

RKI Sensor Specification

Hydrazine (N₂H₄)

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

Part Number: ES-23E-N₂H₄
Sensor Application: GD-K8A, GD-K7D2

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 4 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T ₉₀ 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)	1% vol	0.9 ppm
Acetylene (C ₂ H ₂)	43	2 ppm
Arsine (AsH ₃)	0.5	2 ppm
Carbon Dioxide (CO ₂)	99.9%	-0.02 ppm
Carbon Monoxide (CO)	300	0.11 ppm
Chlorine (Cl ₂)	10	-0.22 ppm
Diborane (B ₂ H ₆)	20	2 ppm
Disilane (Si ₂ H ₆)	4.4	2 ppm
Ethylene (C ₂ H ₄)	244	2 ppm
Fluorine (F ₂)	11	-2 ppm
Germanium Tetrahydride (GeH ₄)	9	2 ppm
Hydrogen (H ₂)	9.8% vol	2 ppm
Hydrogen Bromide (HBr)	2.8	2 ppm
Hydrogen Chloride (HCl)	2.4	2 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Cyanide (HCN)	15	1.64 ppm
Hydrogen Fluoride (HF)	10	0.65 ppm
Hydrogen Selenide (SeH ₂)	0.41	2 ppm
Hydrogen Sulfide (H ₂ S)	27	2 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1% vol	0.22 ppm
Methanol (CH ₃ OH)	1% vol	0.04 ppm
Nitric Oxide (NO)	9	2 ppm
Nitrogen Dioxide (NO ₂)	14	2 ppm
Ozone (O ₃)	14	-2 ppm
Phosphine (Ph ₃)	0	2 ppm
Silane (SiH ₄)	20	2 ppm
Sulfur Dioxide (SO ₂)	10	2 ppm
Toluene (C ₇ H ₈)	1% vol	2.0 ppm