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Gas Detection Tube Data Sheet

Carbon Monoxide CO No. 10-102-18

(Selective)

	Extended Range	Standard Range	Extended Range
Range (ppmv)	2.5 - 50	5 - 100	10 - 200
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min) in air	2 x 3	3	2
in pure hydrogen	2 x 1.5	1.5	1
Correction Factor	0.55	1	2

OVER-RANGE LAYER TURNS PINK ON CO OVERLOAD

Precision (Relative Standard Deviation)*: $\leq \pm 12\%$

Linearity with No. of Pump Strokes: $r^2 = 0.99$

Humidity: No effect 5 - 100% RH.

Temperature Range: 0 - 40°C
(32 - 104°F)

Temp (°C/°F)	0/32	10/50	24/75	40/104
Corr. Factor	0.67	0.73	1.0	1.4

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: White → Light Brown Ring (Over-range White → Pink)

Reaction Principle: Prelayer removes most organic compounds
 $5CO + I_2O_5 + H_2S_2O_7 \rightarrow I_2 + 5CO_2 + \text{sulfur products}$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
H ₂	100%	0
CH ₄	25000	0
H ₂ S	50	0
NH ₃	100	0
NO	100	0
Hexane	100	3
Hexane	400	30
Isobutylene	100	0
Toluene	400	0

*Data based on RAE pumps and tubes used in standard range.

Other Possible Interferences: Suitable for measuring CO in pure hydrogen.

Caution: Dispose of spent or expired tubes according to local regulations.
Possibly hazardous materials are given under the section Reaction Principle.