

Operating Instructions

Sniffer Probe



LP 503

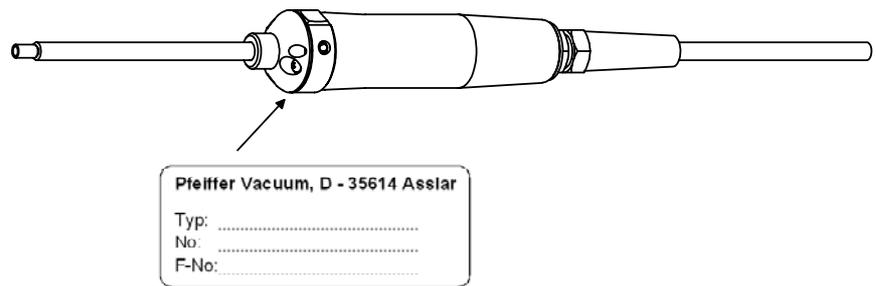
LP 505

LP 510

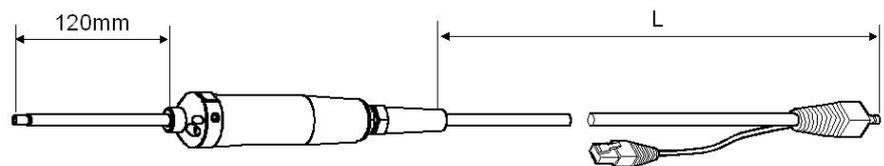
BG 5268BE/E (0611)

Product Identification

In all communications with Pfeiffer Vacuum, please specify the information given on the product nameplate. For convenient reference transfer this information into the nameplate replica below.



Validity



This document applies to sniffer probes with the following part numbers:

BG 449 207 -T	(LP 503	L = 3 m)
BG 449 208 -T	(LP 505	L = 5 m)
BG 449 209 -T	(LP 510	L = 10 m)

The part number can be taken from the product nameplate.

We reserve the right to make technical changes without prior notice.

Intended Use

The LP 503, LP 505, LP 510 sniffer probes are used in conjunction with the following leak detectors

SmartTest	HLT 550
SmartTest	HLT 560
SmartTest	HLT 565
SmartTest	HLT 570
SmartTest	HLT 572
SmartTest	HLT 575

and the forerunner for locating gas leaks on test objects.

Note



Caution: risk clogging
Liquid can cause clogging of the sniffer tip and line.
Do not aspirate any liquids (e.g. water, adhesive substances).

1 Safety

1.1 General Safety Instructions

- Adhere to the applicable regulations and take the necessary precautions for the process media used.
- Before you begin to work, find out whether any vacuum components are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Communicate the safety instructions to other users.

1.2 Liability and Warranty

Pfeiffer Vacuum assumes no liability and the warranty becomes null and void if the custodian or third parties

- disregard the information in this document
- use the product in a non-conforming manner
- make any kind of changes (modifications, alterations etc.) to the product not listed in the corresponding product documentation
- use the product with accessories not listed in the corresponding product documentation

The custodian assumes the responsibility for the process media used.



DANGER

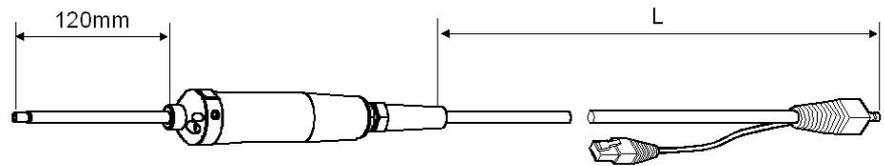
Caution: dangerous voltages.

Voltaged parts must not be touched with the sniffer tip.

Before leak testing electrically operated devices have to be switched off.

