



Test Leak TL7

PHOENIX L300i

Operating instructions
300382582_002_C0

Cat.-numbers
14023V01

Imprint

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Description

1 Description

1.1 General

These Operating Instructions contain important information on how to mount the test leak TL 7.

Notice: Indicates special technical requirements that the user must comply with.

The references to diagrams, e.g. (1/3), consist of the Fig. No. and the Item No. in that order.

Unpack the calibrated leak TL 7 immediately after delivery, even if it is to be put into operation at a later date.

Notice: The shipping container and packaging materials must be kept in the event of complaints about damage.

Check the calibrated leak TL 7 for completeness (see Section 1.4) and carefully examine it visually. If any damage is discovered, report it immediately to the forwarding agent and insurer. If the damaged part has to be replaced, please get in touch with the orders department.

1.2 Technical Data

Nominal calibration range	10^{-7} mbar*I/s
Tolerance of nominal calibration range	± 15%
Temperature coefficient	< 0,5 % / °C
Leak type	capillary
Calibrated for	helium
Filling	helium
Filling pressure	2.9 bar
Connecting flange	special adapter

1.3 Purpose

The calibrated Leak TL 7 with the helium reservoir is used for alignment of the helium mass spectrometer in the Helium-Leak-Detector as well as for calibrating the leak rate indication. It is equipped with a solenoid valve which is actuated via the control electronics of the Leak-Detector.

1.4 Supplied Parts

The supplied parts of the TL 7 comprises in addition:
O-ring 12 x 1.5,
Two cheese head screws M 3 x 25,
Sticker stating the leak rate

2 Assembly

2.1 Tools required

Crosshead screwdriver, size 1
Hex. socket screw key, size 2.5

2.2 Installing/deinstalling the TL 7

See also documentation of the leak detector.
Untighten TL 7 from the valve block by unscrewing the screws M3. Take off the electrical connection. For installing take care that the o-ring and the sealing surfaces are clean.

3 Leaktightness Test

Start the helium leak detector and spray a little helium through the intake opening of the TMP fan into the Leak-Detector.

Notice: In the range of 10^{-9} mbar·l/s no indication must appear.

Entering the value of the calibrated leak

4 Entering the value of the calibrated leak

To enter the value of the calibrated leak please refer to the Technical Handbook, Section „The menu function (Overview)“ or the „Description of the individual menu functions“ under menu item „Cal leak 0.0E-07“.

5 Factory Inspection

Calibrated leaks are not subject to wear and the helium loss of the calibrated leak TL 7, being less than 2 % per year, is negligible. Nevertheless, the leak rate may change over years due to external influences. A factory inspection is, therefore, advisable once a year.

A test certificate, if required for the helium calibrated leak, can be obtained from our Cologne Works. In that case, the calibrated leak should be forwarded to us and will be returned inspected and recertified with the test certificate against charge.

The helium flow rate stated on the main label is the actual leak rate of the calibrated leak.

Declaration of Contamination

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Declaration of Contamination



Declaration of Contamination of Compressors, Vacuum Pumps and Components

The repair and / or servicing of compressors, vacuum pumps and components will be carried out only if a correctly completed declaration has been submitted. **Non-completion will result in delay.** The manufacturer can refuse to accept any equipment without a declaration.

A separate declaration has to be completed for each single component.

This declaration may be completed and signed only by authorized and qualified staff.

Customer/Dep./Institute :	Reason for return: ☒ applicable please mark
Address :	Repair: ☐ chargeable ☐ warranty
	Exchange: ☐ chargeable ☐ warranty
	☐ Exchange already arranged / received
Person to contact:	Return only: ☐ rent ☐ loan ☐ for credit
Phone : Fax:	Calibration: ☐ DKD ☐ Factory-calibr.
End user:	☐ Quality test certificate DIN 55350-18-4.2.1

A. Description of the Leybold product:	Failure description:
Material description :	
Catalog number:	Additional parts:
Serial number:	Application-Tool:
Type of oil (Fore Vacuum-Pumps) :	Application- Process:

B. Condition of the equipment	No ¹⁾	Yes	No	Contamination :	No ¹⁾	Yes
1. Has the equipment been used	☐	☐	☒	toxic	☐	☐
2. Drained (Product/service fluid)	☐	☐	☐	corrosive	☐	☐
3. All openings sealed airtight	☐	☐	☐	flammable	☐	☐
4. Purged	☐	☐	☐	explosive ²⁾	☐	☐
If yes, which cleaning agent				radioactive ²⁾	☐	☐
and which method of cleaning				microbiological ²⁾	☐	☐
¹⁾ If answered with "No", go to D. ←				other harmful substances	☐	☐

C. Description of processed substances (Please fill in absolutely)	
1. What substances have come into contact with the equipment ?	
Trade name and / or chemical term of service fluids and substances processed, properties of the substances According to safety data sheet (e.g. toxic, inflammable, corrosive, radioactive)	
X Tradename:	Chemical name:
a)	
b)	
c)	
d)	
2. Are these substances harmful ?	
3. Dangerous decomposition products when heated ?	
If yes, which ?	
²⁾ Components contaminated by microbiological, explosive or radioactive products/substances will not be accepted without written evidence of decontamination.	

D. Legally binding declaration

I / we hereby declare that the information supplied on this form is accurate and sufficient to judge any contamination level.

Name of authorized person (block letters) :

Date

signature of authorized person

firm stamp

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Abb. 1

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