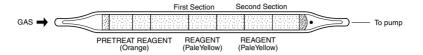
# **CARBON MONOXIDE**



### 1. PERFORMANCE

1) Measuring range : 10-1.000 ppm

This tube is calibrated based on the sampling time not related with number of

pump strokes.

2) Sampling time : 0.5-5.minutes
3) Detectable limit : 10 ppm (5.0 minutes)

4) Shelf life  $\therefore$  2 years 5) Operating temperature  $\therefore$  0  $\sim$  40  $^{\circ}$ C

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")

7) Reading : Colour intensity method using colour standard chart shown in below

8) Colour change : Pale yellow → Green to Blue

# 2. RELATIVE STANDARD DEVIATION

RSD-low: RSD-mid.: RSD-high:

# 3. CHEMICAL REACTION

Molybdate is reduced and molybdeum blue is produced.

 $CO + PdSO_4 + (NH_4)_2MoO_4 \rightarrow Mo_3O_8$ 

### 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Hydrogen sulphide	Black stain is produced.	1,000	Black stain is produced and higher readings are given.
Hydrogen (over 40 ℃)	Similar stain is produced.	10%	Whole reagent is discoloured to Blue and higher readings are given.

### 6. NOTE

- No.106C is specially designed to eliminate an influence of Nitrogen dioxide from readings, which is produced after blasting, by providing a pretreat reagent. The pretreat reagent is available to eliminate Nitrogen dioxide up to 300 ppm.
- 2) The function of first and second section of detecting reagents is the same with the No.106B tube.

# TEMPERATURE CORRECTION TABLE

Temperature	0°C (32°F)	5℃ (41°F)	10℃ (50°F)	15℃ (59°F)	20°C (68°F)	25℃ (77°F)	30°C (86°F)	35℃ (96°F)	40°C (104°F)
Waiting time (minute) Sampling time up to 1 minutes Sampling time of 2 minutes	5 7	5 7	3 4	2	2	1 2	1	1 1	1
Chart Readings (ppm)									
100 200 300 600 1,000	400 800 1,200 2,300 3,900	250 500 800 1,500 2,500	150 300 450 900 1,500	100 200 300 600 1,000	70 140 200 400 700	50 100 150 300 500	40 70 100 200 300	30 50 80 150 250	20 40 60 120 200

#### Color Standards for CARBON MONOXIDE



Feeding Time : 30 sec. Waiting Time : 2 min. Temperature : 15 ℃