 25/25 ISO-KF	127017
Stainless steel, 5 µm, DN 25/40 ISO-KF	127016
Stainless steel, 5 µm, DN 40/40 ISO-KF	127015
Brass, 40 µm, DN 25/25 ISO-KF	107410
Brass, 40 µm, DN 25/40 ISO-KF	107951
Brass, 40 µm, DN 40/40 ISO-KF	107952
Brass, 20 µm, DN 25/25 ISO-KF	105841
Brass, 20 µm, DN 25/40 ISO-KF	105843
Brass, 20 µm, DN 40/40 ISO-KF	105842
Brass, 5 µm, DN 25/25 ISO-KF	105844
Brass, 5 µm, DN 25/40 ISO-KF	105846
Brass, 5 µm, DN 40/40 ISO-KF	105845

**Locking clamp**

Clamp with specific tool that allows to lock any accessory on a DN 40 flange

Accessories	Order number
<b>Locking clamp DN 40 KF</b>	118801

**Transportation cart**

Accessories	Order number
Trolley for ASM 310 and ASM 306 S	114820
2 wheels trolley for ASM 340 wet and dry, with drawer at front	122570
Cart allowing to install the ASM 340 W/D/I on the upper plate and an additional pump on the bottom plate	
Low voltage cart 90–130 V 50/60 Hz	On request
High voltage cart 200–240 V 50/60 Hz	On request

**Test chamber for HLD equipped with 37 pins I/O**

Accessories	Order number
<b>Test chamber</b>	
Small test chamber DN 25 (hemispherical: 72 mm diameter, 31 mm depth)	On request
Medium test chamber DN 25 (cylindrical: 85 mm diameter, 68 mm depth)	On request
Large test chamber DN 40 (cylindrical: 160 mm diameter, 100 mm depth)	On request

Further accessories are available at [www.pfeiffer-vacuum.com](http://www.pfeiffer-vacuum.com)

## Your Success. Our Passion.

We give our best for you every day –  
worldwide!

Are you looking for an  
optimal vacuum solution?  
Please contact us:

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Germany  
Phone +49 6441 802-0



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