

RKI Sensor Specification

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

Hydrogen Fluoride (HF)

Part Number: ES-23PX-HF
Sensor Application: EAGLE, Fixed Systems

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 9 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
Acetic Acid (CH ₃ COOH)	30 ppm	9 ppm
Acetone ((CH ₃) ₂ CO)	1 % vol	0 ppm
Ammonia (NH ₃)	25 ppm	-2 ppm
Arsine (AsH ₃)	1 ppm	0 ppm
Carbon Dioxide (CO ₂)	1.6 % vol	3 ppm
Carbon Monoxide (CO)	300 ppm	0 ppm
Carbon Tetrafluoride (CF ₄)	1 % vol	0 ppm
Chlorine (Cl ₂)	2.7 ppm	4.4 ppm
Diborane (B ₂ H ₆)	10 ppm	0 ppm
Disilane (Si ₂ H ₆)	10 ppm	0 ppm
Ethanol (C ₂ H ₅ OH)	1 % vol	0 ppm
Fluorine (F ₂)	5 ppm	4 ppm
Hydrogen (H ₂)	5 % vol	-1 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Bromide (HBr)	10 ppm	0 ppm
Hydrogen Chloride (HCl)	9 ppm	8 ppm
Hydrogen Cyanide (HCN)	10 ppm	0 ppm
Hydrogen Sulfide (H ₂ S)	30 ppm	0 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1 % vol	0 ppm
Methane (CH ₄)	10 % vol	0 ppm
Nitric Oxide (NO)	100 ppm	0 ppm
Nitrogen Dioxide (NO ₂)	7.7 ppm	1 ppm
Nitrogen Trifluoride (NF ₃)	50 ppm	0 ppm
Ozone (O ₃)	5 ppm	2.4 ppm
Phosphine (Ph ₃)	1 ppm	0 ppm
Phosphoric Acid (H ₃ PO ₄)	50 ppm	0.1 ppm
Silane (SiH ₄)	10 ppm	0 ppm