CARBON DIOXIDE



1. PERFORMANCE

: 1-20% 1) Measuring range 1(100ml) Number of pump strokes

2) Sampling time : 1 minute/1 pump stroke

3) Detectable limit 0.2 % 4) Shelf life 2 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 Pink → Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with alkali, PH indicator is discoloured.

 $CO_2 \pm 2KOH \rightarrow K_2CO_3 \pm H_2O_3$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance		ppm	Interference	ppm	Coexistence
Nitrogen dioxide	FIG.1	50	White stain is produced.	50	Similar stain is produced, but if there is more than 3% of CO ₂ , the accuracy of readings is not affected.
Sulphur dioxide	FIG.2	3,000	Similar stain is produced.	3,000	Higher readings are given.
Hydrogen sulphide	FIG.3	4,000	"	3,000	"

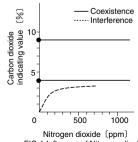


FIG.1 Influence of Nitrogen dioxide

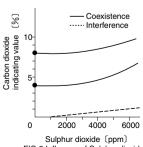
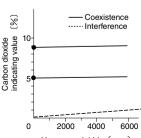


FIG.2 Influence of Sulphur dioxide



Hyrogen sulphide (ppm) FIG.3 Influence of Hydrogen sulphide