2 Technical Data

Sniffer Line Length



LP 503	L = 3 m
LP 505	L = 5 m
LP 510	L = 10 m

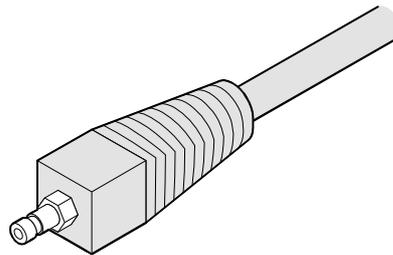
Sniffer Tip

TP 312	120 mm, stiff	standard
TF 312	120 mm, flexible	option
TP 385	385 mm, stiff	option
TF 385	385 mm, flexible	option

Gas Throughput

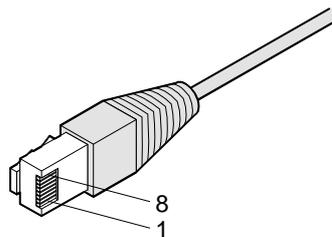
≈ 20 ... 30 sccm

Probe Connection



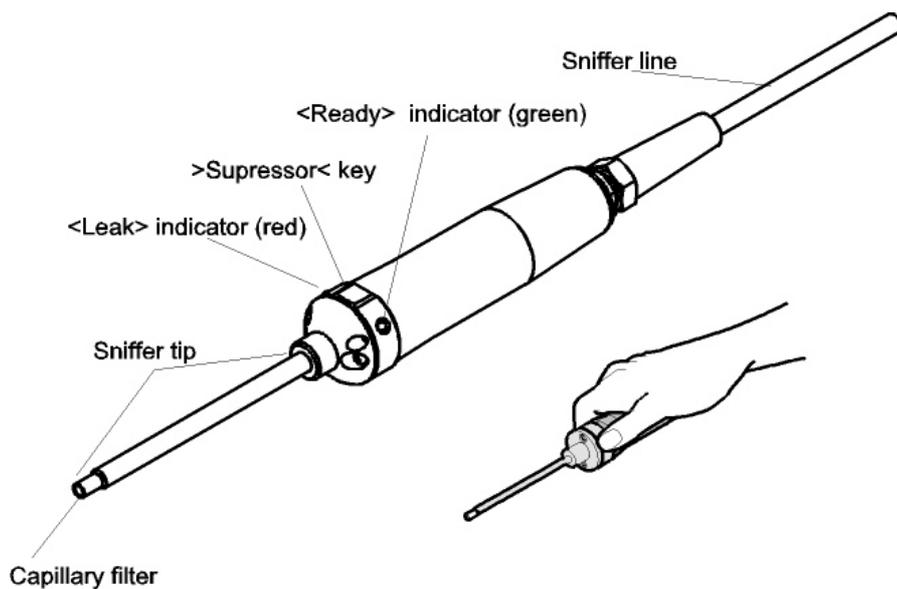
Trigriss type 20 (cast)
Quick-release coupling

Electrical Connection



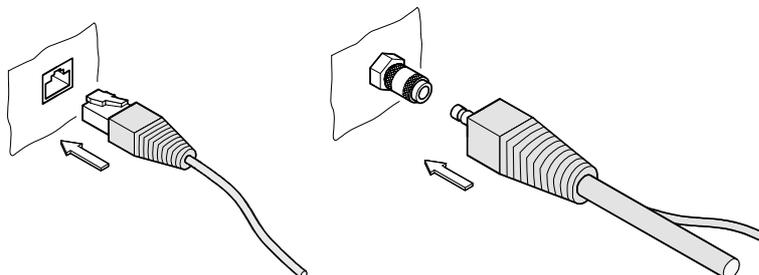
Type RJ 45
Pin 8 not used
Pin 7 not used
Pin 6 +24 VDC
Pin 5 ready
Pin 4 leak
Pin 3 suppress
Pin 2 VM-
Pin 1 VM+

