

Hydrogen Sulfide H₂S

No. N10-103-40



	Extended Range	Standard Range	Extended Range
Range (%)	0.05 - 1%	0.1 - 2%	0.2 - 4%
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1.5
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)*: $\leq \pm 10\%$

Linearity with No. of Pump Strokes: $r^2 = 0.998$

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F) 0/32 18/64 25/77 40/104

Corr. Factor 1.2 1.1 1.0 1.0

Storage Life: 3 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: Light Blue → Black

Reaction Principle: $\text{H}_2\text{S} + \text{CuSO}_4 \rightarrow \text{CuS} + \text{H}_2\text{SO}_4$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
CO	3000	0
CH ₄	25000	0
NO	100	0
NO ₂	200	0
NH ₃	300	0
SO ₂	20	0
Methyl mercaptan	0.1%	0.1%#
Diethyl sulfide	1000	0
Isobutylene	100	0
Toluene	100	0
Hexane	1200	0

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

Concentrations in the high % range leave a yellow color over the entire tube.

Other Possible Interferences: High Concentrations of ammonia; NO₂ in mixtures.

No response to CS₂.