

# Oxygen Headspace Analysis BA 4000 Inj.



The portable Buhler O<sub>2</sub> - analyzer BA 4000 Inj. is designed for oxygen analysis in small packages. Typically, it is used for analysis of head space volume in bottles, cans or soft packages.

**Two different models handle different package sizes.**

**BA 4000 Inj. GV** - Volumes > 35 ml

Integrated sample pump controlled by an adjustable time relay.

**BA 4000 Inj. KV** - Volumes between 15 and 35 ml  
External vacuum pump. Integrated vent valve

Depending on the type of packaging, different probes are available

Optionally, the display can be switched between oxygen or pressure indication. The pressure indication is used to measure vacuum in the package. The pressure indication eliminates the need for zero gas and zero calibration. Furthermore, it is possible to correct the zero point between N<sub>2</sub> and Co<sub>2</sub>.

- **Paramagnetic detection principle**
- **O<sub>2</sub> analysis at low volumes ≥ 15 ml**
- **Long life measuring cell**
- **Simple operation**
- **Fast and accurate O<sub>2</sub>-analysis**
- **Optional time relay for pump control**
- **Broad application range due to choice of piercing probes**

## Overview of BA 4000 Inj. operation

The BA 4000 Inj. is connected to a tube which is equipped with the suitable piercing probe. A self-adhesive septum is placed at the spot on the packing where the sample will be taken. The septum is used to seal the system and the package against ambient air.

The probe needle initially pierces the septum and the septum, needle and probe are evacuated. After evacuation, the needle is pushed into the packaging and the gas sample is drawn. The display shows the measured oxygen values. By turning the switch on the front, it is possible to display the O<sub>2</sub> concentration or the pressure.

## Piercing probes

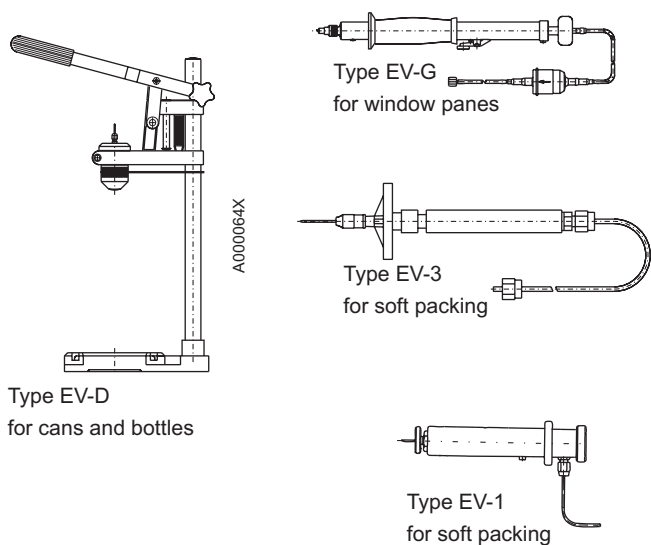
EV-1	For single hand operation. Suitable for taking gas samples from inerted soft packing.
EV-3	Fixed needle. Suitable for taking gas samples from inerted soft packing. The optional attachment of a fine disc filter makes this probe particularly suitable for packages potentially containing fine particulates (e.g. coffee).
EV-D	Adjustable in height with a short, strong needle. Suitable for taking gas samples from hard packing like cans, bottles etc.
EV-G	Suitable for taking samples from double glazed panes.

Water stop filter:

For wet gas samples (cans; Tetrapacks) we recommend fitting our water stop filter to protect the measurement cell from liquid contamination.

Quick coupling set:

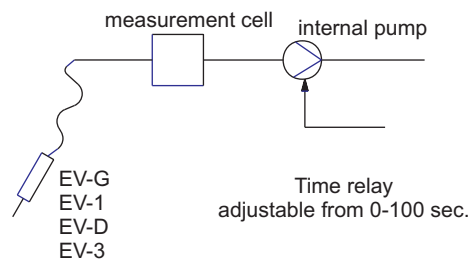
For applications where different piercing probes are needed frequently in connection with one analyzer.



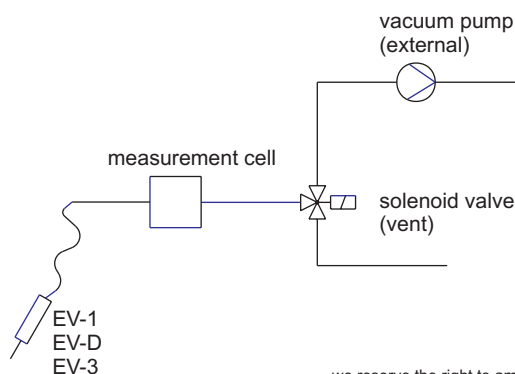
## Please indicate with order

Type	Part No.
BA 4000 Inj. GV	55 11 399
BA 4000 Inj. GV with time relay	55 11 499
BA 4000 Inj. KV	55 11 599
<b>Accessories</b>	
Vacuum pump	65 70 520
Pressure indicator	55 11 0994
EV-D	65 78 999
EV-G	65 74 999
EV-1	65 71 999
Needles for EV-1	65 70 9012
Adhesive tape	65 70 947
EV-3	65 70 9021
Needles for EV-3	65 70 901
Septum for EV-3	65 70 937
Discfilter for EV-3	65 70 9033
Quick coupling set	65 70 949
Water stop filter	65 70 975
Power converter 230 V, 50/60 Hz, 12 VDC	55 11 0992
Power converter 115 V, 50/60 Hz, 12 VDC	55 11 0993

## BA 4000 Inj. GV flow principle



## BA 4000 Inj. KV flow principle



we reserve the right to amend specifications