# 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 $H_2O$ / L |

## Reaction Principle

a) $H_2 + {}^1/_2\ O_2 \rightarrow H_2O$

b) $H_2O + SeO_2 + H_2SO_4 \rightarrow$ 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. % $O_2$.


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