

# Ammonia

## SensoriC NH3 3E 1000



# Product Data Sheet

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### FEATURES

Amperometric 3 electrode sensor cell  
Fixed organic gel electrolyte  
No CO2 interference  
0 volt bias operation

### TYPICAL APPLICATIONS

TLV-monitoring, leakage detection  
Fixed point applications in cold storages & refrigeration plants  
No background concentrations of ammonia \*

### PART NUMBER INFORMATION

SENSORIC CLASSIC	1854-031-03069
CTL 4 series adaptation	1854-031-04049
CTL 7 series adaptation	1854-031-07079

Note:

\* Background concentrations of ammonia might shorten life time of sensor .

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### TECHNICAL SPECIFICATIONS

Measuring Range		0–1000 ppm	
Sensitivity Range		6 nA/ppm ± 3 nA/ppm	
Zero Current at 20°C		<± 40 nA	
Resolution at 20°C		<15 ppm	
Bias Potential	0 mV		
Linearity		<5% full scale	
Response Time at 20°C			
t50		<20 s	calculated from 5 min. exposure time
t90		<120 s	calculated from 5 min. exposure time
Long Term Sensitivity Drift		<10% per 6 months	
Operation Conditions			
Temperature Range		-40°C to +40°C	
Humidity Range		15–90% r.H, non–condensing	
Effect of Humidity		an abrupt change of r.H. will cause a short term drift of zero reading	
Sensor Life Expectancy		> 18 months in air	
Warranty		12 months	

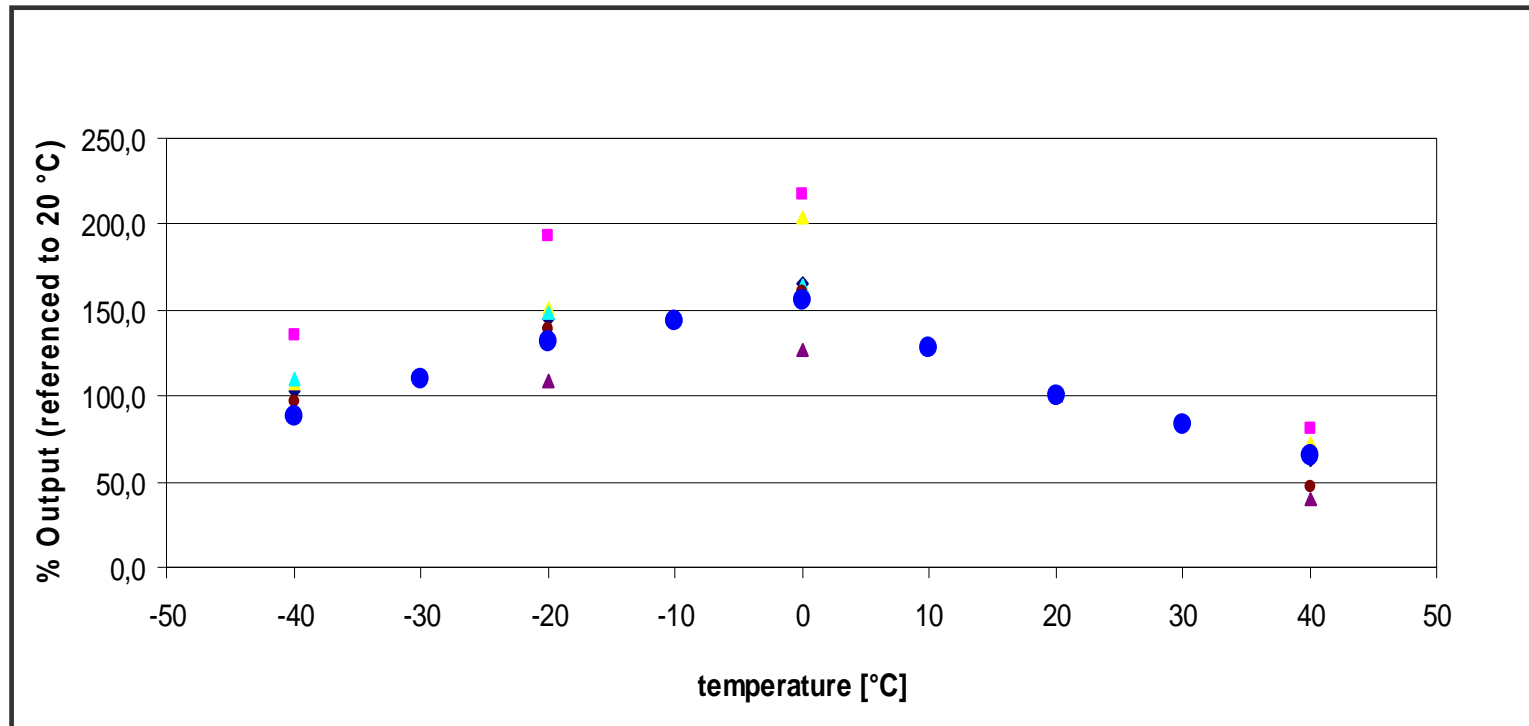
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### OUTPUT vs. TEMPERATURE:



