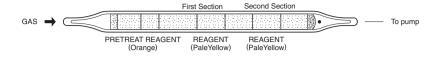
# **CARBON MONOXIDE**



# 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 : 2 years5) Operating temperature  $: 0 \sim 40 \,^{\circ}\text{C}$ 

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.				

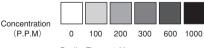
#### 6. NOTE

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

Color Standards for CARBON MONOXIDE



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