Carbon Dioxide CO_2 SCD-8

Specification :

Measurement Range	Extended	Standard	Extended
	0.5 - 1%	1 - 20%	20 - 40%
No. of Pump Strokes	2 (200 ml)	1 (100 ml)	0.5 (50 ml)
Volume Correction Factor (VCF)*	0.5	1.0	2.0
Sampling Time	2.5 minutes per pump stroke (100 ml)		
Color Change	Blue → Off White		
Detection Limit	0.2% (2 pump strokes)		
Shelf Life	3 years		
Relative standard deviation	± 10 – 15 %		

* Multiply the observed reading by the correction factor (VCF) to obtain the true concentration.

Reaction Principle :

$CO_2 + NaOH \rightarrow Na_2CO_3 + H_2O$

Possible Interferences :

Compound	Concentration (ppm)	Interference	Color Change / Comments
Carbon monoxide	≥1.5	+	Color darkens
Hydrogen sulphide	≥0.2	+	Off White
Sulphur dioxide	≥0.02	+	Off White

Correction For Environmental Parameters :

Temperature (°C):	4	20	30	40
Temperature Correction Factor (TCF) *:	0.93	1	1.06	1.24

Relative humidity	Not necessary between 10 - 90 %.

* Multiply the observed reading by the correction factor (VCFXTCF) to obtain the true concentration.

Calibration Of The Tube :

Static gas dilution method.

TLV (TWA): 5000 ppm TLV (STEL): 30,000 ppm Non-Flammable