

1. PERFORMANCE

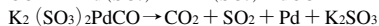
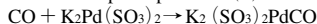
- 1) Measuring range : 20-1,000 ppm 5-50 ppm
 Number of pump strokes 1 (100mℓ) 4 (400mℓ)
- 2) Sampling time : 3 minutes/1 pump stroke
- 3) Detectable limit : 2 ppm (400mℓ)
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Yellow → Dark brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Pottassium disulphate palladate (II) is reduced, and Palladium is liberated.



4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | ppm | Interference | ppm | Coexistence |
|------------------|-------|---|-------------------|--|
| Ethylene | 5,000 | Pale grey stain is produced. | 5,000 | The top of discoloured layer becomes unclear and higher readings are given. |
| Hydrogen | 5,000 | Greyish yellow stain is produced. | 5,000 | Whole layer is discoloured to Greyish yellow and the top of discoloured layer becomes unclear. |
| Acetylene | 1.5 | Dark green stain is produced. | CO conc. × 1/5 | Higher readings are given. |
| Sulphur dioxide | 100 | Original colour is faded. | ∕ | ∕ |
| Nitrogen dioxide | | The accuracy of readings is not affected. | ∕ | ∕ |

(NOTE)

When the concentration is below 50 ppm, 4 pump strokes can be used to determine the lower concentration.

Following formula is available for the actual concentration.

Actual concentration = 1/4 × Temperature corrected value

TEMPERATURE CORRECTION TABLE

| Scale Readings (ppm) | True Concentration (ppm) | | | | |
|----------------------|--------------------------|---------------|---------------|---------------|----------------|
| | 0 °C (32 °F) | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 1,000 | 870 | 930 | 1,000 | 1,030 | 1,060 |
| 900 | 780 | 840 | 900 | 930 | 960 |
| 800 | 690 | 750 | 800 | 830 | 850 |
| 700 | 610 | 680 | 700 | 720 | 720 |
| 600 | 520 | 560 | 600 | 620 | 640 |
| 500 | 430 | 470 | 500 | 520 | 540 |
| 400 | 350 | 370 | 400 | 410 | 430 |
| 300 | 260 | 280 | 300 | 310 | 320 |
| 200 | 180 | 190 | 200 | 210 | 220 |
| 100 | 90 | 100 | 100 | 100 | 110 |