



Air Supply Unit Type: LV2

Function:

The **LV2** air supply unit is used for continuously supplying all common oxygen probes with reference air.

A defined volume of filtered external air is pressed into the inside of the zirconium oxide pipe. The low gauge pressure largely prevents any penetration of the furnace atmosphere into the zirconium oxide pipe.

The volume of reference air selected should not be too great otherwise there will be an unnecessary cooling of the built-in thermoelement. As a rule, oxygen probes with through zirconium oxide pipes (**MESA oxygen probes**) require almost no reference air so that the temperature measurement error is negligible in these probes.

In addition to the reference air the **LV2** also offers an air output for the probe rinsing. This externally triggerable air output is used for rinsing out the space between the protective pipe and the zirconium oxide pipe.

This function is triggered automatically at certain times for a certain duration by state-of-the-art C-level controllers (**MCON Carbo**). The aim of this function is to remove soot particles and other contamination by burning off and rinsing out.

Technical Data:

Pump:

Diaphragm pressure pump
End pressure $\pm 20\%$ — 2.8 (0.27) mWts (bar) Free yield — 168 l/h
Built-in filter

Reference air:

Measuring range (adjustable with valve)
1.6 l/h to 16 l/h
Accuracy class
2.5 VDI/VDE 3513, sht. 2
Readoff length 100 mm

Rinsing air:

Measuring range (adjustable with valve)
10 l/h to 100 l/h
Accuracy class
2.5 VDI/VDE 3513, sht. 2
Readoff length 100 mm
Built-in non-return valve

Measuring principle:

Floating body

Switch cabinet:

Wall housing, steel-plated
RAL 7032 pebble grey
Protection type IP 55
Cable and hose glands PG 13.5

Dimensions:

W x H x D

380 x 300 x 210 mm

Air connections:

Hose nozzles for 4 mm I.D.

Electr. data:

Pump, solenoid valve — 230 V/50 Hz

Power consumption:

approx. 12 VA

Ambient temperature:

-10 to 50 degrees Celsius

Accessories:

Plastic hose:

Internal diameter: 4 mm

External diameter: 6 mm