

# **Operating Instructions**

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# 1 About this manual

## 1.1 Validity

This operating manual is for customers of Pfeiffer Vacuum. It describes the functioning of the designated product and provides the most important information for safe use of the unit. The description follows applicable EU guidelines. All information provided in this operating manual refers to the current state of the product's development. The documentation remains valid as long as the customer does not make any changes to the product.

Up-to-date operating instructions can also be downloaded from www.pfeiffer-vacu-um.com.

This manual covers products with the following part numbers:

Spray gun	Part number
Standard spray gun	112535
Elite spray gun	109951

### 1.2 Conventions

#### 1.2.1 Safety instructions

Operating manual safety instructions Pfeiffer Vacuum are based on the UL, CSA, ANSI Z-535, SEMI S2, ISO 3864 and DIN 4844 certification standards. This document describes the following information and danger levels:

# NOTICE Command or note Command to perform an action or information about properties, the disregarding of which may result in damage to the product.

#### 1.2.2 Instructions in the text

→ Work instruction: here you have to do something.

#### 1.2.3 Pictographs



Warning of a displayed source of danger in connection with operation of the unit or equipment

# 2 Description

# 2.1 Product identification



Fig. 1: Identification label

P/N	Part number
Ind.	Index

# 2.2 Supply limit

The spray gun is delivered with its accessories in a compact case.

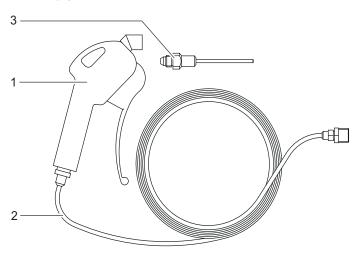


Fig. 2: Standard spray gun

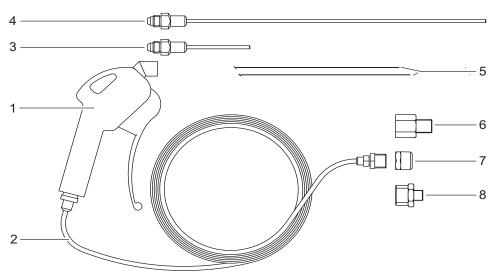


Fig. 3: Elite spray gun

1	Spray gun	5	Needles (qty 2)
2	Plastic tube (5 m) + connector M 1/4 G	6	Connector M 1/4 NPT
3	Short nozzle (9 cm)	7	Connector M 3/8 G
4	Long nozzle (30 cm)	8	Connector M 1/8 G

# 3 Connection

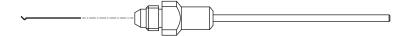
- → if necessary, screw an adaptive connector to the plastic tube.
- → Connect the plastic tube to the gas bottle containing a tracer gas. (Bottle and regulator at the customer's expense).

			Short nozzle			
	Ne	edle	Pressure regulator	Flow rate		
	Used	Length				
Rough and fast detection	no		0.5 / 1 bar	> 1000 ml / min		
Fine detection	yes	80 mm	0.5 bar	60 ml / min		

	Long nozzle									
	Ne	edle	Pressure regulator	Flow rate						
	Used	Length								
Rough and fast detection	no		0.5 / 1 bar	> 500 ml / min						
Fine detection	yes	175 mm	0.5 bar	60 ml / min						

Maximum pressure at the exhaust of the tracer gas bottle of the regulator	3 bar absolu / 42 PSI
Recommended pressure at the exhaust of the tracer gas bottle of the regulator	1.5 bar absolu / 7 PSI

→ It is possible to reduce the flow rate by putting the needle as shown on the picture and cutting it if necessary.



## 4 Use

# 4.1 Complying the use with the aim

- The spray gun can be used with all the ASM xxx leak detectors.
- The spray gun is aimed at getting connected to the bottle which contains the tracer gas required to the leak control.
- It allows spraying part or installation to be tested with tracer gas in order to locate a possible leak.

