

RKI Sensor Specification

Features: Fast warm-up time
Good zero stability
Quick response time

Sulfur Dioxide (SO₂)

Part Number: ES-23A-SO2
Sensor Application: EAGLE, Fixed Systems

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 – 30 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T₉₀ Response time (20°C, 2 min. exposure)	90 seconds

Operating Conditions			
Temperature Range	-20°C to +45°C	Life Expectancy	2-3 Years
Humidity Range	10-95% RH, Non Condensing	Warranty	1 Year

Known Gas Interferences

Gas	PPM Gas Applied	Reading
Acetone ((CH ₃) ₂ CO)	8.2% vol.	15.0
Acetylene (C ₂ H ₂)	140.0	15.0
Ammonia (NH ₃)	2.9% vol.	15.0
Bromine (Br ₂)	13.0	-15.0
Carbon Dioxide (CO ₂)	1,000	no response
Carbon Monoxide (CO)	0.37% vol.	15.0
Chlorine (Cl ₂)	17.0	-15.0
Ethylene (C ₂ H ₄)	0.16% vol.	15.0
Fluorine (F ₂)	39.0	-15.0
Hydrogen (H ₂)	2.0% vol.	15.0
Hydrogen Bromide (HBr)	7.6	15.0
Hydrogen Chloride (HCl)	5.1	15.0

Gas	PPM Gas Applied	Reading
Hydrogen Cyanide (HCN)	200.0	15.0
Hydrogen Sulfide (H ₂ S)	0.56	15.0
I.P.A. ((CH ₃) ₂ CHOH)	11.0% vol.	15.0
Iodine (I ₂)	8.8	15.0
	5.6	-15.0
Methanol (CH ₃ OH)	8.9% vol.	15.0
Nitric Oxide (NO)	65.0	15.0
Nitrogen Dioxide (NO ₂)	59.0	15.0
Nitrogen Trifluoride (NF ₃)	1.9% vol.	15.0
Ozone (O ₃)	45.0	-15.0
Toluene (C ₆ H ₅ CH ₃)	74% vol.	15.0