

# 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:	yellow-green → pink

## Ambient Operating Conditions

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

## Reaction Principle

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

## 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. % O<sub>2</sub>.

