# Hydrogen Cyanide HCN 3E 30 F

## **HCN 3E 30 F**

#### **FEATURES**

Amperometric 3 electrode sensor cell Very stable zero reading Very selective Highly sensitive Fixed organic gel electrolyte

#### TYPICAL APPLICATIONS

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

#### PART NUMBER INFORMATION

MINI 1639-231-30009 4 series adaptation 1639-231-30049 7 series adaptation 1639-231-30079

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#### **TECHNICAL SPECIFICATIONS**

Measuring Range  $0-30 \text{ ppm}^{1)}$ 

Sensitivity Range 60 nA/ ppm ± 15 nA/ ppm

Zero Current at  $20\,^{\circ}\text{C}$   $<\pm\,15\,\text{nA}$ Resolution at  $20\,^{\circ}\text{C}$   $<0.2\,\text{ppm}$ Bias Potential  $0\,\text{mV}$ 

Linearity < 5% full scale

Response Time at 20 ℃

< 25 s calculated from 2 min. exposure time</li>
 < 50 s calculated from 2 min. exposure time</li>

Long Term Sensitivity Drift < 5% per month

**Operation Conditions** 

Temperature Range -40 °C to +40 °C

Humidity Range 15–95% r.H., non–condensing

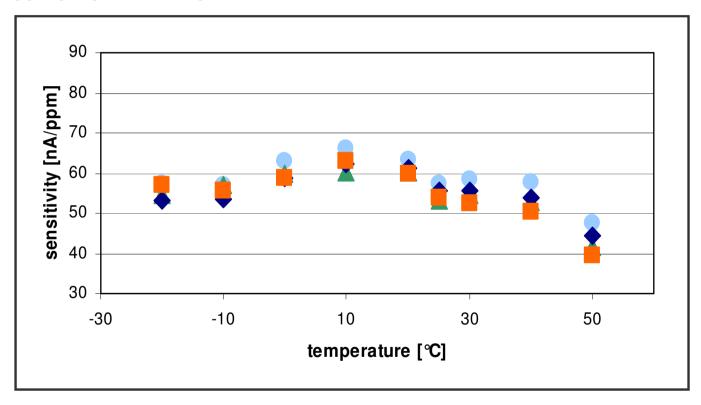
Effect of Humidity no effects

Sensor Life Expectancy > 18 months
Warranty 12 months

<sup>1)</sup> 0 - 100 ppm during short gas exposure in minute range.

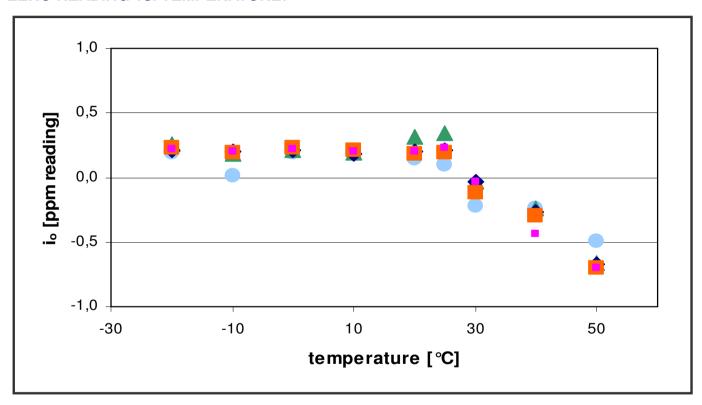
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#### **OUTPUT vs. TEMPERATURE:**



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#### **ZERO READING vs. TEMPERATURE:**



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#### CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Hydrocarbons	% range	0
Hydrogen	10000 ppm	0
Nitric Oxide	100 ppm	-5
Nitrogen Dioxide	10 ppm	-7
Hydrogen Sulfide	20 ppm	01

<sup>1)</sup> Short gas exposure in minute range; after filter saturation: approx. 40 ppm reading.

#### Notes:

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

## **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 relevant 'Application Notes'.

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