



EC4-100-ETO Ethylene Oxide Electrochemical Sensor

PERFORMANCE (measured using Carbon Monoxide)

Range 0 - 100 ppm
 Sensitivity..... 440 - 1080nA/ppm ETO
 Zero in air at 20 °C..... -200 to +2500 nA
 Resolution..... 1 ppm ETO
 Linearitylinear across range
 Response time, t90..... <45 s
 Long-term output drift.....<2% signal/month
 Warranty 2 years

OPERATING CONDITIONS

Temperature range -20 to +50 °C
 Operating humidity..... 15 - 90% RH (non-condensing)
 Pressure range 90 - 110 kPa (nominal)
 Operating circuit..... see Electrochemical Toxic Sensor Application Note
 Applied potential +300 mV
 Storage life..... 6 months in original packaging (0 - 25 °C)

PHYSICAL CHARACTERISTICS

Label coloursilver
 Weight..... 5 g approx.
 Dimensionssee outline

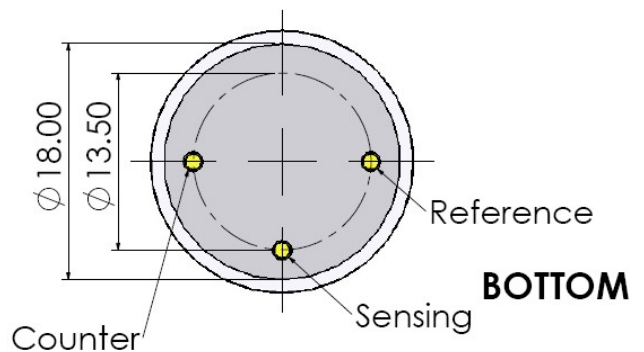
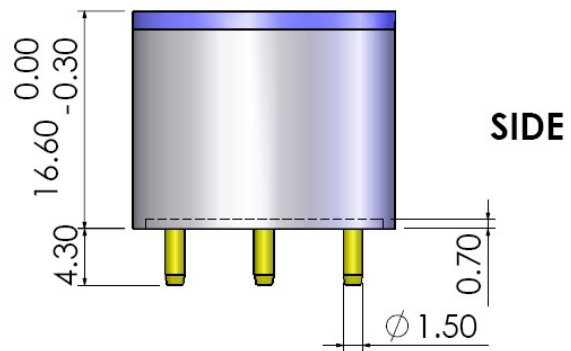
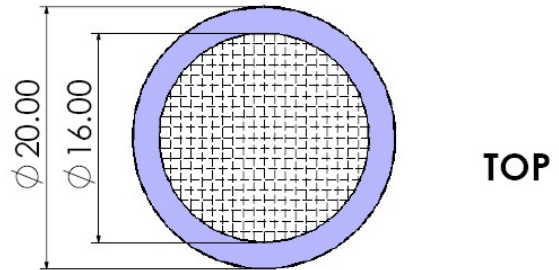
This device is designed to be RoHS compliant.

CROSS-SENSITIVITY DATA

| GAS | Concentration ppm | Sensor Response (As ppm CO) |
|-----------------|-------------------|-----------------------------|
| Carbon Monoxide | 100 | 100 |
| Ethylene Oxide | 100 | 1056 |
| Ethanol | 100 | 325 |
| Methanol | 100 | 800 |
| Propan-1-Ol | 100 | 207 |
| Butan-1-ene | 100 | 279 |
| 1,3 Butadiene | 100 | 915 |
| Ethene | 100 | 342 |
| Propene | 100 | 310 |
| Vinyl Chloride | 100 | 113 |
| Vinyl Acetate | 100 | 511 |
| Formic Acid | 100 | 167 |
| Formaldehyde | 100 | 715 |
| Acrylonitrile | 100 | 113 |

Note: This table is for reference only. Calibration should be carried out with the actual gas at a known concentration.

OUTLINE



All dimensions in mm.
 All tolerances ±0.15mm unless otherwise stated.

Important Note

Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.

Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the e2v website.

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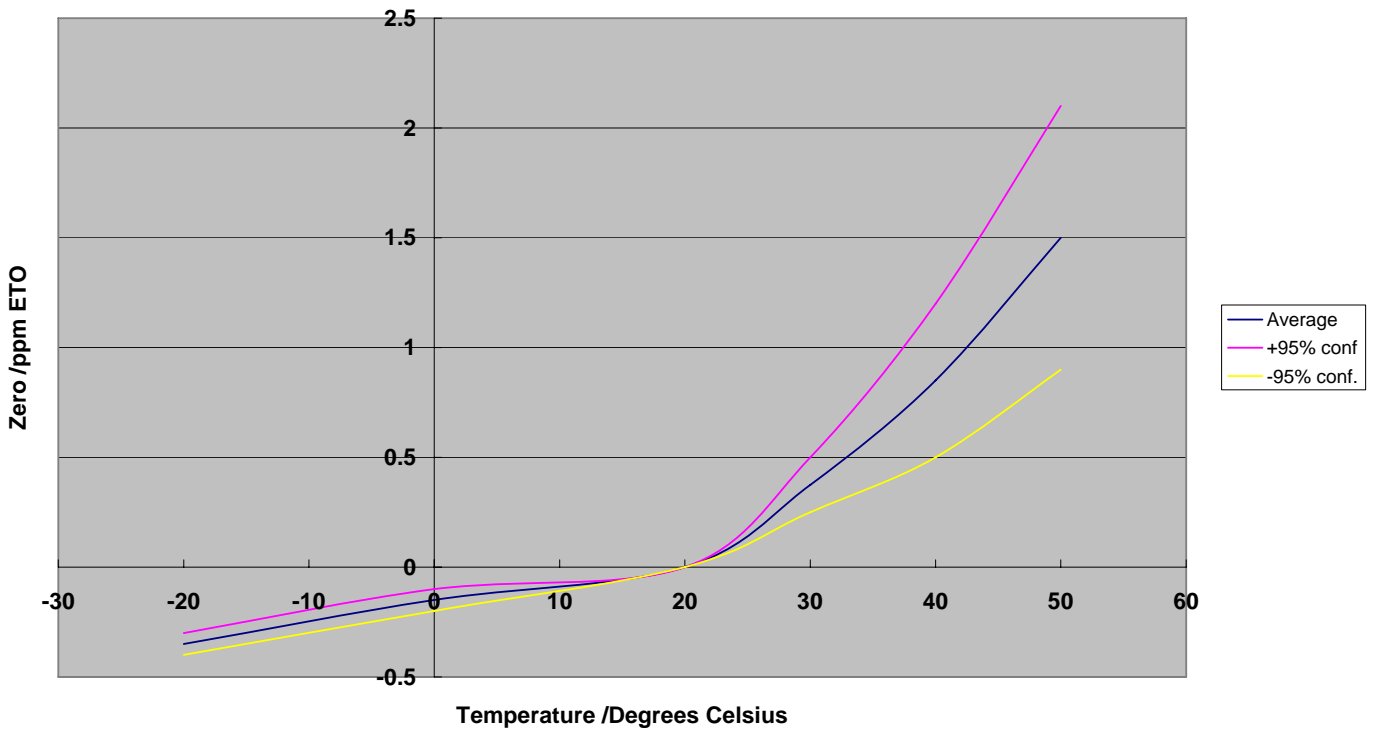
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TEMPERATURE DEPENDENCE

EC4-100-ETO Graph of Zero vs Temperature



EC4-100-ETO Graph of Sensitivity vs Temperature

