# **Hydrogen Cyanide**

Sensoric HCN 2E 30 F



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#### **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 |
|-------------------------|----------------|
| SENSORIC CLASSIC        | 1639-221-30069 |
| CTL 4 series adaptation | 1639-221-30049 |
| CTL 7 series adaptation | 1639-221-30079 |



### **HCN 2E 30 F**

#### **TECHNICAL SPECIFICATIONS**

Measuring Range 0-30 ppm

Sensitivity Range 30 nA/ ppm ± 15 nA/ ppm

Zero Current at  $20\,^{\circ}\text{C}$  <  $\pm\,5$  nA Resolution at  $20\,^{\circ}\text{C}$  < 0.2 ppm not required Linearity < 5% full scale

Response Time at 20 ℃

< 20 s calculated from 2 min. exposure time</li>
 < 30 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 - 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 ℃**

| 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         | 01            |
| Hydrogen          | 10000 ppm     | 0             |
| Hydrogen Sulfide  | 10 ppm        | 01            |
| Nitric Oxide      | 100 ppm       | 0             |
| Nitrogen          | 100 %         | 0             |
| Nitrogen Dioxide  | 10 ppm        | -19           |
| Ozone             | 0.25 ppm      | 0             |
| Sulfur Dioxide    | 20 ppm        | 0             |

<sup>1)</sup> Short gas exposure in minute range; after filter saturation: H2S approx.40 ppm reading, HCI approx. 5 ppm;

#### 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 the Sensoric range sensors requires complete understanding of the instructions. Before using Sensoric range sensors please carefully read 'Application Notes' which can be found at www.citytech.com under the heading 'Support' -> 'Application Notes' -> 'Sensoric'

Product Safety Data Sheets (PSDS) can be obtained at <a href="www.citytech.com">www.citytech.com</a> under the heading 'Support' -> 'Product Safety Datasheets'

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

