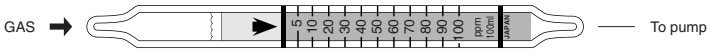
Tube No.
**105SE**

# AMMONIA




## 1. PERFORMANCE

| | | | |
|---|---|---|---|
| 1) Measuring range | : 10-200 ppm | 5-100 ppm | 1-20 ppm |
| Number of pump strokes | 1/2 (50mℓ) | 1 (100mℓ) | 5 (500mℓ) |
| 2) Sampling time | : 1 minute/1 pump stroke | | |
| 3) Detectable limit | : 0.2 ppm (500mℓ) | | |
| 4) Shelf life | : 3 years | | |
| 5) Operating temperature | : 0 ~ 40℃ | | |
| 6) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION TABLE") | | |
| 7) Reading | : Direct reading from the scale calibrated by 1 pump stroke | | |
| 8) Colour change | : Pale purple → Pale yellow | | |

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

By reacting with Phosphoric acid, PH indicator is discoloured.

$NH_3 + H_3PO_4 \rightarrow (NH_4)_2HPO_4$

## 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | Coexistence |
|---|---|---|
| Amines | Similar stain is produced. | Higher readings are given. |
| Chlorine | The accuracy of readings is not affected. | Lower readings are given. |
| Sulphur dioxide | 〃 | 〃 |

(NOTE)

When the concentration is below 5 ppm, 5 pump strokes can be used to determine the lower concentration and following formula is available to obtain the actual concentration.

Actual conccentration = Temperature corrected concentration × 1/5

When the concentration is over 100 ppm, 1/2 pump strokes can be used to determine the higher concentration and following formula is available to obtain the actual concentration.

Actual conccentration = Temperature corrected concentration × 2

COEFFICINET TABLE FOR TEMRERATURE CORRECTION (AT 20℃)

| Temperature (℃) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 ~ 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Coefficient | 0.90 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 |

Actual concentration = Reading value × Coefficient for temperature correction