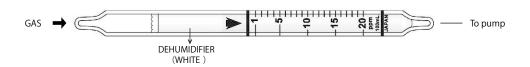
# **HYDROGEN SULPHIDE**



## 1. PERFORMANCE

1) Measuring range : 2-40 ppm 1-20 ppm 0.5-10 ppm Number of pump strokes 1/2 (50mL) 1 (100mL) 2 (200mL)

2) Sampling time : 1 minute / 1 pump stroke 3) Detectable limit : 0.05 ppm (200mL)

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

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION COEFFICIENT TABLE")

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

8) Colour change : Pale brown  $\rightarrow$  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	Interference	ppm	Coexistence	
Phosphine	Similar stain is produced.	_	Higher readings are given.	
Mercaptans	//	_	//	
Arsine	//	_	<i>''</i>	
Hydrogen selenide	//	_	<i>''</i>	
Hydrogen cyanide	//	0.1	//	
Nitrogen dioxide	The accuracy of readings is not a ffected.	1	Lower readings are given.	
Ammonia	//	15	The discolouration fades from the inlet side at 200mL.	
Hydrogen chloride	"	less than 20	The accuracy of readings is not affected.	
Hydrogen fluoride	"	less than 30	"	
Nitric acid	"	less than 20	"	
Sulphur dioxide	"	less than 40	"	

### (NOTE)

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

1/2 pump strokes: Actual concentration = Reading value × 2 2 pump strokes: Actual concentration = Reading value × 0.5

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

				-		
Temperature(°C)	0	10	15	20 - 25	30	40
Correction factor	0.7	0.85	0.93	1.0	1.1	1.2

Actual concentration = Reading value ×Coefficient for temperature correction