CARBON DIOXIDE



1. PERFORMANCE

1) Measuring range Number of pump strokes $1/2(50m\ell) = 1(100m\ell)$ 2) Sampling time $1/2(50m\ell) = 1(100m\ell)$ 3) Detectable limit $1/2(50m\ell) = 1(100m\ell)$

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 : Pale blue → Pale pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with alkali, PH indicator is discoloured. CO₂ + 2NaOH → Na₂CO₃ + H₂O

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Chlorine	The accuracy of readings not affected.		The accuracy of readings is not affected.
Hydrogen sulphide	"		"
Nitrogen dioxide	"		"
Sulphur dioxide	"		"
Hydrogen cyanide	Similar stain is produced.	120	Higher readings are given.

(NOTE)

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

Actual concentration = $2 \times$ Reading value