CARBON DIOXIDE



1. PERFORMANCE

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

2) Sampling time : 1 minute / 1 pump stroke

3) Detectable limit 0.2%4) Shelf life 2 years 5) Operating temperature $0\sim40\%$

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

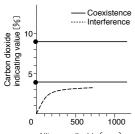
By reacting with alkali, pH indicator is discoloured. CO2+2KOH→K2CO3+H2O

4. CALIBRATION OF THE TUBE

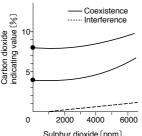
STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

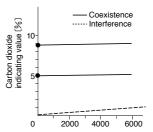
Substance		ppm	Interference	ppm	Coexistence
Nitrogen dioxide	FIG.1	50	White stain is produced.	50	Similar stain is produced, but if there is more than 3% of CO ₂ , the accuracy of readings is not affected.
Sulphur dioxide	FIG.2	3,000	Similar stain is produced.	3,000	Higher readings are given.
Hydrogen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



Nitrogen dioxide (ppm) FIG.1 Influence of Nitrogen dioxide



Sulphur dioxide (ppm)
FIG.2 Influence of Sulphur dioxide



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