

MEMBRAPOR SPECIFICATION SHEET

HCI/C-20



Hydrogen Chloride Gas Sensor in Compact Housing

MEASUREMENT

Operation Principle	3-Electrode Electrochemical
Nominal Range	0 – 20 ppm
Maximum Overload	200 ppm
Inboard Filter	–
Output Signal	450 ± 150 nA/ppm
Resolution (Electronics dependent)	< 0.2 ppm
T80 Response Time	< 30 sec
Typical Baseline Range (pure air, 20°C)	-0.3 ppm to 0.1 ppm
Maximum Zero Shift (+20°C to +40°C)	N.D.
Repeatability	< 2 % of signal
Output Linearity	Linear
Gain	–

ELECTRICAL

Rec. Load Resistor	10 - 20 Ohm
Bias (V_Sens-V_Ref)	Not allowed
Conformity to RoHS directive	RoHS Compliance

ENVIRONMENTAL

Relative Humidity Range	15 % to 90 % R.H. non-condensing
Temperature Range	-40 °C to 50 °C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	N.D.
Humidity Effect	none

LIFETIME

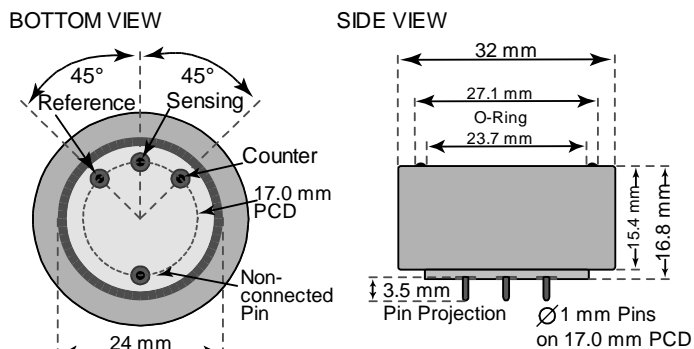
Expected Operation Life	2 years in air
Expected Long Term Output Drift in air	< 2 % per month
Filter Life	–
Storage Life	6 months in container
Rec. Storage Temperature	5 °C – 20 °C
Warranty Period	12 months from date of dispatch

Performance data conditions: 20 °C, 50% RH, 1013 mbar

IMPORTANT NOTE

1) abrupt changes in rel. humidity causes a short term transient signal

Compact-Size Outline Dimensions



± 0.10 mm

MECHANICAL

Weight	13 g
Position Sensitivity	None

APPLICATIONS

Discontinuous Measurement
Safety and Environmental Control

CROSS-SENSITIVITY DATA

The table below does not claim to be complete. Interfering gases should not be used for calibration.

Interfering Gas	Conc. ppm	Reading ppm
HBr	20	10
Cl ₂	20	-0.4
CO	1000	0
C ₂ H ₄	100	0
Alc	30	0.2
H ₂		0
H ₂ S	20	31
NO	25	0
NO ₂	20	-4
SO ₂	100	0

REV.: 06/2017

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Page 1 of 2

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HCl/C-20

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TEMPERATURE DEPENDENCE

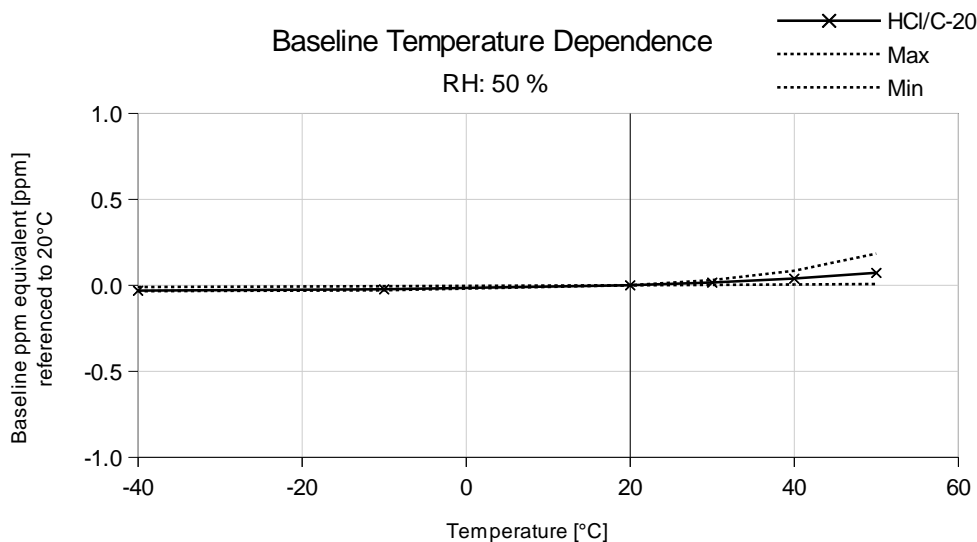


Figure 2: The shift in baseline shown in ppm referenced to 20 °C and a relative humidity of 50%.

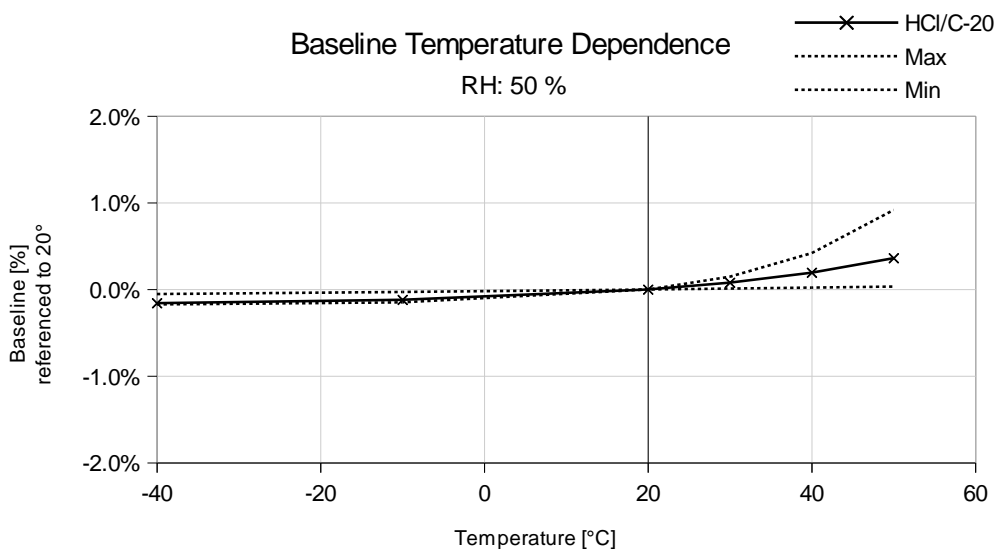


Figure 3: The shift in baseline expressed as percentage of the measurement range referenced to 20 °C and a R.H. of 50%.

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