



Translation of the original operating instructions

SPRAY-Check TL8, TL9

Test leak

Catalog No.
551-031, 551-032

From software version

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1 About this Manual

This document applies to the indicated on the title page.

Product names may occur in the document, which are added for identification purposes only and belong to the respective owner of the rights.

1.1 Warnings



DANGER

Imminent hazard resulting in death or serious injuries



WARNING

Hazardous situation resulting in potential death or serious injuries



CAUTION

Hazardous situation resulting in minor injuries

NOTICE

Hazardous situation resulting in damage to property or the environment

1.2 Target Groups

This instruction manual is intended for the user of the , technically qualified personnel and instructed personnel.

2 Safety

2.1 Intended use

The is a calibration leak that is used directly on the leak detector or the test chamber.

The membrane only allows the tracer gas helium to pass through and retains all other typical air components.

- Only use the as intended, as described in the instruction manual, to avoid hazards due to misuse.
- Comply with application limits, see "Technical Data".

Incorrect usage

Avoid the following unintended uses:

- Use of the calibration leak by untrained personnel
- Use outside the technical specifications, see "Technical Data"
- Use of the calibration leak in case of recognizable defects
- Use if the ambient temperature is too high or too low
- Use an O-ring without sintered filter if a coating process takes place on the inside of the membrane.
- Use cannulas or capillaries (e.g. on a helium spray unit) with an outer diameter <1 mm
- Differential pressures > 1.1 bar are applied to the membrane
- Use of tracer gases other than helium or liquids
- Contamination by other media (only helium permitted)

2.2 Duties of the user

- Read, observe, and follow the information in this instruction manual and in the work instructions provided by the owner. This concerns in particular the safety and warning instructions.
- Always observe the complete operating instructions for all work.
- If you have any questions about operation or maintenance that are not answered in this manual, contact customer service.

2.3 Owner Requirements

The following notes are for companies or any person who is responsible for the safety and effective use of the calibration leak by the user, employees or third parties.

Safety-conscious operation

- Operate the calibration leak only if it is in good operating condition and does not show any damage.
- Only operate the calibration leak as intended, in a safety and risk conscious manner, and in accordance with this instruction manual.
- Adhere to the following regulations and observe their compliance:
 - Intended use
 - General applicable safety and accident prevention regulations
 - International, national and local standards and guidelines
 - Additional device-related provisions and regulations
- Keep this instruction manual available on site.

Personnel qualifications

- Only allow instructed personnel to work with the calibration leak. The instructed personnel must have received training regarding the calibration leak.
- Make sure that authorized personnel have read and understood the instruction manual and all other applicable documents.

3 Scope of Delivery, Transport, Storage

Scope of delivery

551-031 / 551-032	Quantity
	1
Centering ring DN25 ISO-KF (with and without sintered filter)	2
Digital operating instructions, to download as PDF from www.inficon.com	1

- ▶ Check the scope of delivery after receipt of the calibration leak to make sure it is complete.

Transport

NOTICE

Damage caused by transport

Transport in unsuitable packaging material can damage the calibration leak.

- ▶ Only transport the calibration leak in suitable packaging.

Storage

Always store the device in compliance with the technical data, see "Technical Data [▶ 9]".

NOTICE

Calibration leak defect due to improper storage

Excessive humidity in conjunction with condensate formation can significantly reduce the service life of the calibration leak.

- ▶ A storage time of at least 2 years is guaranteed in the sealed and damage-free PE bag together with the original silica gel. We recommend replacing the desiccant bag after two years.

4 Description



WARNING

Risk of injury or damage to the due to ESD discharge

- ▶ Observe the ESD protective measures.
- ▶ Wear ESD protective clothing.



CAUTION

Risk of injury or damage to the due to falling

- ▶ Only place the on the battery compartment on a level, stable and vibration-free surface.
- ▶ Make sure that the cannot fall down.

4.1 Function

The is a calibration leak that is used directly on the leak detector or the test chamber. There it serves the following purposes

- Checking the functionality of the leak detector
- Determining the time response of the vacuum chamber
- Checking the helium spray unit

The membrane only allows the tracer gas helium to pass through and retains all other typical air components. The leak rate is determined by the number of quartz windows present and the prevailing helium concentration. The calibration leak can therefore be permanently connected to the leak detector or the test chamber.