3 Design



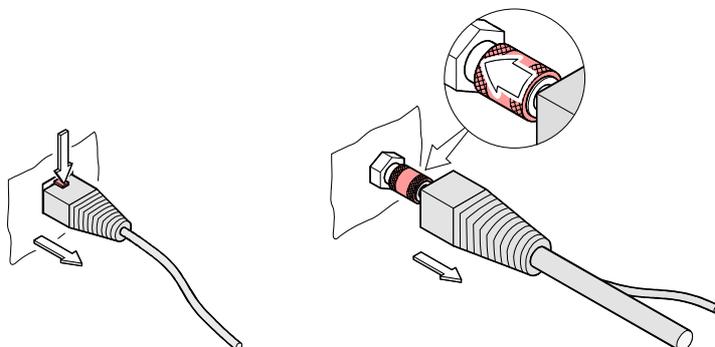
4 Connection

Plugging In



Unplugging

Before unplugging, press the "STOP" key on the control unit of the leak detector.

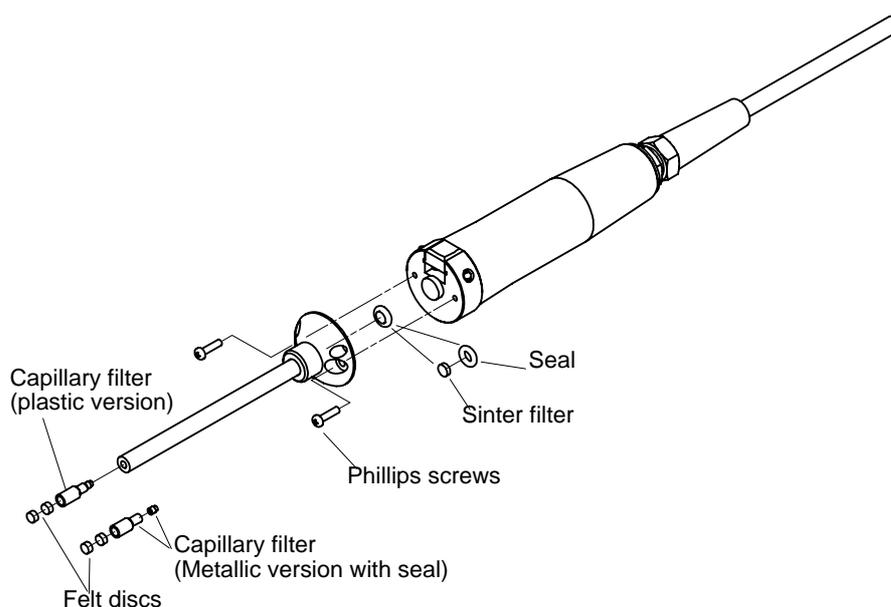


5 Maintenance

Sniffer Probe Clogged

Clogging of the sniffer probe may be due to:

- Clogging of capillary filter: → section 5.1
- Clogging of sinter filter: → section 5.2
- Clogging of sniffer probe capillary: ⇒ replace sniffer tip
- Damage of sniffer tip: ⇒ replace sniffer tip
- Clogging / damage of sniffer line: ⇒ replace sniffer probe



5.1 Replacing the Felt Discs or the Capillary Filter

- 1 Press the "STOP" key on the control unit of the leak detector.
- 2 Remove dirty felt discs by means of tweezers and replace them
or
unscrew capillary filter and replace it (if using the metallic version, do not forget the seal)
- 3 Press the "START" key on the control unit of the leak detector.
- 4 Hold finger against the capillary filter:
⇒ You should be able to feel the resulting vacuum.
- 5 Measure the gas throughput with the sniffer probe connected (→ Leak detector):
 - = 20 ... 30 sccm
 - ≠ 20 ... 30 sccm: ⇒ check sinter filter → section 5.2
⇒ re-check capillary filter
⇒ → Leak detector

