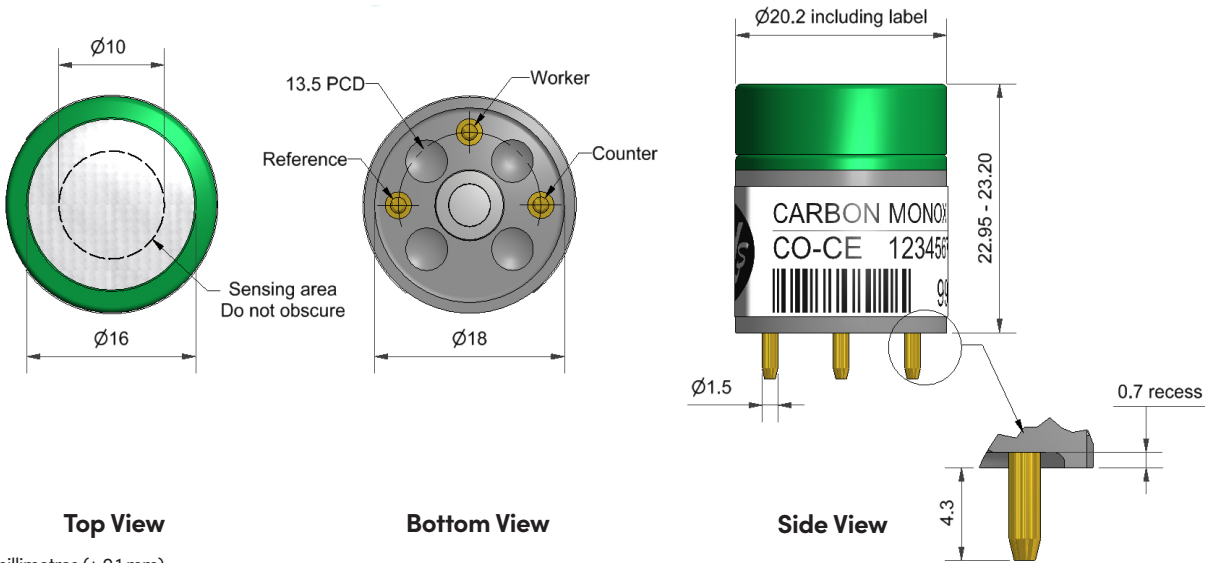


CO-CE Carbon Monoxide Sensor – High Concentration



Dimensions are in millimetres (± 0.1 mm).

Performance	Sensitivity	nA/ppm in 2,000ppm CO		10 to 25
	Response time	t90 (s) from zero to 2,000ppm CO		< 75
	Zero current	ppm equivalent in zero air		< ± 20
	Resolution	RMS noise (ppm equivalent)		< 5
	Range	ppm CO limit of performance warranty		10,000
	Linearity	ppm error at full scale, linear at zero and 2,000ppm CO		< 500
	Overgas limit	maximum ppm for stable response to gas pulse		100,000
Lifetime	Zero drift	ppm equivalent change/year in lab air		< 1
	Sensitivity drift	% change/year in lab air, monthly test		< 4
	Operating life	months until 80% original signal (24-month warranted)		> 24
Environmental	Sensitivity @ -20°C	% (output @ -20°C/output @ 20°C) @ 400ppm CO		70 to 90
	Sensitivity @ 50°C	% (output @ 50°C/output @ 20°C) @ 400ppm CO		102 to 112
	Zero @ -20°C	ppm equivalent change from 20°C		< ± 3
	Zero @ 50°C	ppm equivalent change from 20°C		< ± 5
Cross Sensitivity	Filter capacity	ppm-hrs	H ₂ S	4,000,000
	Filter capacity	ppm-hrs	NO ₂	10,000,000
	Filter capacity	ppm-hrs	NO	2,000,000
	Filter capacity	ppm-hrs	SO ₂	5,000,000
	H ₂ S sensitivity	% measured gas @ 20ppm	H ₂ S	< 0.1
	NO ₂ sensitivity	% measured gas @ 10ppm	NO ₂	< 0.1
	NO sensitivity	% measured gas @ 50ppm	NO	< 0.1
	SO ₂ sensitivity	% measured gas @ 20ppm	SO ₂	< 0.1
	Cl ₂ sensitivity	% measured gas @ 10ppm	Cl ₂	< 0.1
	H ₂ sensitivity	% measured gas @ 400ppm	H ₂ at 20°C	< 45
	C ₂ H ₄ sensitivity	% measured gas @ 400ppm	C ₂ H ₄	< 2
	NH ₃ sensitivity	% measured gas @ 20ppm	NH ₃	< 0.1
	Key Specifications	Temperature range	°C	
Pressure range		kPa		80 to 120
Humidity range		% rh continuous		15 to 90
Storage period		months @ 3 to 20°C (stored in sealed pot)		6
Load resistor		Ω (recommended)		10 to 47
Weight		g		< 8

