

RKI Sensor Specification

Silane (SiH₄)

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

Part Number: ES-23DH-SiH₄
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 – 15 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)	1.0% Vol.	0.34 ppm
Ammonia (NH ₃)	250 ppm	0.35 ppm
Arsine (AsH ₃)	5.2 ppm	5.0 ppm
Carbon Dioxide (CO ₂)	99.9% Vol.	0.03 ppm
Carbon Monoxide (CO)	5000 ppm	5.0 ppm
Chlorine (Cl ₂)	29 ppm	-5.0 ppm
Diborane (B ₂ H ₆)	18 ppm	5.0 ppm
Disilane (Si ₂ H ₆)	3.8 ppm	5.0 ppm
Germanium Tetrahydride (GeH ₄)	4.4 ppm	5.0 ppm
Hydrogen (H ₂)	1.0% Vol.	5.0 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	58 ppm	5.0 ppm
Hydrogen Selenide (SeH ₂)	21 ppm	5.0 ppm
Hydrogen Sulfide (H ₂ S)	13 ppm	5.0 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1.0% Vol.	0.43 ppm
Nitrogen (N ₂)	99.9% Vol.	0.01 ppm
Nitric Oxide (NO)	100 ppm	-0.09 ppm
Nitrogen Dioxide (NO ₂)	19 ppm	-5.0 ppm
Phosphine (Ph ₃)	4.1 ppm	5.0 ppm
Sulfur Dioxide (SO ₂)	16 ppm	5.0 ppm