

RKI Sensor Specification

Ammonia (NH₃)

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

Part Number: ES-23R-NH3
Sensor Application: EAGLE, Fixed Systems
(Current Style)

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 – 75 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
Arsine (AsH ₃)	0.51	- 0.1
Carbon Dioxide (CO ₂)	2500 ppm @ 3 min.	-0.4
	16% vol. @ 20 min.	1.2
Carbon Monoxide (CO)	100.00	0.00
Diborane (B ₂ H ₆)	5.34	0.90
Diethyl Triamine (H ₂ N(CH ₂ CH ₂ NH) ₂ H)	30.00	0.00
Ethylamine ((CH ₃) ₂ NH)	30.00	23.00
Hydrogen (H ₂)	2% vol. @ 3 min.	1.80
	99.9% vol. @ 8 hours	73.20

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	20.00	-10.0
Hydrogen Sulfide (H ₂ S)	33.00	1.60
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1% vol.	1.00
Nitrogen Dioxide (NO ₂)	96.00	-43.7
Phosphine (Ph ₃)	0.59	-0.1
Silane (SiH ₄)	13.90	-0.2
Sulfur Dioxide (SO ₂)	52.00	-17.0