MEMBRAPOR





Page 1 of 2

Alc/M-200

Alcohol Gas Sensor in Miniature Housing

Measurement

Operation Principle	3-Electrode Electrochemical	
Nominal Range	0 - 200 ppm	
Maximum Overload	400 ppm	
Inboard Filter	-	
Output Signal with		
Ethanol	1000 ± 400 nA/ppm	
Methanol	1100 ± 400 nA/ppm	
Resolution (Electronics dependent)	< 0.2 ppm	
T90 Response Time (Ethanol)	< 30 s	
Typical Baseline Range (pure air, 20°C)	0.5 ppm to 2.5 ppm ¹	
Maximum Zero Shift (+20°C to +40°C)	N.D.	
Repeatibility	< 2 % of signal	
Output Linearity	Linear	
Gain	-	

Electrical

Rec. Load Resistor	10 Ohm
Bias (V_Sens-V_Ref)	+300 mV
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

REV.: 04.2019 Phone: +41 43 311 72 00 Membrapor AG Fax: +41 43 311 72 01 Birkenweg 2

CH-8304 Wallisellen E-Mail: info@membrapor.ch Website: www.membrapor.ch Switzerland

Performance data: 20 - 25°C, 50% RH, 1013 mbar

Important Note: Fresh sensors with bias need 24-72 h for stabilization of the baseline.







Miniature-Size Outline Dimensions

Sensing

Reference

Counter

13.5 mm

PCD

PCD

Side View

20.5 mm

20 mm

15.5 mm

Pin Projection

(1.5 mm Pins on 13.5 mm PCD)

± 0.10 mm

Lifetime

Expected Operation Life	2 years in air
Expected Long Term Output Drift in air	< 2 % signal loss 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

Mechanical

Weight	5.5 g
Position Sensitivity	None

Applications

Continuous Air Quality Monitoring Safety and Process Control

Cross Sensitivity Data

The table below does not claim to be complete. Interfering gases should not be used for calibration. Please contact Membrapor AG for further support regarding cross sensitivites.

Interfering Gas	Concentration [ppm]	Reading [ppm]
CO	100	60
I be a strong to all I broken a sub-suc-		

Unsaturated Hydrocarbons

REV.: 04.2019 Page 2 of 2

Phone: +41 43 311 72 00 Membrapor AG
Fax: +41 43 311 72 01 Birkenweg 2
E-Mail: info@membrapor.ch CH-8304 Wallisellen
Website: www.membrapor.ch Switzerland

Performance data: 20 – 25°C, 50% RH, 1013 mbar

For further information about usage of Membrapor sensors, see application note <u>MEM1</u>. The data contained in this document is for guidance only. Membrapor AG accepts no liability for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.