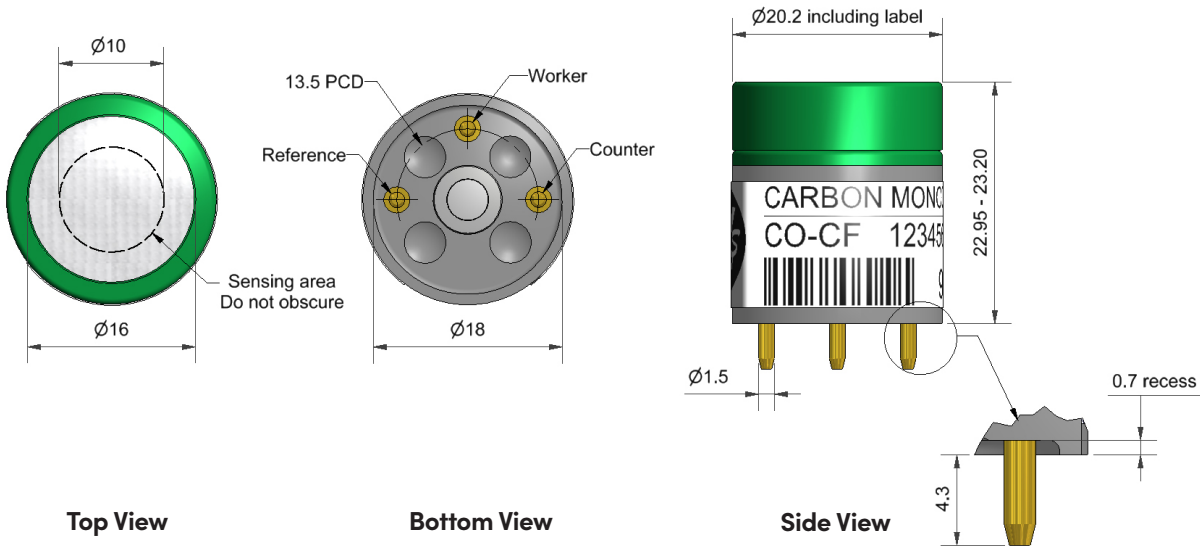


CO-CF Carbon Monoxide Sensor



Dimensions are in millimetres (± 0.1 mm) unless otherwise stated.

Performance	Sensitivity	nA/ppm in 400ppm CO	55 to 90	
	Response time	t90 (s) from zero to 400ppm CO	< 30	
	Zero current	ppm equivalent in zero air	< - 4 to + 2	
	Resolution	RMS noise (ppm equivalent)	< 0.5	
	Range	ppm CO limit of performance warranty	5,000	
	Linearity	ppm CO error at full scale, linear at zero, 1000ppm CO	< ± 30	
	Overgas limit	maximum ppm for stable response to gas pulse	20,000	
Lifetime	Zero drift	ppm equivalent change/year in lab air	< 0.2	
	Sensitivity drift	% change/year in lab air, monthly test	< 8	
	Operating life	months until 80% original signal (24-month warranted)	> 24	
Environmental	Sensitivity @ -20°C	% (output @ -20°C/output @ 20°C) @ 400ppm CO	63 to 85	
	Sensitivity @ 50°C	% (output @ 50°C/output @ 20°C) @ 400ppm CO	102 to 115	
	Zero @ -20°C	ppm equivalent change from 20°C	< ± 3	
	Zero @ 50°C	ppm equivalent change from 20°C	< ± 8	
Cross Sensitivity	Filter capacity	ppm-hrs	H <sub>2</sub> S	250,000
	Filter capacity	ppm-hrs	NO <sub>2</sub>	600,000
	Filter capacity	ppm-hrs	NO	400,000
	Filter capacity	ppm-hrs	SO <sub>2</sub>	300,000
	H <sub>2</sub> S sensitivity	% measured gas @ 20ppm	H <sub>2</sub> S	< 0.1
	NO <sub>2</sub> sensitivity	% measured gas @ 10ppm	NO <sub>2</sub>	< 0.1
	Cl <sub>2</sub> sensitivity	% measured gas @ 10ppm	Cl <sub>2</sub>	< 0.1
	NO sensitivity	% measured gas @ 50ppm	NO	< 0.1
	SO <sub>2</sub> sensitivity	% measured gas @ 20ppm	SO <sub>2</sub>	< 0.1
	H <sub>2</sub> sensitivity	% measured gas @ 400ppm	H <sub>2</sub> at 20°C	< 45
	C <sub>2</sub> H <sub>4</sub> sensitivity	% measured gas @ 400ppm	C <sub>2</sub> H <sub>4</sub>	< 2
	NH <sub>3</sub> sensitivity	% measured gas @ 20ppm	NH <sub>3</sub>	< 0.1
Key Specifications	Temperature range	°C	-30 to 50	
	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

