CARBON DIOXIDE



1. PERFORMANCE

1) Measuring range Summer of pump strokes 1 $(100-2000 \text{ ppm} \ 1/2 (50 \text{m} \ell))$ 2) Sampling time 200-4000 ppm 1/2 $(50 \text{m} \ell)$ 2 minutes/1 pump stroke

3) Detectable limit $: 5 \text{ ppm}(100\text{m}\ell)$ 4) Shelf life : 2 years5) Operating temperature $: 0 \sim 40 \, \text{°C}$

6) Reading : Direct reading from the scale calibrated by 1 pump strokes

7) Colour change : Pink→Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

 $CO_2 + 2KOH \rightarrow K_2CO_3 + H_2O$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Hydrogen cyanide	Similar stain is produced.	1000	Higher readings are given.
Hydrogen chloride	"	30	The accuracy of readings is not affected.
Hydrogen sulphide	"	10	"
Nitrogen dioxide	"	5	"
Sulphur dioxide	"	100	"
Chlorine	Original colour is faded to White.	15	"
Ammonia	The accuracy of readings is not affected.		"

(NOTE)

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

Actual concentration = $2 \times \text{Reading value}$