

## **Performance**

Measuring Range	0.04 to 0.08 ppm	0.08 to 0.2 ppm	0.2 to 5.0 ppm	5.0 to 16.5 ppm	
Number of Pump Strokes	8	4	2	1	
Correction Factor	0.2	0.4	1	3.3	
Sampling Time	2 minutes per pump stroke				
Detecting Limit	0.01ppm (n=8)				
Colour Change	White → Yellowish orange				
Reaction Principle	Nitrogen oxides is oxidised by nitrogen dioxide, then react with diphenylamineto produce p-nitroso-diphenylamine which colour is yellowish orange.				
Coefficient of Variation	10% (for 0.2 to 1 ppm), 5% (for 1 to 5 ppm)				
Shelf Life	3 Years				
Corrections for temperature & humidity	Unnecessary				
Store the tubes at cool and dark place.					

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Chlorine, Bromine, Chlorine dioxide	-	Plus error	Produce similar stain
Sulphur dioxide	<u>≥</u> 25 ppm	Minus error	No discoloration
Hydrogen sulphide	<u>≥</u> 25 ppm	Minus error	No discoloration

## Calibration gas generation

NO<sub>2</sub>:Permeation tube method

NO: High pressure gas cylinder method

TLV-TWA	TLV-STEL	Explosive range
NO₂:3ppm NO:25ppm	NO <sub>2</sub> :5ppm	-