

RKI Sensor Specification

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

Acetic Acid
Part Number: ES-K233-CH3COOH
Sensor Application: GD-K8A, GD-K7D2

| Technical Specifications | | | |
|-----------------------------|---------------------------------|---|---------------------|
| Measuring Principle | Amperometric 3-electrode sensor | Accuracy | +/- 10 % of reading |
| Range of Measurement | 0 – 30 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% vol | 0.0 ppm |
| Ammonia (NH ₃) | 39.4 | 0.0 ppm |
| Arsine (AsH ₃) | 1 | 0.0 ppm |
| Bromine (Br ₂) | 1 | 19 ppm |
| Butane (C ₄ H ₁₀) | 1.0% vol | 0.0 ppm |
| Carbon Dioxide (CO ₂) | 1.0 % vol | 0.0 ppm |
| Carbon Monoxide (CO) | 286.6 | 0.0 ppm |
| Chloroform (CHCl ₃) | 0.69% vol | 0.0 ppm |
| Chlorine (Cl ₂) | 0.8 | 15 ppm |
| Chlorine Trifluoride (ClF ₃) | 1 | 17 ppm |
| Diborane (B ₂ H ₆) | 10 | 0.0 ppm |
| Disilane (Si ₂ H ₆) | 10 | 0.0 ppm |
| Ethanol (C ₂ H ₅ OH) | 10% vol | 0.0 ppm |
| Fluorine (F ₂) | 2.0 | 24 ppm |
| Flon 14 (CF ₄) | 1% vol | 0.0 ppm |
| Flon 16 (C ₂ F ₆) | 1% vol | 0.0 ppm |
| Hydrogen (H ₂) | 99.9% vol | 0.0 ppm |
| Hydrogen Bromide (HBr) | 5.6 | 3.8 ppm |

| Gas | PPM Gas Applied | Reading |
|---|-----------------|----------|
| Hydrogen Chloride (HCl) | 3.0 | 38 ppm |
| Hydrogen Cyanide (HCN) | 20 | -7.5 ppm |
| Hydrogen Fluoride (HF) | 6 | 86 ppm |
| Hydrogen Sulfide (H ₂ S) | 32.8 | -1.9 ppm |
| Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH) | 3.0% vol | 0.0 ppm |
| Iodine (I ₂) | 1 | 15 ppm |
| Methane (CH ₄) | 99.9% vol | 0.0 ppm |
| Methanol (CH ₃ OH) | 10% vol | 0.0 ppm |
| Nitric Acid (HNO ₃) | 5.0 | 32 ppm |
| Nitric Oxide (NO) | 102.4 | 0.0 ppm |
| Nitrogen Dioxide (NO ₂) | 101 | 56 ppm |
| Nitrogen Trifluoride (NF ₃) | 1.0 | 0.0 ppm |
| Ozone (O ₃) | 5 | 66 ppm |
| Phosgene (COCl ₂) | 1 | 0.0 ppm |
| Phosphine (Ph ₃) | 1.1 | 0.0 pm |
| Silane (SiH ₄) | 10 | 0.0 ppm |
| Sulfur Dioxide (SO ₂) | 10 | 37.5 ppm |