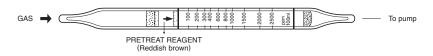
NITROGEN OXIDES



1. PERFORMANCE

1) Measuring range : 100-2,500 ppm Number of pump strokes : $1(100m\ell)$

2) Sampling time : 1 minute/1 pump stroke

3) Detectable limit : 10 ppm4) Shelf life : 2 years5) Operating temperature $: 5 \sim 45 ^{\circ}\text{C}$

6) Reading : Direct reading from the scale calibrated by 1 pump stroke

7) Colour change : White→Green

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

NO; By reacting with an Oxidizer, NO2 is produced.

 $NO + CrO₃ + H₂SO₄ \rightarrow NO₂$ $NO₂ + (C₆H₅)₂NH \rightarrow (C₆H₅)₂NNO$

NO2; By reacting with Diphenylamine, N-Nitroso-diphylamine is produced.

 $NO_2 + (C_6H_5)_2NH \rightarrow (C_6H_5)_2NNO$

4. CALIBRATION OF THE TUBE

NO ; STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Hydrogen chloride	The bottom of discoloured layer is changed to Dark blue.	500	Higher readings are given.
Sulphur dioxide			The accurecy of readings is not affected.

(NOTE)

When the concentration of Nitrogen oxides is high (over 2,000 ppm) in the measuring range, a green ring may occur in the discoloured layer or double-stained layer may occur. The total stain length should be read, even if the stained layer gets multi-colour discolouration.