

Hydrogen 0.5%/a

Order No. CH 30 901

Application Range

Standard Measuring Range:	0.5 to 3.0 Vol.-%
Number of Strokes n:	5
Time for Measurement:	approx. 1 min
Standard Deviation:	± 10 to 15 %
Color Change:	grey green → pink

Ambient Operating Conditions

Temperature:	5 to 40 °C
Absolute Humidity:	< 30 mg H ₂ O / L

Reaction Principle

- $\text{H}_2 + \frac{1}{2} \text{O}_2 \rightarrow \text{H}_2\text{O}$
- $\text{H}_2\text{O} + \text{SeO}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{pink reaction product}$

Cross Sensitivity

Up to 1,000 ppm CO has no influence on the indication; higher concentrations lead to lower measurement results. Acetylene and alcohols react similarly to hydrogen.

Additional Information

Do not use in potentially explosive areas. Qualify before use with a combustible gas monitor. When the hydrogen concentration is above 3 Vol.-% the catalysis layer heats up during the measurement with a reddish glow.

Determination of hydrogen in air with at least 5 Vol.-% O₂.



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