



## L-Probe with Measurement Chamber MK 1

### Areas of application:

- **Measuring oxygen in gases**
- **Indirect measurement of the carbon content in carbonizing atmospheres**
- **Indirect measurement of the dew point in gases, e.g. in the production of carrier gas for heat treatment plants**

### Function:

The **L-probe** is a sensor for measuring oxygen in gas atmospheres. The probe is heated with a constant voltage. It outputs a voltage which can be converted into oxygen, C-potential or dew point in a transmitter.

The **probe** is screwed into the **measurement chamber** and is immersed in the gas flow. Different types of fittings are available which are adapted to the relevant local conditions.

The **measurement chamber** also enables a simple connection as a bypass for burn-off. Systems without gauge pressure are fitted with an extra pump.

Only small volumes of gas are required for measuring. 20-50 l/h are sufficient. A high-precision power supply unit is available as an accessory for supplying the ceramic heating layer in the **probe**.

The **probe** can be installed anywhere. It is mounted by screwing it in to the corresponding thread. The feed lines to the **measurement chamber** must be absolutely leakproof to avoid incorrect measurement of the very small residual values of O<sub>2</sub>.

## Technical Data:

### Probe

**Installation length of probe:**

approx. 28 mm

**Total length:**

94 mm

(probe with cable bushing)

### Measurement chamber

**Dimensions:**

60 x 60 x 24 mm

**Weight:**

0,6 kg

**Connections:**

Measuring gas inlet and outlet and connection for injector pump with G 1/4" screw glands

## Electrical Data:

### Heating element

**Power supply:**

12.00 V

**Heating power:**

approx. 18 W

**Heating current:**

Warm-up phase: approx. 3.0 A

Steady condition: approx. 1.4 A

### Probe

**Output:**

0...1300 mV

**Probe internal resistance:**

$\leq 150$  ohm

**Response time:**

approx. 2 s

**Ready for control:**

approx. 70 s after switching on the heating element (guideline)

**Needed Accessories:**

- NTV44G

**Optional Accessories:**

- Carbo 15/ 47/ 100/ 1000

- Dewpoint controller

- Carbomat-M

- Carbo-M

All specifications subject to change without prior notice.