4.2 Structure

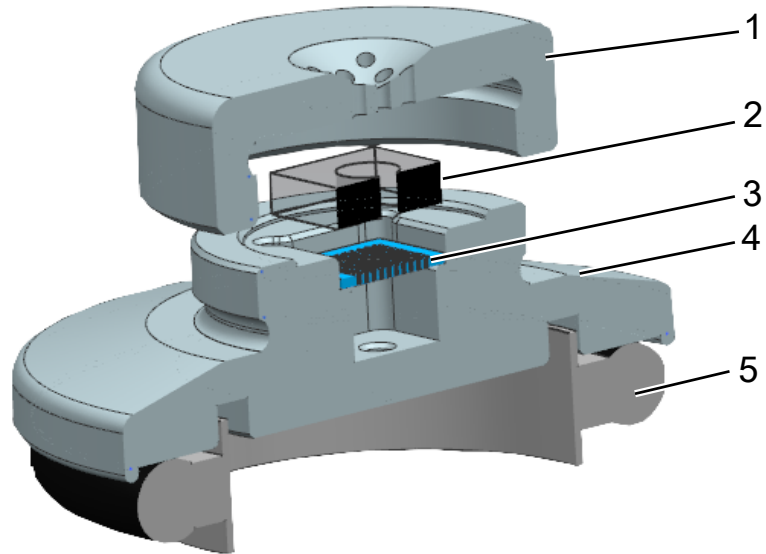


Fig. 1: design

1	Screw-in lid
2	Filling volume - only for TL9 (551-032)
3	Chip
4	Calibration leak housing
5	Gasket

4.3 Technical Data

4.3.1 Mechanical data

Mechanical data	
Dimensions (Ø x D)	40 mm x 14 mm
Weight	60 g

4.3.2 Ambient conditions

Ambient conditions	
Permissible ambient temperature (during operation)	10 °C to 40 °C
Permissible storage temperature	0 °C to 50 °C
Max. relative humidity up to 30°C	80 %

Ambient conditions	
Max. relative humidity from 30°C to 40°C	Decreasing on linear basis from 80% to 50%
Max. relative humidity above 40°C	50 %
Max. altitude above sea level	2000 m

4.3.3 Physical data

Physical data	
Leak rate at 100% helium and 20°C	
551-031	TL8: 9×10^{-8} mbar l/s
551-032	TL9: 7×10^{-9} mbar l/s
Tolerance	±15%
Leak type	Permeation - based on Wise Technology™
Response time of leak	approx. 1.2 s
Pressure range	0 – 1100 hPa
Connection type	DN25 ISO-KF
Temperature coefficient	3.2 % / °C

5 Decommissioning

5.1 Disposal of SPRAY-CHECK

The calibration leak can be disposed of by the operator.

- During disposal, observe the environmental and safety regulations of your country.



5.2 Sending the calibration leak for inspection or disposal



WARNING

Danger due to harmful substances

Contaminated calibration leaks can endanger the health. The contamination declaration serves to protect all persons who come into contact with the calibration leak. Calibration leaks sent in without a return number and completed contamination declaration will be returned to the sender by the manufacturer.

- ▶ Fill in the declaration of contamination completely.

- 1 Please to get in touch with us and send a completed declaration of contamination before sending anything to us.
 - ⇒ We will then send you a return authorization number and the shipping address.
- 2 Use suitable packaging for the return.
- 3 Before shipping the calibration leak, attach a copy of the completed contamination declaration to the outside of the packaging. For contamination declaration see below.

Declaration of Contamination

The service, repair, and/or disposal of vacuum equipment and components will only be carried out if a correctly completed declaration has been submitted. Non-completion will result in delay.
 This declaration may only be completed (in block letters) and signed by authorized and qualified staff.

1 Description of product

Type _____

Article Number _____

Serial Number _____

2 Reason for return

3 Operating fluid(s) used (Must be drained before shipping.)

4 Process related contamination of product:

toxic	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>	
caustic	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>	
biological hazard	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)	
explosive	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)	
radioactive	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)	
other harmful substances	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>	

2) Products thus contaminated will not be accepted without written evidence of decontamination!

The product is free of any substances which are damaging to health
 yes

1) or not containing any amount of hazardous residues that exceed the permissible exposure limits

5 Harmful substances, gases and/or by-products

Please list all substances, gases, and by-products which the product may have come into contact with:

Trade/product name	Chemical name (or symbol)	Precautions associated with substance	Action if human contact

6 Legally binding declaration:

I/we hereby declare that the information on this form is complete and accurate and that I/we will assume any further costs that may arise. The contaminated product will be dispatched in accordance with the applicable regulations.

Organization/company _____

Address _____ Post code, place _____

Phone _____ Fax _____

Email _____

Name _____

Date and legally binding signature _____ Company stamp _____

Copies:
 Original for addressee - 1 copy for accompanying documents - 1 copy for file of sender



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