

## SPECIFICATION SHEET FOR HIGH SENSITIVE CO SENSOR TYPE CO/MF-200

### PERFORMANCE CHARACTERISTICS

|   |  |
|---|--|
| Nominal Range                           | 0 – 200 ppm                                    |
| Maximum Overload                        | 500 ppm  |
| Expected Operation Life                 | 2 years in air                                 |
| Output Signal                           | 500 ± 100 nA/ppm                               |
| Inboard Filter                          | To remove H <sub>2</sub> S and SO <sub>2</sub> |
| Resolution                              | 0.15 ppm                                       |
| Temperature Range                       | - 20 °C to + 50 °C                             |
| Pressure Range                          | Atmospheric ± 10 %                             |
| Pressure Coefficient                    | No data  |
| t <sub>90</sub> Response Time           | < 25 sec                                       |
| Relative Humidity Range                 | 15 % to 90 % R.H.<br>non-condensing            |
| Typical Baseline Range (pure air, 20°C) | - 0.5 ppm to + 0.7 ppm                         |
| Maximum Zero Shift (+20°C to +40 °C)    | - 1.1 ppm equivalent                           |
| Expected Long Term Output Drift         | < 2 % signal loss/month                        |
| Recommended Load Resistor               | 10 Ohm   |
| Bias Voltage                            | Not required                                   |
| Repeatability                           | < 2 % of signal                                |
| Output Linearity                        | < 5 % full scale                               |

### CROSS-SENSITIVITY DATA

| Interfering Gas  | Cross-Sensitivity (%) |
|------------------|-----------------------|
| H <sub>2</sub> S | 0                     |
| SO <sub>2</sub>  | 0                     |
| NO               | 0                     |
| NO <sub>2</sub>  | 0                     |
| H <sub>2</sub>   | < 60                  |

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

### APPLICATIONS

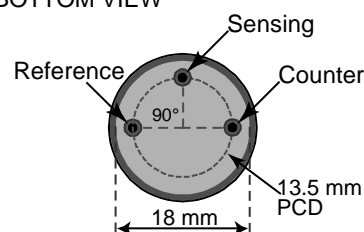
Safety and Environmental Control  
For Portable Gas Detectors

### PHYSICAL CHARACTERISTICS

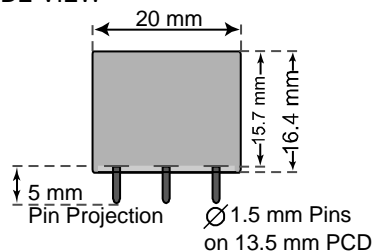
|                                 |                                 |
|---------------------------------|---------------------------------|
| Weight                          | ~ 5.4 g                         |
| Position Sensitivity            | None                            |
| Storage Life                    | Six months in container         |
| Recommended Storage Temperature | 5 °C – 20 °C                    |
| Warranty Period                 | 12 months from date of dispatch |

### Miniature-Size Outline Dimensions

BOTTOM VIEW



SIDE VIEW

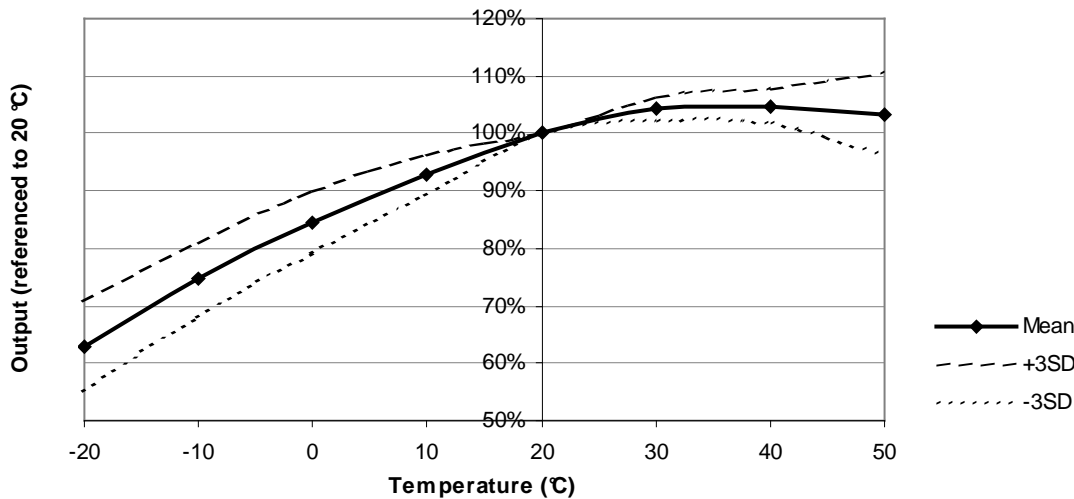


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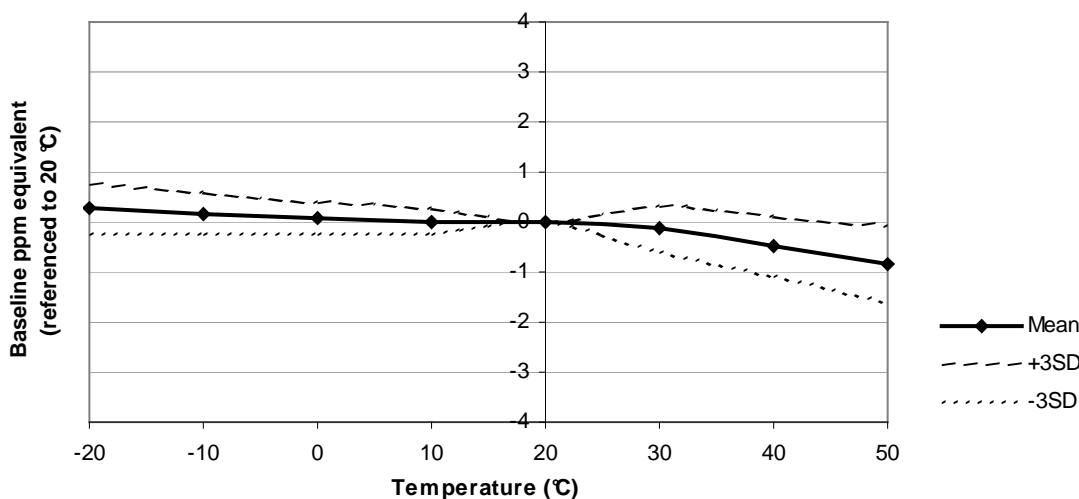
**TEMPERATURE DEPENDENCE**

The output of an electrochemical sensor varies with temperature. The graphs below show the variation in output with temperature for this type of sensor. The results are shown in the graphs as a mean for a batch of sensors, along with confidence intervals corresponding to  $\pm 3$  times the standard deviation. The sensitivity dependence is expressed as a percentage of the signal at 20 °C. The shift in baseline is shown in ppm referenced to 20 °C.

**Sensitivity Temperature Dependence**



**Baseline Temperature Dependence**



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 the information contained within it. The data is given for guidance only. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.