OZONE



1. PERFORMANCE

1) Measuring range 100-1,000 ppm S0-500 ppm Number of pump strokes $1/2(50\text{m}\,\ell)$ $1(100\text{m}\,\ell)$ 2) Sampling time $1/2(50\text{m}\,\ell)$ $1/2(50\text{m}\,\ell)$ 1/2

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

7) Colour change : Dark blue → Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Indigo is oxidized and Isatin is produced.

$$\begin{array}{cccc}
O & H & O & O \\
C & C & N & +2O_3 \longrightarrow 2 & C & C & +2O_2
\end{array}$$

$$\begin{array}{ccccc}
O & C & C & C & C & C & C & C & C
\end{array}$$

4. CALIBRATION OF THE TUBE

COLOURIMETRY METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Nitrogen dioxide		The top of discoloured layer becomes unclear and higher readings are given.
Chlorine	"	"

(NOTE)

In case of 1/2 pump strokes, following formula is available for actual concentration.

Actual concentration = $2 \times$ Reading value