MEMBRAPOR

Specification Sheet

Ethyne, Acetylene Gas Sensor C2H2/CF-2000

C2H2 Gas Sensor in Compact Housing

Applications

- Discontinuous Measurement
- Chemical Synthesis
- Welding and Cutting Processes

For further information about usage of Membrapor sensors, see application note MEM1.

Measurement

Operation Principle	3-Electrode Electrochemical
Nominal Range	0 - 2000 ppm
Maximum Overload	10000 ppm
Inboard Filter	-
Output Signal	50 ± 10 nA/ppm
Resolution (Electronics dependent)	< 1.0 ppm
T80 Response Time	< 60 s
Typical Baseline Range (pure air, 20°C)	-2.0 ppm to 8.0 ppm
Maximum Zero Shift (+20°C to +40°C)	20 ppm
Repeatability	< 2 % of signal
Output Linearity	Linear
Gain (Only applies to 4-Electrode sensors)	-

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Electrical

Rec. Load Resistor	10 - 33 Ω
Bias (V_Sens-V_Ref)	not recommended
Conformity to RoHS directive	RoHS Compliance

Environmental

Relative Humidity Range	15 % to 90 % RH non-condensing
Temperature Range	-40 °C to 50 °C
Pressure Range	Atmospheric
Pressure Coefficient	N.D.
Humidity Effect	None

Lifetime

Expected Operation Life	3-5 years in air, application based, see MEM1
Expected Long Term Output Drift	< 15 % signal loss per year
Filter Life	N.D.
Storage Life	6 months in container
Recommended Storage Temperature	-10°C - 30°C
Warranty Period	3 years from date of dispatch

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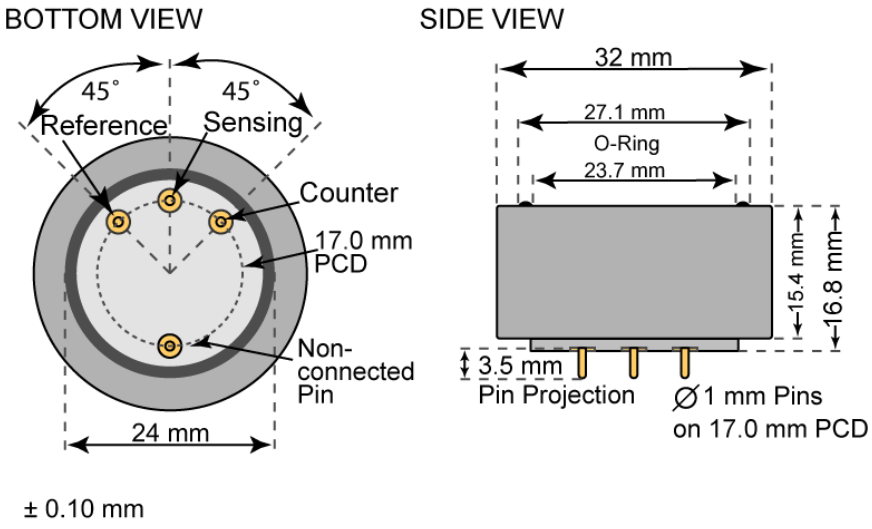
Compact-Size Outline Dimensions



± 0.10 mm

Mechanical

Weight	13 g
Orientation	Any
Housing material	Polycarbonate

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Cross Sensitivity Data

The table below does not claim to be complete. We recommend using the target gas for calibration purposes. Using surrogate (interfering) gases can result in inaccuracies in the final calibration. Please contact Membrapor AG for further support regarding cross sensitivities.

Interfering Gas	Concentration [ppm]	Reading [ppm]
C_2H_4	1000	~ 608
CO	1000	353
H_2	1000	~ 180
SO_2	20	5.9

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