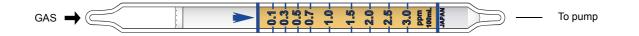
# HYDROGEN SULPHIDE



## **1. PERFORMANCE**

1) Measuring range	: 0.2-6.0 ppm 0.1-3.0 ppm
Number of pump strokes	1/2(50 mL) 1(100 mL)
2) Sampling time	: 1 minute/1 pump stroke
3) Detectable limit	: 0.05 ppm (100mL)
4) Shelf life	: 2 years
5) Operating temperature	$: 0 \sim 40 ^{\circ}{\rm C}$
6) Temperature compensation	: Necessary (See "TEMPERATURE CORRECTION TABLE")
6) Reading	: Direct reading from the scale calibrated by 1 pump stroke
7) Colour change	: Pale yellow $\rightarrow$ Pink

## 2. RELATIVE STANDARD DEVIATION

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

#### **3. CHEMICAL REACTION**

By reacting with silver compound, Acidic product is produced and PH indicator is discoloured.

### 4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence		
Sulphur dioxide	<1000	The accuracy of readings is not affected.		The accuracy of readings is not affected.		
Nitrogen dioxide	50	Whole reagent is changed to Pale orange.	1.0	Lower readings are given.		
Ammonia		The accuracy of readings is not affected.	1.0	The pink stain fades from the zero end of the detecting reagents(inlet side of the tube).		
Arsine		Whole reagent is changed to Pale orange.	0.25	Higher readings are given.		
Hydrogen selenide	0.5	Similar stain is produced.		//		
Mercaptans	0.2	//		//		
Phosphine		Whole reagent is changed to Pale pink.	0.4	//		
Hydrogen cyanide		Whole reagent is changed to Pale orange.	<1.0	The accuracy of readings is not affected if the maximum end point of the pink stain is discernable.		

(NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration. Actual concentration =  $2 \times$  Reading value

#### TEMPERATURE CORRECTION COEFFICIENT TABLE (AT 20°C)

Temperature(°C)	0	5	10	15	20	25	30	35	40
Correction Factor	0.80	0.85	0.90	0.95	1.0	1.0	1.05	1.10	1.15

Actual concentration = Reading value  $\times$  Coefficient for temperature correction