

Combustible Gas Sensor 0 – 100% LEL

Performance Characteristics

Part Number	CLL-6012-400
Gas Detected	Most combustible gases and vapors
Nominal Range	0-100%LEL
Sensitivity Range	31±9 mV/%CH ₄
T90 Response Time	< 20 seconds (methane)
Linear to	0-75%LEL
Long Term Sensitivity Drift	<±5%FSS/month
Long Term Zero Drift	<±5%LEL _{methane} /month
Warranty Period	12 months

Operation Conditions

Temperature Range	-20°C to 50°C
Operating Humidity	15-90%RH non-condensing
Operating Voltage	4.25V D.C.
Operating Current	75±8 mA
Storage	no Si,Pb, Sn and S etc.vapors allowed

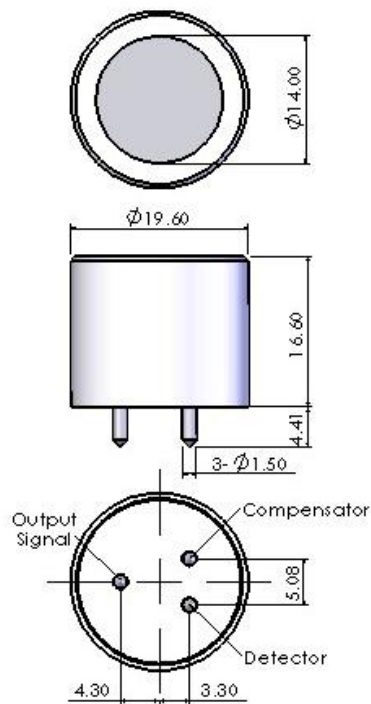
Enhanced Features

Excellent long term stability
Excellent H₂S poison resistance

Physical Characteristics

Weight	20 g (approx)
Orientation Sensitivity	None

Outline Dimensions



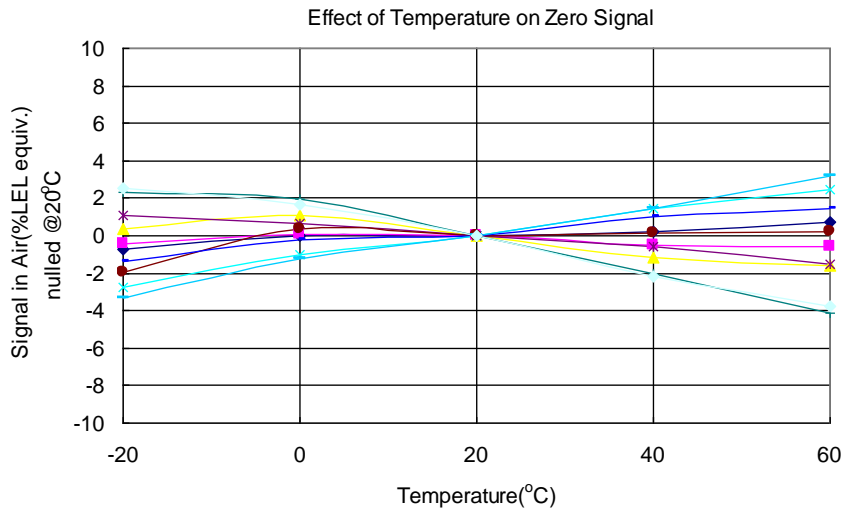
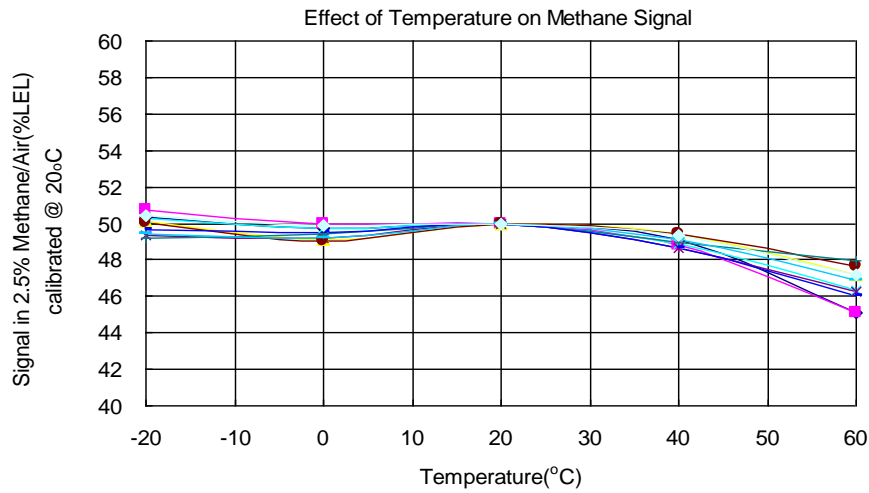
All dimensions in mm
 All tolerances ±0.15mm
 unless otherwise stated

Relative Sensitivity

Gas/Vapor	LEL (%vol)	Relative Sensitivity
Methane	5.0	100
Propane	2.1	63
n-Butane	1.9	63
n-Pentane	1.5	48
n-Hexane	1.1	40
n-Octane	1.0	34
Gasoline	1.3	42
Hydrogen	4.0	83
Acetone	2.5	59
Ethanol	3.3	59
m-Xylene	1.1	29
Toluene	1.1	33
Benzene	1.2	43
Styrene	1.1	29

Note: Relative Sensitivities are listed for guidance only. Calibration must be made using the gas under investigation for most accurate consideration.

Temperature Dependence



Note: Temperature dependence data is supplied for guidance only.

Product Approval

- **UL**
Class I, Division I, Groups A, B, C & D Hazardous Locations
Certificate No: E187829
- **ATEX(94/9/EC)**
II 2G Ex d IIC
Certificate No: DEMKO 03 ATEX 0311958U
Certificate No: 03 ATEX 0311958U
- **IECEX**
Ex d IIC
Certificate No: IECEX UL 07.0001U
Ex ia IIC T4 Ga or Ex ia I Ma
Certificate No: IECEX KEM 08.0030U

Notes:

1. All performance specifications are based upon the following environment conditions: 20 °C, 50% relative humidity and 1 atmospheric pressure (100 kPa or ambient pressure).
2. Recommend calibration with target gas. If calibration with a cross sensitivity gas, we cannot ensure the accuracy of calibration and measurement.
3. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
4. The cross sensitivities are including but not limited to the above gases. It may also respond to other gases.