Figure 1 Sensitivity Temperature Dependence

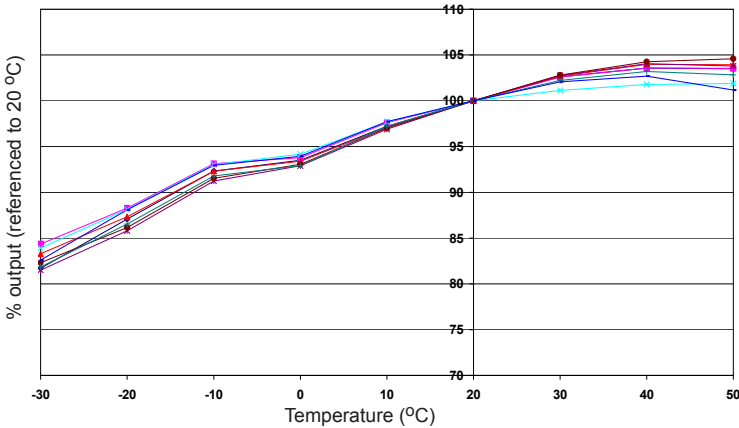


Figure 1 shows the variation in sensitivity caused by changes in temperature.
This data is taken from a typical batch of sensors.

Figure 2 Zero Temperature Dependence

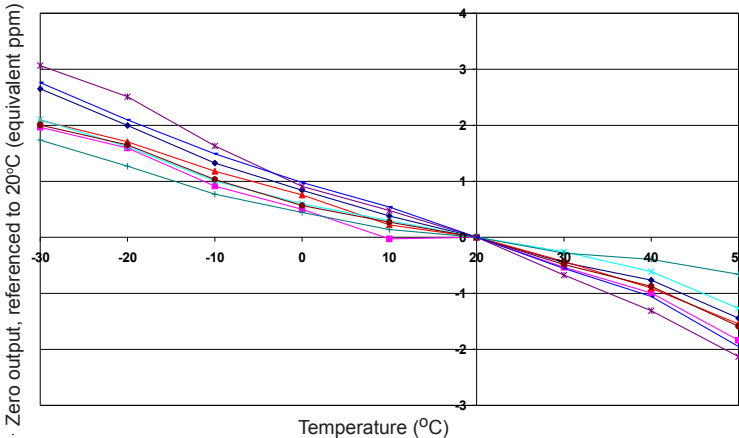


Figure 2 shows the variation in zero output caused by changes in temperature, expressed as ppm gas equivalent, referenced to zero at 20 °C.
This data is taken from a typical batch of sensors and shows repeatability.

Figure 3 Response to 10% Volume CO

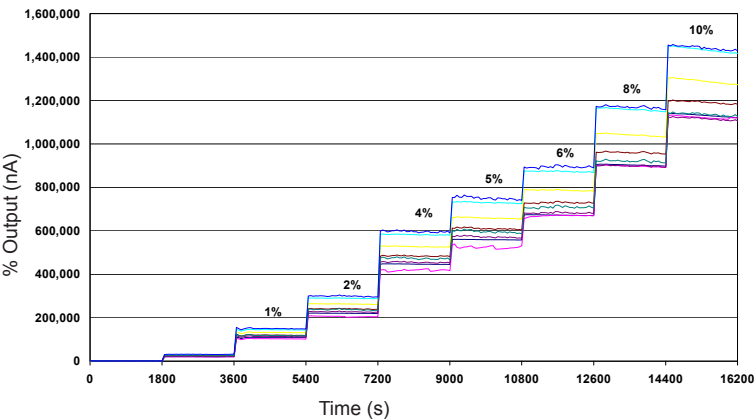


Figure 3 shows the non-linear response to step changes in CO concentrations from 10% CO to 0% CO.
This data is taken from a typical batch of sensors and shows repeatability.