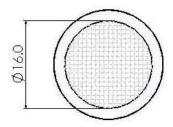
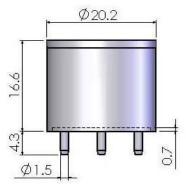
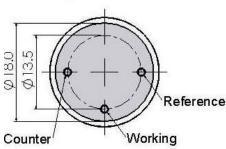
4-HCN-50 HYDROGEN CYANIDE SENSOR 0-50PPM HCN



Outline Dimensions







All dimensions are in millimetres mm. All tolerances are +/- 0.2mm.

Note: PCB sockets are recommended for the sensor pin connection. Soldering or using glue with the sensor should be avoided and will invalidate warranty.

All performance specifications are based upon the following environment conditions: +20°C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure).

SPECIFICATION - 4 SERIES

Operating Principle: Electrochemical, 3-electrode cell

Gas Detected: Hydrogen Cyanide HCN

Measurement Range: 0 - 50 ppm

Maximum Overload: 100 ppm

Resolution: 0.2 ppm

Expected Operating Life: 2 years in air

Temperature Range: -20°C to +50°C

Humidity Range (non-condensing): 15 – 90% RH

Response Time (T90): \leq 120 seconds

Long Term Sensitivity Drift: < 2% signal per month

Linearity at Standard Range: Linear

Sensitivity: $0.10 + - 0.02 \mu \text{A/ppm}$

Baseline (20°C): $< +/- 0.2 \mu A$

Baseline Drift (-20°C to 50°C): 0 to -1 ppm equivalent

Pressure range: 90 to 110 kPa

Bias Potential: 0 mV

Warranty Period: 12 months from date of despatch

Storage Life: 6 months in original sealed container

Storage Temperature: 0°C to +20°C

Orientation Sensitivity: None

Weight (approx): 5 g

Part Number: 2112B0731400



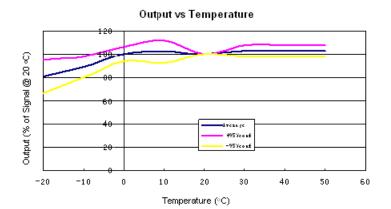
4-HCN-50 HYDROGEN CYANIDE SENSOR 0-50PPM HCN

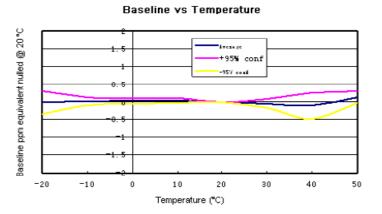
CROSS SENSITIVITY DATA

Gas	Concentration (ppm)	Output Signal (ppm HCN equivalent)
Carbon Monoxide	300	<u>0</u>
Sulphur Dioxide	5	1.5
Nitrogen Dioxide	5	-3
Hydrogen Sulphide	15	30
Nitric Oxide	35	-1
Ethylene	100	0

Notes: Calibration with cross-sensitivity gas is not recommended. The cross-sensitivity may fluctuate between +/- 30% and may differ from batch to batch and within the sensor's lifetime. The cross-sensitivities are including but not limited to the above gases. The sensor may also respond to other gases.

TEMPERATURE DEPENDENCE





Notes: Sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important to avoid exposure to high concentrations of solvent during storage, fitting into instrumentation and operation. When using sensors on PCBs, degreasing agents should be used prior to the sensor being fitted.

By the nature of the technology used, any sensor can potentially fail to meet specification without warning. Euro-Gas makes every effort to ensure reliability of all sensors but where life safety is a performance requirement of the product and, where practical, Euro-Gas recommends that all gas sensors and instruments using sensors are checked for response to gas before use.

The data contained in this document is believed to be accurate and reliable. The data given is for guidance only. Euro-Gas Management Services Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this datasheet or the information contained in it. Customers should test the sensors under their own conditions to ensure that the sensors are suitable for their own requirements and in accordance with the plans and circumstances of the specific project and any standards/regulations pertaining to the country in which the sensors will be utilised. Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time. This datasheet is not intended to form the basis of a contract and in the interest of product improvement, Euro-Gas reserves the right to alter design features and specifications without notice.

