

# Hydrogen Cyanide

**HCN 2E 30 F**

# Product Data Sheet

## HCN 2E 30 F

### FEATURES

Amperometric 2 electrode sensor cell  
Very selective  
Fast response  
High resolution  
Fixed organic gel electrolyte

### TYPICAL APPLICATIONS

TLV-monitoring, leakage detection  
portable & fixed point applications  
Gold mining

### PART NUMBER INFORMATION

MINI	1639-221-30009
CTL 4 series adaptation	1639-221-30049

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### TECHNICAL SPECIFICATIONS

Measuring Range	0 – 30 ppm
Sensitivity Range	30 nA/ ppm $\pm$ 15 nA/ ppm
Zero Current at 20 °C	< $\pm$ 5 nA
Resolution at 20 °C	< 0.2 ppm
Bias Potential	not required
Linearity	< 5% full scale
Response Time at 20 °C	
t50	< 20 s calculated from 2 min. exposure time
t90	< 30 s calculated from 2 min. exposure time
Long Term Sensitivity Drift	< 5% per month
Operation Conditions	
Temperature Range	-40 °C to +40 °C
Humidity Range	15 - 90% r.H., non-condensing
Effect of Humidity	no effects
Sensor Life Expectancy	> 18 months
Warranty	12 months

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### CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Ammonia	100 ppm	0
Arsine	0.2 ppm	1
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	1 ppm	0
Diborane	0.25 ppm	0.4
Hydrocarbons	% ppm	0
Hydrochloric Acid	5 ppm	0 <sup>1</sup>
Hydrogen	10000 ppm	0
Hydrogen Sulfide	10 ppm	0 <sup>1</sup>
Nitric Oxide	100 ppm	0
Nitrogen	100 %	0
Nitrogen Dioxide	10 ppm	-19
Ozone	0.25 ppm	0
Sulfur Dioxide	20 ppm	0

1) Short gas exposure in minute range; after filter saturation: H<sub>2</sub>S approx.40 ppm reading, HCl approx. 5 ppm;

#### Notes:

1. Interference factors may differ from sensor to sensor and with life time. It is not advisable to calibrate with interference gases.
2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

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## **Safety Note**

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

## **Attention**

Use of this range of sensors requires complete understanding of the instructions. Before using this range, please carefully read 'Application Notes'.

For further assistance on sensor selection and use, please contact a member of the Technical Sales team.