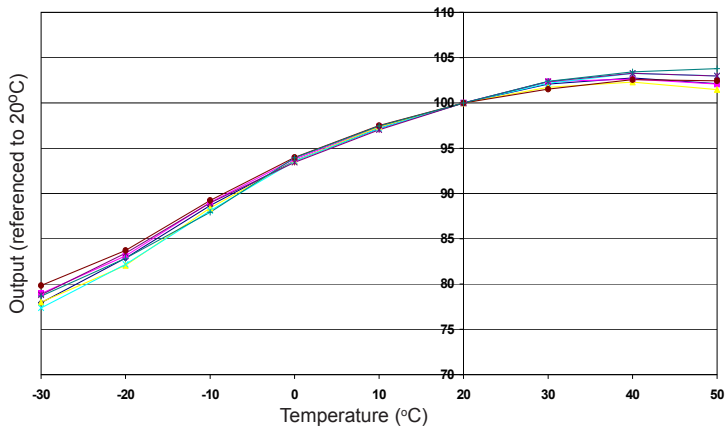


Figure 1 shows the variation in sensitivity caused by changes in temperature.  
This data is taken from a typical batch of sensors.

Figure 2 Zero Temperature Dependence

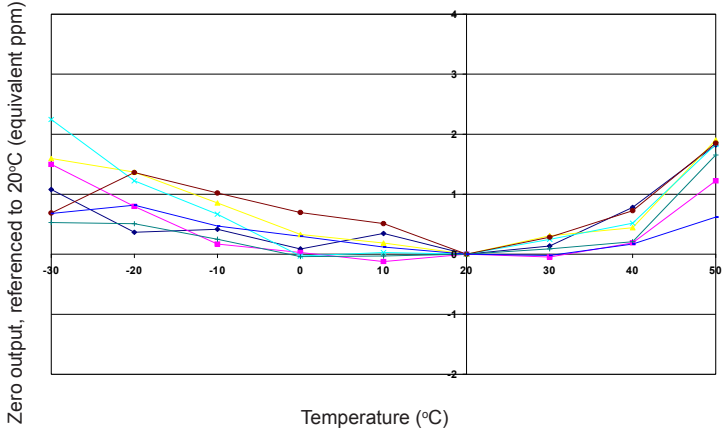


Figure 2 shows the variation in zero output caused by changes in temperature, expressed as ppm gas equivalent, referenced to zero at 20°C.  
This data is taken from a typical batch of sensors.

Figure 3 Response to Exposure to 2% CO

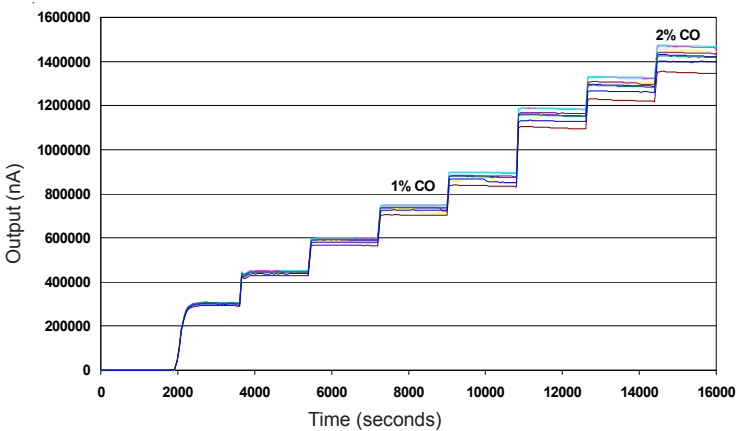


Figure 3 shows the excellent response to step changes in CO concentrations from zero to 2% CO by volume.  
This data is taken from a typical batch of sensors.

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