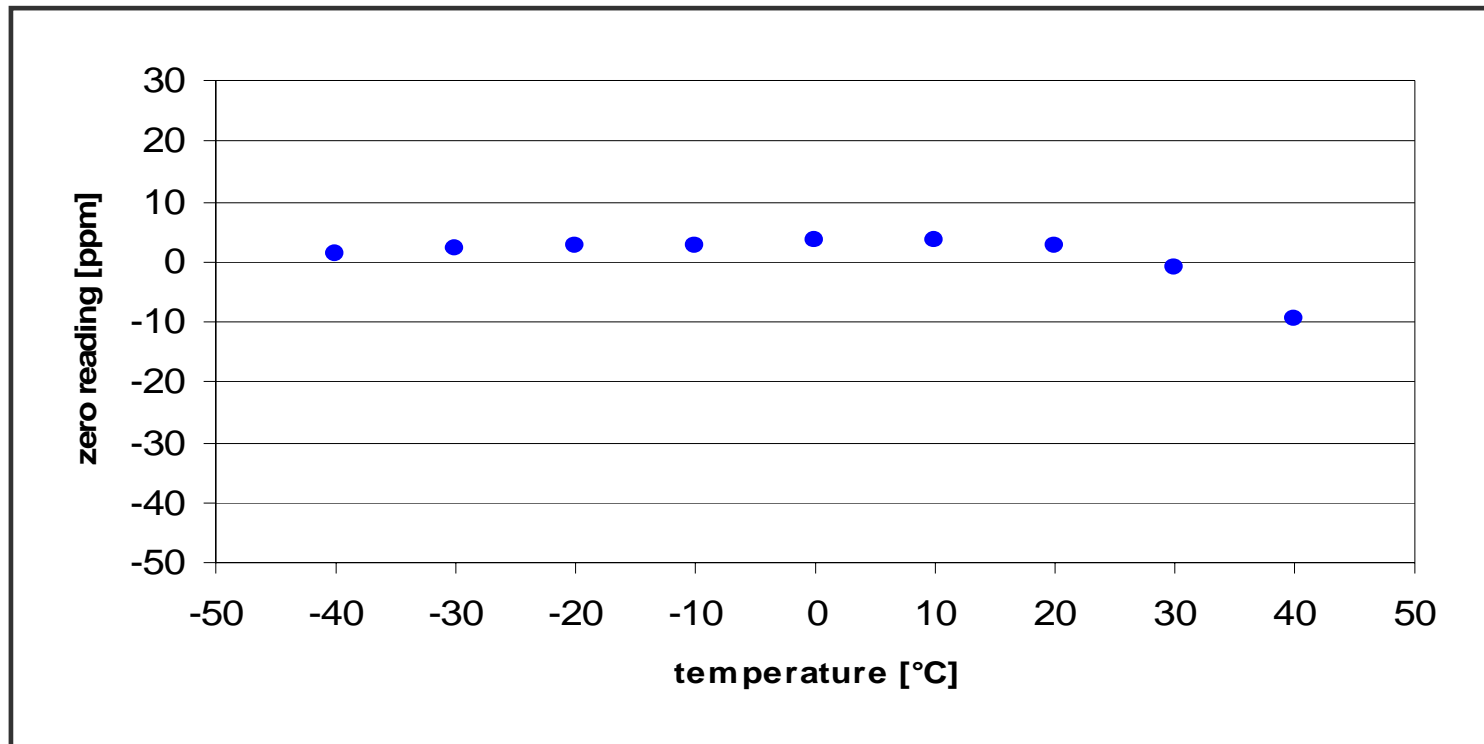
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### ZERO READING vs. TEMPERATURE:



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### CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	yes / n.d.
Amines		yes <sup>1</sup>
Arsine	0.2 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	95
Chlorine	5 ppm	0
unsat. Hydrocarbons	% range	yes / n.d.
Hydrogen	3000 ppm	3000
Hydrogen Sulfide	20 ppm	40
Hydrogen Chloride	10 ppm	0
Nitrogen Dioxide	10 ppm	0
Phosphine	300 ppm	0
Sulfur Dioxide	20 ppm	5

1) Please contact our Technical Marketing Department for more details

Notes:

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

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