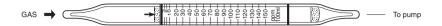
HYDROGEN SULPHIDE



1. PERFORMANCE

1) Measuring range : 3-150 ppm 1-50 ppm 0.75-37.5 ppm 6-300 ppm Number of pump strokes 1(100ml) 3(300ml) 4 (400ml) $1/2(50 \text{m} \ell)$

2) Sampling time 1 minute/1 pump stroke 3) Detectable limit $0.3 \text{ ppm} (300 \text{m} \ell)$

4) Shelf life 3 years 5) Operating temperature $0 \sim 40 \,^{\circ}\text{C}$

6) Reading Direct reading from the scale calibrated by 1 pump stroke

7) Colour change White→Dark brown

2. RELATIVE STANDARD DEVIATION

RSD-low: 10% RSD-mid.: 5% RSD-high: 5%

3. CHEMICAL REACTION

By reacting with Lead acetate (II), Lead sulphide is produced. $H_2S + Pb(CH_3CO_2)_2 \rightarrow PbS + 2CH_3CO_2H$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance		Interference	ppm	Coexistence
Sulphur dioxide	FIG.1	The accuracy of readings is not affected.	12	Higher readings are given.
Mercaptans	FIG.2	"	550	"
Nitrogen dioxide	FIG.3	"	2	Lower readings are given.

(NOTE)

In case of 1/2, 3 or 4 pump strokes, following formula is available for the actual concentration.

Actual concentration = Reading value $\times \frac{1}{\text{Number of pump strokes}}$

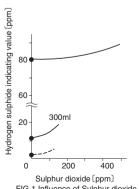


FIG.1 Influence of Sulphur dioxide

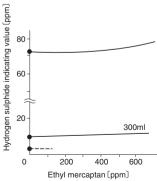
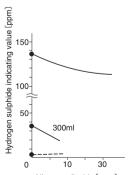


FIG.2 Influence of Ethyl mercaptan



Nitrogen dioxide (ppm) FIG.3 Influence of Nitrogen dioxide