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 : 0~40℃

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→Pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with silver compound, acid gas 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	<i>''</i>	_	//	
Arsine	<i>''</i>	_	//	
Hydrogen selenide	<i>''</i>	_	//	
Hydrogen cyanide	<i>''</i>	0.1	//	
Nitrogen dioxide	The accuracy of readings is not affected.	1	Lower readings are given.	
Ammonia	"	15	The discolouration fades from the inlet side at 200mL.	
Hydrogen chloride	<i>''</i>	less than 20	The accuracy of readings is not affected.	
Hydrogen fluoride	<i>''</i>	less than	//	
Nitric acid	//	less than 20	//	
Sulphur dioxide	//	less than 40	//	

(NOTF)

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

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

TABLE OF THE COEFFICIENT FOR TEMPERATURE CORRECTION(BASED ON 20°C)

Temperature($^{\circ}$ C)	0	10	15 - 25	30	40
Correction factor	0.8	0.9	1.0	1.1	1.2