

# RKI Sensor Specification

**Features:** Fast warm-up time  
 Good zero stability  
 Quick response time  
 Sensitive to all Flammable gases & vapors

## LEL/PPM Hydrocarbon Sensor

**Part Number:** 62-0125RK  
**Sensor Application:** Eagle

Technical Specifications			
<b>Measuring Principle</b>	Catalytic Oxidation	<b>Accuracy</b>	+/- 5% of reading or +/- 2% LEL (whichever is greater)
<b>Range of Measurement</b>	0 – 100% LEL / 0-50,000 ppm	<b>Repeatability</b>	+/- 2% of reading
<b>Resolution</b>	1% of full scale	<b>T<sub>90</sub> Response time (20°C, 2 min. exposure)</b>	< 30 seconds

Operating Conditions			
Temperature Range	-20°C to +50°C	<b>Life Expectancy</b>	2 -5 Years
Humidity Range	0-100% RH, Non Condensing	<b>Warranty</b>	1 Year

## Relative Response Information

The response factors below are based on calibration with methane. These factors should be used for rough approximation only. For best accuracy, calibrate with target gas if practical.

To calculate the approximate LEL level for an alternate gas, multiply gas reading by appropriate conversion factor.

Gas	Conversion Factor
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	1.89
Benzene (C <sub>6</sub> H <sub>6</sub> )	2.85
Butyl acrylate	**
Butyl acetate	4.34
2 - Butyl alcohol	4.49
1- Butyl alcohol	6.28
Cyclohexane	2.77
Cumene	5.89
Ethylene Dichloride	5.55
Ethyl Alcohol	2.04
Ethyl Chloride	1.72
Ethyl Acrylate	3.57
Hexane	2.14
Hydrogen (H <sub>2</sub> )	1.10
Isobutane (C <sub>4</sub> H <sub>10</sub> )	1.79

Gas	Conversion Factor
Isopropanol	2.19
Methane (CH <sub>4</sub> )	1.0
Methanol (CH <sub>3</sub> OH)	1.72
Methyl Acetate	1.68
Methyl Acrylate	1.92
Methyl Ethyl Keytone	2.94
Methyl Isobutyl Keytone	2.94
Nonane	4.28
Pentane (C <sub>5</sub> H <sub>12</sub> )	1.92
Propane	1.59
Styrene	4.09
Toluene (C <sub>7</sub> H <sub>8</sub> )	2.00
Xylene (C <sub>8</sub> H <sub>10</sub> )	2.94
Vinyl Acetate Monomer	3.55

**Acetylene 1.5**

\*- Vapor pressure too low for significant LEL reading.

\*\* - Testing above performed with sensor current at 148mA