Order No.

67 33051

Carbon Monoxide 2/a

Standard Measuring Range : 2 to 60 ppm

Number of Strokes (n) : 10

Time for Measurement
Standard Deviation
Colour Change

: app. 4 min
: ± 10 to 15 %
: white → brownish

pink/green

Ambient Operating Conditions

Temperature : $0 \text{ to } 50 \text{ }^{\circ}\text{C}$

Absolute Humidity : 2 to 20 mg H₂O / L

Reaction Principle

$$5 \text{ CO} + I_2O_5 \longrightarrow I_2 + 5 \text{ CO}_2$$

Cross Sensitivity

Acetylene reacts in the same way as CO, but with a different sensitivity.

Petroleum hydrocarbons, benzene, halogenated hydrocarbons and hydrogen sulphide are retained in the precleanse layer. The capacity of the precleanse layer may not be sufficient for high concentrations of hydrocarbons and halogenated hydrocarbons. When in question, use a Dräger carbon pretube (CH 24101) in front of the CO tube. Practically all gases and vapors that would cause interference with the CO indication (e.g. propane, butane, trichloroethylene, perchloroethylene) are adsorbed by the activated charcoal in the pretube.

Easily cleaved halogenated hydrocarbons (e.g. trichloroethylene), in high concentrations can form chromyl chloride in the precleanse layer, which discolours the indicating layer yellowish brown, the carbon pretube can prevent this from happening.

It is impossible to measure CO in the presence of high olefin concentrations.

Extension of the Measuring Range

Using n=2, multiply the reading by 5; the range of measurement is 10 to 300 ppm.

