

Hydrogen Fluoride

SensoriC HF 3E 10 SE



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FEATURES

Amperometric 3 electrode sensor cell
Very stable zero reading
Highly sensitive
Monitors for acid gases

TYPICAL APPLICATIONS

TLV-monitoring, leakage detection
Portable & fixed point applications

PART NUMBER INFORMATION

MINI	1336-932-30009
SENSORIC CLASSIC	1336-932-30069
CTL4 series adaptation	1336-932-30049
CTL 7 series adaptation	1336-932-30079

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Rev. 09/2006

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TECHNICAL SPECIFICATIONS

Measuring Range	0–10 ppm
Sensitivity Range	300 nA/ppm ± 100 nA/ppm
Zero Current at 20°C	<± 30 nA
Resolution at 20°C	<0.1 ppm
Bias Potential	0 mV
Linearity	<10% full scale
Response Time at 20°C	
t50	< 30 s calculated from 4 min. exposure time
t90	< 90 s calculated from 4 min. exposure time
Long Term Sensitivity Drift	<10% per 6 months
Operation Conditions	
Temperature Range	-20°C to +40°C
Humidity Range	15–90% r.H., non–condensing
Effect of Humidity	abrupt change of r.H. might cause a zero reading transient
Sensor Life Expectancy	> 18 months
Warranty	12 months

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OUTPUT vs. TEMPERATURE:

Due to the nature of the gas the temperature dependence of the sensor as a function of the environmental temperature conditions is strongly related to the experimental conditions such as relative humidity.

SensoriC is currently revising this set of data via cross calibration with HCl.

Based on the current experience with this sensor the temperature dependence

- a) *on the zero reading is < 0.5 ppm*
- b) *on the sensitivity is < 20% of the sensitivity at 20°C*

within the specified temperature range.

Please contact our Technical Support Department (tech@sensoric.de) for further details.

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Cross Sensitivities at 20°C

Gas	Concentration	Reading [ppm]
Acetic Acid	100 ppm	yes / no data
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	1 ppm	0.7
Hydrocarbons	% range	0
Hydrogen	3000 ppm	< 1
Hydrogen Chloride	10 ppm	6
Sulfur Dioxide	20 ppm	16 ¹

1) Short gas exposure in minute range.

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