

H2 Sensor

For measuring concentrations of hydrogen with digital display



Hydrogen sensor with digital display

The H2 sensor enables nitriding and carburizing atmospheres to be easily measured. In all applications, only a free inlet to the furnace atmosphere is required. The created electrical signal is a measurement for the hydrogen content of the analysed gas.

Measuring principle: Heat conductivity of the measuring gas in nitrogen, ammonia, hydrogen and carbonic gases. Can be used for nitriding, nitrocarburizing, oxynitriding, X-nitriding as well as carburizing processes. Simple installation, e.g. by convection pipe connection which is located within the gas atmosphere. With calibration gas connection and electric connection via connector.

The sensor works according to the diffusion principle -

no exhaust gas via sensor.

The sensor can be connected directly to the 4-20 mA input of the automation device (e.g. recorder, programmer etc.)

Backlit LCD display with H2 value and operating data display - thereby operation possible even without separate evaluation electronic.

Fields of application:

- Nitriding
- Nitrocarburizing
- Oxynitriding
- X-Nitriding
- Carburizing processes

Technical Data

- Measuring converter WLD / heat-conductive gas sensor
- Connection temperature at KF flange: < 65°C
- Measuring gas pressure range: 30 mbar up to 10 bar absolut
- Measuring range: 0 ... 60, 0 ... 75, 0 ... 100 Vol.-%
- Output: 4-20 mA linear
- Time response: Output delay 6 ... 20s
- Preheat time: Depending on sensor installation, approx. 20 minutes at room temperature
- Dimensions: 105 x 66 x 240 mm (WxHxD)

Accessories:

- Documentation
- Power supply unit (optional) 24V/3A, short-circuit proof
- Connecting plug, optional 2 m connecting line with connected plug connector

Requirements for use:

- KF16 vacuum flange for connection
- If necessary convection pipe depending on installation, on request

Exemplary installation Pit-type furnace

