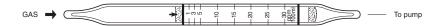
# **HYDROGEN SULPHIDE**



#### 1. PERFORMANCE

1) Measuring range Sumbler of pump strokes 1/2 (50 mpm 1-30 ppm 1/2 ( $50 \text{m} \ell$ ) 1 ( $100 \text{m} \ell$ ) 2) Sampling time 1/2 ( $50 \text{m} \ell$ ) 1 minute/1 pump stroke 1/2 ( $50 \text{m} \ell$ ) 2.2 ppm ( $100 \text{m} \ell$ )

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→Pale 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.	10	Higher readings are given.
Mercaptans	FIG.2	"	300	"
Nitrogen dioxide	FIG.3	"	2	Lower readings are given.

## (NOTE)

When the concentration is over 30ppm, 1/2 pump strokes can be used to determine higher concentration with the following formula;

Actual concentration =  $2 \times$  Reading value