

Oxygen Probe

Probe for oxygen concentration measurement and carbon potential calculation



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The probe is applicable for case hardening in gas, for heat treatment in protective gas, for carbonitriding as well as for measurement of endothermic gas properties.

The probe is intended for direct gas atmosphere installation and is installed via screw connection (1" male thread).

Length from 650 to 1000 mm and diameter from 22 and 26,9 mm are available.

Characteristics:

- High measuring accuracy
- Short response time
- High durability



• Output: 0 - 1200 mV

• Installation depth: at least 50 mm in the furnace chamber

• Accuracy: ± 0.05 %

• Weight: 2 - 3 kg, depending on length

• Response time: < 1 second

Reference air: ambient air < 60°C, flow rate approx. 20 I/ h
Purge air: ambient air < 60°C, flow rate approx. 200 I/ h

• Protective pipe: Heat-resisting steel (1.4841) for the protection of the sensor from heat- and/or mechanical stress

• Operating temperature: 760 °C - 1100 °C

• Thermocouple: Type S or without

Accessories:

• Connection adapter for mounting parts of other manufacturers (option)

• Documentation



Please check if the operational conditions are in accordance with the aforementioned data. If deviations are existent, ask for consultation in order to check the conditions and be adapted if applicable.

The following types of probe are available:

Art-No.	Type of probe
SE-CP-226500	Length: 650 mm; diameter: 22 mm, without thermocouple
SE-CP-226501	Length: 650 mm; diameter: 22 mm, integrated thermocouple type S
SE-CP-227500	Length: 750 mm; diameter: 22 mm, without thermocouple
SE-CP-227501	Length: 750 mm; diameter: 22 mm, integrated thermocouple type S
SE-CP-228500	Length: 850 mm; diameter: 22 mm, without thermocouple
SE-CP-228501	Length: 850 mm; diameter: 22 mm, integrated thermocouple type S
SE-CP-2210000	Length: 1000 mm; diameter: 22 mm, without thermocouple
SE-CP-2210001	Length: 1000 mm; diameter: 22 mm, integrated thermocouple type S
SE-CP-266500	Length: 650 mm; diameter: 26,9 mm, without thermocouple
SE-CP-266501	Length: 650 mm; diameter: 26,9 mm, integrated thermocouple type S
SE-CP-267500	Length: 750 mm; diameter: 26,9 mm, without thermocouple
SE-CP-267501	Length: 750 mm; diameter: 26,9 mm, integrated thermocouple type S
SE-CP-268500	Length: 850 mm; diameter: 26,9 mm, without thermocouple
SE-CP-268501	Length: 850 mm; diameter: 26,9 mm, integrated thermocouple type S
SE-CP-2610000	Length: 1000 mm; diameter: 26,9 mm, without thermocouple
SE-CP-2610001	Length: 1000 mm; diameter: 26,9 mm, integrated thermocouple type S

Electrical connection takes place via 4-pole LEMO connector. Other connection adapters on request.