5.2 Checking / Replacing the Sinter Filter

1 Press the "STOP" key on the control unit of the leak detector.

2 Remove the two Phillips screws

3 Remove the sinter filter with the seal

4 Visually check the filter for contamination:



5 Reinstall the sniffer tip

6 Press the "START" key on the control unit of the leak detector.

7 Hold finger against the capillary filter:
 ⇒ You should be able to feel the resulting vacuum

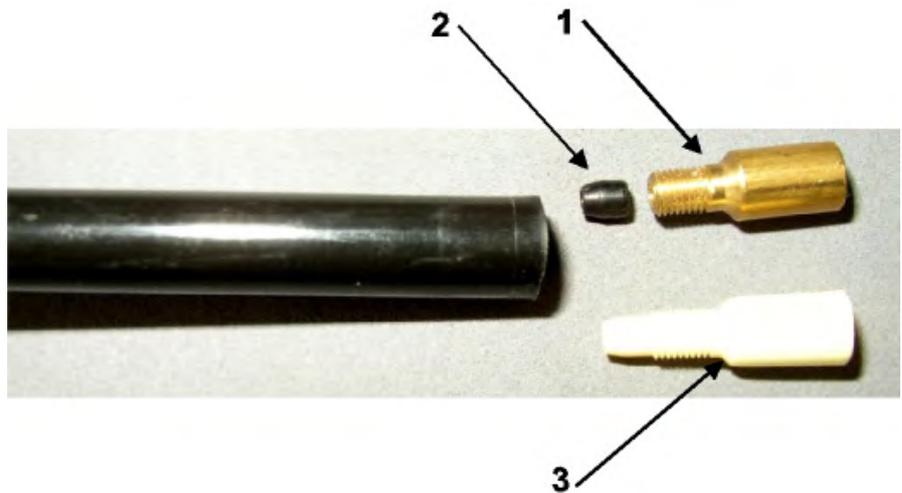
8 Measure the gas throughput with the sniffer probe connected (→  Leak detector):

 = 20 ... 30 sccm

 ≠ 20 ... 30 sccm: ⇒ check the capillary filter → section 5.1
 ⇒ re-check the sinter filter
 ⇒ →  Leak detector

5.3 Replacing Capillary Filter

Remove the gasket of the metal filter before you change the metal filter to plastic capillary filter.



Pos.	Description
1	Metal capillary filter
2	Taper gasket (can be black or white)
3	Plastic capillary filter



Take a small pin or needle (about Ø 0.5 mm) and press the capillary from the top out off the tip (Fig. 10-76). Then the taper gasket (Fig. 10-73,3) at the tip can drop out.



Take out the capillary and remove the taper gasket at the top of the sniffer tip.

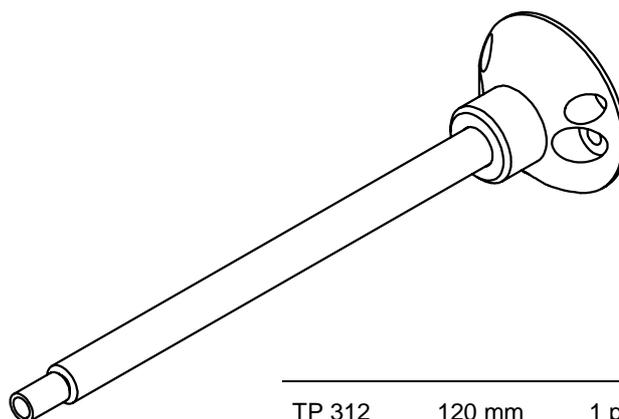
6 Spare parts

				Ordering number
Capillary Filter		Plastic standard version	5 pcs.	BN 846 392 -T
		Felt discs for capillary filter	50 pcs.	BN 846 099 -T
Sinter Filter		Sinter filter, with seal	5 pcs.	BN 845 979 -T