Any other use is inappropriate to the product's aim.

## 4.2 Checking before the use

#### **NOTICE**

Check that the tracer gas goes out of the nozzle before using the spray gun.

- → Connect the spray gun to the gas bottle.
- → Drop the spray gun's nozzle (2 cm) in a water container.
- → Handle the spray gun: bubbles from the tracer gas must appear in the water.

## 4.3 Process

→ Slowly sweep the part that is to be checked using the gun spraying tracer gas (start at the top of the part then go down): check on your detector if a leak is detected and measured.

## 5 Service

#### Pfeiffer Pfeiffer Vacuum offers first-class customer service!

- On-Site maintenance for many products)
- Overhaul / repair in the nearby Service Location
- Fast replacement with refurbished exchange products in mint condition
- Advice on the most cost-effi cient and quickest solution

Detailed information, addresses and forms at: www.pfeiffer-vacuum.com (Service).

#### Overhaul and repair in the Pfeiffer Vacuum Service Center

The following general recommendations will ensure a fast, smooth servicing process:

- → Fill out the "Service Request/Product Return" form and send it to your local Pfeiffer Vacuum Service contact.
- → Include the confirmation on the service request from Pfeiffer Vacuum with your shipment.
- → Fill out the declaration of contamination and include it in the shipment (mandatory!). The Declaration of contamination is valid for any product/device including a part exposed to vacuum.
- → Dismantle all accessories and keep them.
- → Close all the ports flange openings by using the original protective covers or metallic airtight blank flanges for contaminated devices.
- → If possible, send pump or unit in its original packaging.

#### Sending of contaminated pumps or devices

No devices will be accepted if they are contaminated with micro-biological, explosive or radioactive substances. "Hazardous substances" are substances and compounds in accordance with the hazardous goods regulations (current version).

- → Neutralize the pump by flushing it with nitrogen or dry air.
- → Close all openings airtight.
- → Seal the pump or device in suitable protective film.
- → Return the pump/device only in a suitable and sturdy transport container and send it in while following applicable transport conditions.

Pump or device returned without declaration of contamination form fully completed and/ or non-secured in a suitable packaging, will be decontaminated and/or returned at the shipper's expense.

#### **Exchange or repaired**

The factory operating parameters are always preset with exchange or repaired devices. If you use specific parameters for your application, you have to set these again.

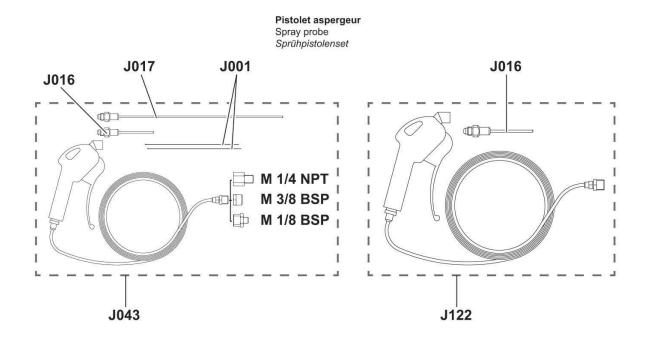
#### Service orders

All service orders are carried out exclusively according to our general terms and conditions for the repair and maintenance, available in our website.

# 6 Spare parts

Spare parts available for sales, classified by functions are listed in this chapter.

# Spare parts



Ref	Description	P/N	Qty	Remarks
J001	Needle for LDS Probe - D 0.3 mm	072606	1	
J016	Nozzle, Short Rigid; for He Probe	109955	1	
J017	Nozzle, Long Rigid; for He Probe	109956	1	
J043	"Elite" Helium Spray Probe	109951	1	
J122	Helium Spray Probe	112535	1	



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.

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Are you looking for a perfect vacuum solution? Please contact us

Pfeiffer Vacuum GmbH Headquarters T +49 6441 802-0 info@pfeiffer-vacuum.de

