Ozone

SensoriC O3 3E 1 F



SensoriC O3 3E 1 F

FEATURES

Amperometric 3 electrode sensor cell Long life time High reliability Fast response Fixed organic gel electrolyte

TYPICAL APPLICATIONS

Environmental monitoring Indoor Air Quality, water treatment plants

PART NUMBER INFORMATION

| MINI | 1531-231-30009 |
|-------------------------|----------------|
| SENSORIC CLASSIC | 1531-231-30069 |
| CTL 4 series adaptation | 1531-231-30049 |
| CTL 7 series adaptation | 1531-231-30079 |



SensoriC O3 3E 1 F

TECHNICAL SPECIFICATIONS

Measuring Range 0–1 ppm

Sensitivity Range 450 +/- 150 nA/ppm (negative signal)

Zero Current at 20° C $< \pm 10 \text{ nA}$ Resolution at 20° C < 0.03 ppmBias Potential 0 mV

Linearity < 10% full scale

Response Time at 20°C

t50 < 15 s calculated from 3 min. exposure time¹⁾
t90 < 60 s calculated from 3 min. exposure time¹⁾

Long Term Sensitivity Drift < 5% per month ²⁾

Operation Conditions

Temperature Range -20°C to +40°C

Humidity Range 15–90% r.H., non–condensing

Effect of Humidity abrupt changes will cause a short term drift

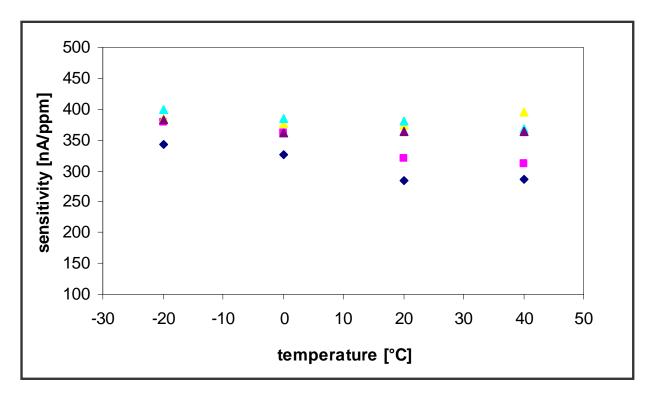
Sensor Life Expectancy > 18 months
Warranty 12 months

- 1) At approx. 200 ccm/ min. (tolerance range to t₉₀: 30 to 60 sec.; depend on air velocity; minimum gas flow 5 l/h)
- 2) At 20°C and 30-50% r.H.; Sensitivity might increase over life time depending on application; high air flow conditions might effect life time



SensoriC O3 3E 1 F

OUTPUT vs. TEMPERATURE:



ZERO READING vs. TEMPERATURE:

no effect



SensoriC O₃ 3E₁ F

CROSS SENSITIVITIES AT 20°C

| Gas | Concentration | Reading [ppm] |
|------------------|---------------|--------------------|
| Bromine, Iodine | | yes; n/d |
| Carbon Dioxide | 5000 ppm | 0 |
| Carbon Monoxide | 100 ppm | 0 |
| Chlorine | 1 ppm | 1.2 |
| Chlorine Dioxide | 1 ppm | 1.5 |
| Hydrazine | 3 ppm | -3 |
| Hydrogen | 3000 ppm | 0 |
| Hydrogen Sulfide | 20 ppm | -1.6 ¹⁾ |
| Nitrogen | 100 % | 0 |
| Nitrogen Dioxide | 10 ppm | 6 |

¹⁾ Continuous exposure at ppm level over more than 30 min. might blind the sensor.

Notes:

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

