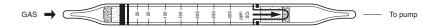
# **SULPHUR DIOXIDE**



### 1. PERFORMANCE

1) Measuring range 20-300 ppmNumber of pump strokes  $1(100\text{m}\ell)$ 

2) Sampling time : 1 minute/1 pump stroke

3) Detectable limit : 3 ppm4) Shelf life : 2 years5) Operating temperature  $: 0 \sim 40 \,^{\circ}\text{C}$ 

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

7) Colour change : Purple → Yellow

## 2. RELATIVE STANDARD DEVIATION

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

#### 3. CHEMICAL REACTION

By reacting with alkali, PH indicator is discoloured.  $SO_2 + 2NaOH \rightarrow Na_2SO_3 + H_2O$ 

#### 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

#### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Chlorine FIG.1		Similar stain is produced.	SO <sub>2</sub> conc. × 1/5	Higher readings are given.
Nitrogen dioxide FIG.2	100	Pink stain is produced.	"	"
Hydrogen sulphide FIG.3		The accuracy of readings is not affected.	SO <sub>2</sub> conc. × 100	Lower readings are given.

