

RKI Sensor Specification

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

Diethylamine (C4H11N)

Part Number: ES/ESM/ESU23RV-DEA
Sensor Application: GD-K8A, GD-K7D2, GD-K71D, Eagle, GD-K77D, GD-70D

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement		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
Ammonia (NH ₃)	23 ppm	30 ppm
Arsine (AsH ₃)	0.51 ppm	-0.1 ppm
Carbon Dioxide (CO ₂)	2,500 ppm	-0.5 ppm
Carbon Monoxide (CO)	100 ppm	0.0 ppm
Di-amylamine (CH ₃ (CH ₂) ₄ NH(CH ₂) ₄ CH ₃)	5 ppm	1.3 ppm
Diborane (B ₂ H ₆)	5.34 ppm	1.2 ppm
Diethylenetriamine (NH ₂ CH ₂ CH ₂) ₂ NH	30 ppm	0 ppm
Hydrogen (H ₂)	2% vol	2.3 ppm
Hydrogen (H ₂)	99.9% vol	95.2 ppm
Hydrogen Chloride (HCl)	20 ppm	-13 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Sulfide (H ₂ S)	33 ppm	2.1 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1% vol	1.3 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	9.4% vol	0.7 ppm
Methanol (CH ₃ OH)	1% vol	0 ppm
Nitrogen Dioxide (NO ₂)	96 ppm	- 56.8 ppm
Phosphine (Ph ₃)	0.59 ppm	-0.2 ppm
Silane (SiH ₄)	13.9 ppm	-0.3 ppm
Sulfur Dioxide (SO ₂)	52 ppm	-22.1 ppm
Tri-amylamine (C ₅ H ₁₁) ₃ N	5 ppm	0.7 ppm
Trimethylamine (CH ₃) ₃ N	6 ppm	4.5 ppm
t-butylamine (CH ₃) ₃ CNH ₂	5 ppm	3.5 ppm

Part # Prefix	Applicable Instruments
ES	GD-K8A, GD-K7D2, Eagle
ESM	GD-K71D, GD-K77D
ESU	GD-70D