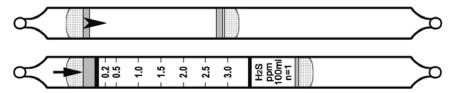
Hydrogen Sulfide H₂S No. H-10-103-05



	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.1 - 1.5	0.2 - 3	0.4 - 6
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1
Correction Factor	0.5	1	2

<u>Precision (Relative Standard Deviation)*</u>: ≤±12%

<u>Linearity with No. of Pump Strokes</u>: $r^2 = 0.999$

Humidity: No effect between 5 - 90% RH.

Temperature Range: No effect between 0 - 40°C (32 - 104°F).

Storage Life: 1 year in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

 $\underline{Color\ Change} \colon \ \mathsf{Pale\ orange} \ \to \ \mathsf{Pink}$

Reaction Principle: Pretube eliminates humidity

 $H_2S + HgCl_2 \rightarrow Mercury sulfide product + HCl$

HCl + Base → Chloride Salt + H₂O (dye color change)

<u>Cross-sensitivity</u> : Substance	Concentration (ppmv)	Apparent Reading*
Methyl mercaptan	3	0#
Butyl mercaptan	3	0#
NH ₃	100	0
NO ₂	5	0
SO ₂	100	0
CS ₂	100	0
CO	250	0
Hexane	100	0
Isobutylene	100	0^
Toluene	100	0

^{*} Data based on Honeywell pumps and tubes used in standard range.

Other Possible Interferences: Acids and bases.

[#] Interferes at higher concentrations.

[^] Reduces response when mixed with H₂S.