

# Products

## Helium Leak Detector PHOENIX L300i



PHOENIX L300i

The PHOENIX L300i is a portable multi-purpose helium leak detector and equally well suited to both service and series production testing.

The rugged modular design and its ease of use make the PHOENIX L300i one of the most user-friendly leak detector in its class.

Through the remote controls iPad and RC 310, remote monitoring and control is possible.

### Advantages to the User

- Lowest detectable leak rate
- Short He recovering time condition
- Quick startup under 2 minutes
- Extremely fast response time
- Oil-free gas admission system
- One of the smallest helium leak detectors in the world
- High sensitivity
- Fast leak rate readout also at low leak rates
- Service friendly through modular design

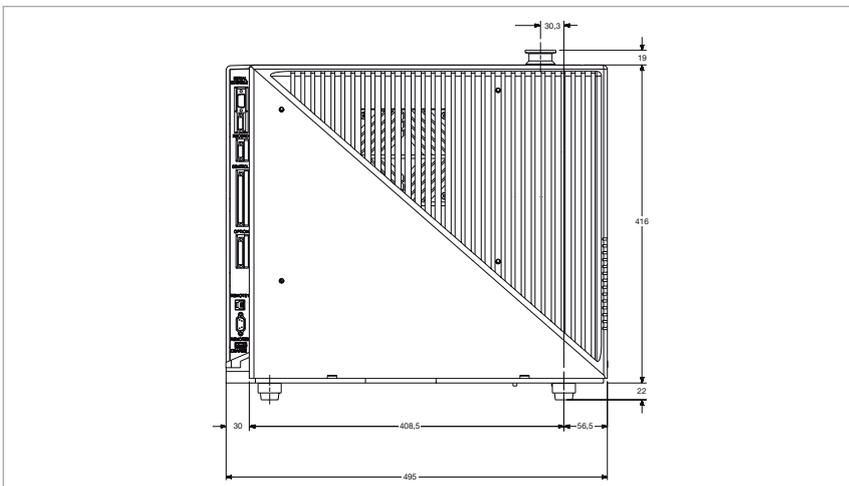
### Typical Applications

Leak tests in connection with

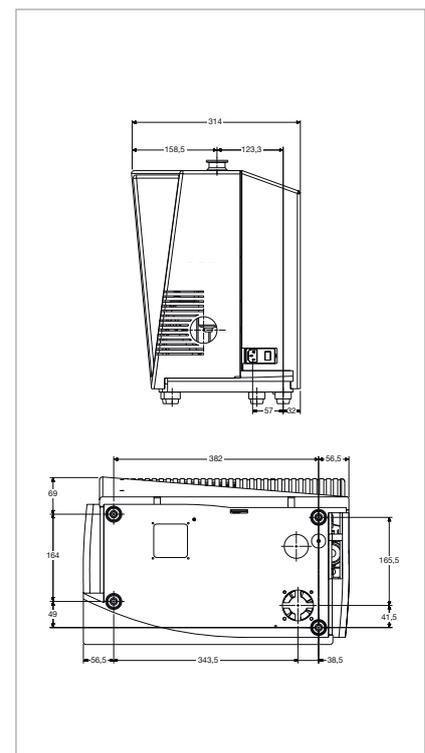
- Quality assurance
- Automotive industry
- Analytical instruments
- Systems manufacture
- Power station engineering
- Research and development
- Semiconductor industry
- High vacuum and ultra-high vacuum engineering
- Ideal tool for industrial series production testing – in the cooling and air conditioning industries, for example

In connection with the sniffer lines which are available as accessories the PHOENIX L300i may also be used as a sniffer leak detector.

In connection with a partial flow pump set the PHOENIX L300i may also be used for the detection of leaks on large vessels.



Dimensional drawing for the PHOENIX L300i (rear side)



Dimensional drawing for the PHOENIX L300i (side and upper side)

## Technical Data

## PHOENIX L300i

Minimum detectable helium leak rate		
Vacuum mode	mbar x l x s <sup>-1</sup>	≤ 5 x 10 <sup>-12</sup>
Sniffer mode	mbar x l x s <sup>-1</sup>	< 1 x 10 <sup>-7</sup>
Minimum detectable hydrogen leak rate		
Vacuum mode	mbar x l x s <sup>-1</sup>	≤ 1 x 10 <sup>-8</sup>
Sniffer mode	mbar x l x s <sup>-1</sup>	< 1 x 10 <sup>-7</sup>
Units of measurement (selectable)		
Pressure		mbar, Pa, atm, Torr
Leak rate		mbar x l x s <sup>-1</sup> , Pa x m <sup>3</sup> x s <sup>-1</sup> , Torr x l x s <sup>-1</sup> , atm x cc x sec <sup>-1</sup> , sft <sup>3</sup> /yr
Sniffer mode		ppm, g/a eq, oz/yr eq
Leak rate measurement range	mbar x l x s <sup>-1</sup>	1 x 10 <sup>-12</sup> to 1 x 10 <sup>-1</sup>
Measurement ranges		12 decades
Max. inlet pressure	mbar (Torr)	15 (11.25)
Pumping speed during the evacuation process		
50 Hz	m <sup>3</sup> x h <sup>-1</sup> (cfm)	2.5 (1.5)
60 Hz	m <sup>3</sup> x h <sup>-1</sup> (cfm)	3.0 (1.8)
Pumping speed (helium) at the inlet		
GROSS mode	l/s	0.4
FINE mode	l/s	> 2,5
Time constant of the leak rate signal (blanked off, 63% of final value)	s	< 1
Run-up time (after starting)	min	≤ 2
Mass spectrometer		180° magnetic sector field
Ion source		2 filaments; iridium/yttria-oxide
Detectable masses	amu	2, 3 and 4
Inlet port	DN	25 ISO-KF
Dimensions (W x H x D)		495 x 456 x 314
Weight	kg (lbs)	40.0 (88.2)
Available languages		English, German, Chinese, Japanese (Katakana), Russian, French, Italian, Spanish, Polish and Korean

## Ordering Information

## PHOENIX L300i

	Part No.
PHOENIX L300i	
EURO version	
230 V, 50/60 Hz, mbar readout, with integrated calibrated leak TL 7	<b>250000V01</b>
US version	
115 V, 60 Hz, mbar readout, with integrated calibrated leak TL 7	<b>251000V01</b>
Japan version	
100 V, 50/60 Hz, mbar readout, with integrated calibrated leak TL 7	<b>251100V01</b>
iPad incl. software (APP) and protection case (IP 67) PHOENIX L300i	<b>252005V01</b>
WLAN module iPad	<b>252006V01</b>
iPad holder PHOENIX L300i	<b>252007V01</b>
BARCODE scanner iPad PHOENIX L300i	<b>252008V01</b>
iPad table stand	<b>252009V01</b>
iPad lock	<b>252010V01</b>
Partial flow system (115-230 V)	<b>140 20</b>
PC software LeakWare	<b>140 90</b>
For further accessories see para. "Accessories for PHOENIX L300i, PHOENIX L300i DRY and PHOENIX L300i MODUL"	