7 Options

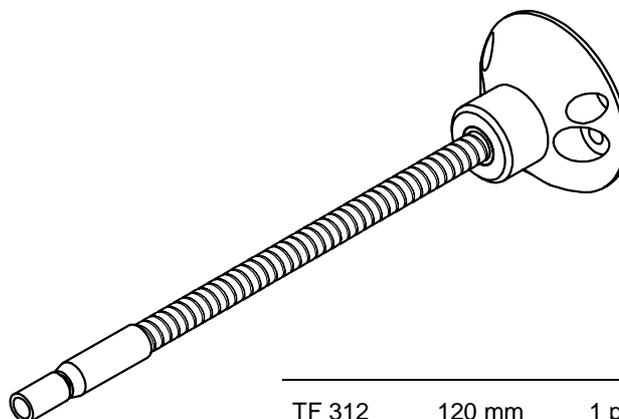
				Ordering number
Capillary Filter		Metal version for rough duty, with seal	1 piece	BG 449 140 -T

Sniffer Tip, stiff



			Ordering number
TP 312	120 mm	1 piece	BG 449 215 -T
TP 385	385 mm	1 piece	BG 449 216 -T

Sniffer Tip, flexible



			Ordering number
TF 312	120 mm	1 piece	BG 449 217 -T
TF 385	385 mm	1 piece	BG 449 218 -T

8 Returning the Product

WARNING

Caution: forwarding contaminated products

Products returned to Pfeiffer Vacuum for service or repair should preferably be free of harmful substances.

Units which are contaminated microbiologically, explosively or radioactively cannot be accepted as a matter of principle!

Do not return any units which are microbiologically, explosively or radioactively contaminated!

Adhere to the forwarding regulations of all involved countries and forwarding companies and enclose a completed contamination declaration.

Products that are not clearly declared as "free of harmful substances" are decontaminated at the expense of the customer.

9 Disposal

DANGER

Caution: contaminated parts

Contaminated parts can be detrimental to health.

Before you begin to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Separating the Components

After disassembling the product, separate its components according to the following criteria:

Components Exposed to Process Gases

Components which have been exposed to radioactive, toxic, caustic, or microbiological process gases must be disposed of in accordance with the relevant national regulations.

Components which have been exposed to other process gases must be separated according to their materials and recycled.

Components Not Exposed to Process Gases

Such components must be separated according to their materials and recycled.

Declaration of Contamination

The repair and/or service 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 can only be completed and signed by authorised and qualified staff.

1 Description of product
 Type _____
 Article No. _____
 Serial No. _____

2 Reason for return

3 Operating fluid(s) used

4 Process related contamination of product:

toxic	no <input type="checkbox"/>	yes <input type="checkbox"/>	
corrosive	no <input type="checkbox"/>	yes <input type="checkbox"/>	
biological hazard	no <input type="checkbox"/>	yes <input type="checkbox"/> *)	
explosive	no <input type="checkbox"/>	yes <input type="checkbox"/> *)	
radioactive	no <input type="checkbox"/>	yes <input type="checkbox"/> *)	
other harmful substances	no <input type="checkbox"/>	yes <input type="checkbox"/>	



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

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

Trade/Product name Manufacturer	Chemical name (or symbol)	Dangerous material class	Measures if spillage	First aid in case of human contact

6 Legally binding declaration:
 I hereby declare that the information supplied on this form is complete and accurate. The dispatch of the contaminated product will be in accordance with the appropriate regulations covering packaging, transportation and labelling of dangerous substances.

Name of organisation or company _____

Address _____ Post code _____

Phone _____ Telex _____

E-Mail _____

Name _____

Date and legally binding signature _____ Company stamp _____

Copies: Original to manufacturer or representative - 1 copy attach to consignment packaging - 1 copy for file of sender

Vacuum is nothing, but everything to us!



Turbo Pumps



Rotary Vane Vacuum Pumps



Roots Pumps



Dry Vacuum Pumps



Leak Test Units



Valves



Flanges, Feedthroughs



Vacuum Measurement



Gas Analysis



System Technology



Service

PFEIFFER  **VACUUM**