

RKI Sensor Specification

Germane (GeH4)

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

Part Number: ES-23DH-GeH4
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 - 0.8 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T₉₀ Response time (20°C, 2 min. exposure)	30 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.	0.30
Acetylene (C ₂ H ₂)	4.3	0.050
Ammonia (NH ₃)	250	0.27
Arsine (AsH ₃)	0.24	0.20
Carbon Dioxide (CO ₂)	99.8% vol.	0.028
Carbon Monoxide (CO)	220	0.020
Chlorine (Cl ₂)	1.5	-0.20
Diborane (B ₂ H ₆)	0.81	0.20
Disilane (Si ₂ H ₆)	0.18	0.20
Ethanol (C ₂ H ₃ OH)	1.0%	0.03
Fluorinert FX-3300 (C ₈ F ₁₈)	3.7%	0.01
HFE-7100 (C ₄ F ₉ OCH ₃)	22	-0.001
Hydrogen (H ₂)	450	0.20

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	2.6	0.20
Hydrogen Selenide (SeH ₂)	0.92	0.20
Hydrogen Sulfide (H ₂ S)	0.7	0.20
I.P.A. ((CH ₃) ₂ CHOH)	1% vol.	0.38
Methanol (CH ₃ OH)	1% vol.	0.00
Nitric Oxide (NO)	100	-0.07
Nitrogen (N ₂)	99.99	0.01
Nitrogen Dioxide (NO ₂)	0.98	-0.20
Ozone (O ₃)	042	-0.20
Phosphine (Ph ₃)	0.19	0.20
Phosphorous Trifluoride (PF ₃)	1.1	0.20
Silane (SiH ₄)	0.23	0.20
Sulfur Dioxide (SO ₂)	0.83	0.20