

## 1. PERFORMANCE

- |                          |   |            |           |
|--------------------------|---|------------|-----------|
| 1) Measuring range       | : 5-400 ppm   |            |           |
|                          | (0.5 hr.)   | (4 hrs.)   | (8 hrs.)  |
| 2) Sampling time         | : 8 hrs. (6 mℓ/min.)  | 50-400 ppm | 5-100 ppm |
| 3) Shelf life            | : 3 years   |            | 5-60 ppm  |
| 4) Operating temperature | : 0 ~ 40 °C   |            |           |
| 5) Reading               | : Direct reading from the scale calibrated by 8 hrs. Sampling |            |           |
| 6) Colour change         | : White → Brown ringed  |            |           |

## 2. RELATIVE STANDARD DEVIATION

RSD-low : 15%    RSD-mid. : 15%    RSD-high : 15%

## 3. CHEMICAL REACTION

Iodine pent-oxide is reduced.  
 $CO + I_2O_5 + H_2SO_4 \rightarrow I_2$

## 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Butane		50	Higher readings are given.
Hexane		50	∕

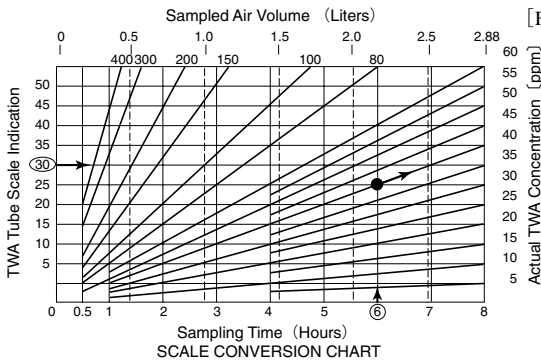
(NOTE)

- Model PM-2 personal sampler (option) is available for this tube.
- Flow Rate and Sampling Time
  - In case of 8 hours, sampling with 6 mℓ/min., the TWA concentration can read directly by the scale printed on the tube at the top of Brown ring.
  - If the sampling duration is less than 8 hours, the actual TWA concentration can be obtained graphically from the chart provided below.
  - If the flow rate is not 6 mℓ/min, divide the scale reading by the ratio of sampled air volume to 2880 mℓ.  

$$\text{Actual TWA concentration (ppm)} = I \times \frac{2880}{V}$$

I = Scale reading  
 V = Sampled air volume in mℓ

[Flow rate (mℓ/min.) × Sampling duration (min.)]



Example :

- If sampling time is 6 hours and scale reading is 30, the actual TWA concentration is 40 ppm.
- If sampled air volume is 1.5 ℓ and scale reading is 10, the actual TWA concentration is 19.2 ppm.