

RKI Sensor Specification

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

Chlorine Trifluoride (ClF₃)

Part Number: ES-K233-ClF₃
Sensor Application: EAGLE, Fixed Systems

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 1 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)	100.0	19.5
Ammonia (NH ₃)	39.4	0.0
Bromine (Br ₂)	1.0	1.2
Carbon Dioxide (CO ₂)	1% vol.	0.0
Carbon Monoxide (CO)	286.6	0.0
Chlorine (Cl ₂)	1.0	1.2
Ethanol (C ₂ H ₅ OH)	10% vol.	0.0
Fluorine (F ₂)	2.0	1.5
Hydrogen (H ₂)	99.9% vol.	0.0
Hydrogen Bromide (HBr)	5.6	0.2
Hydrogen Chloride (HCl)	3.0	2.4
Hydrogen Cyanide (HCN)	20.0	-0.5

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	6.0	5.5
Hydrogen Sulfide (H ₂ S)	32.8	-0.1
I.P.A. ((CH ₃) ₂ CHOH)	3% vol.	0.0
Iodine (I ₂)	1.0	1.0
Methane (CH ₄)	99.9% vol.	0.0
Methanol (CH ₃ OH)	10% vol.	0.0
Nitric Acid (HN0 ₃)	5.0	2.0
Nitrogen Dioxide (NO ₂)	101.0	3.5
Ozone (O ₃)	5.0	4.1
Phosgene (COCl ₂)	1.0	0.0
Phosphine (PH ₃)	1.1	0.0
Sulfur Dioxide (SO ₂)	10.0	2.4