

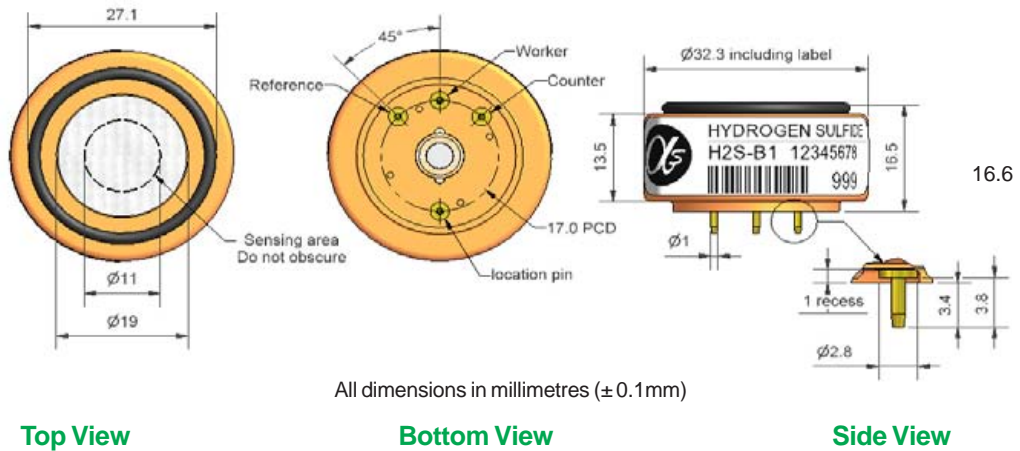


H2S-B1 Hydrogen Sulfide Sensor



PATENTED

Figure 1 H2S-B1 Schematic Diagram



PERFORMANCE			
	Sensitivity	nA/ppm in 20ppm H ₂ S	
Response time	t ₉₀ (s) from zero to 20ppm H ₂ S		< 35
Zero current	ppm equivalent in zero air		< ± 0.2
Resolution	RMS noise (ppm equivalent)		< 0.1
Range	ppm H ₂ S limit of performance warranty		200
Linearity	ppm error at full scale, linear at zero and 20ppm H ₂ S		1 to -8
Overtgas range	maximum ppm for stable response to gas pulse		500

LIFETIME				
	Zero drift	ppm equivalent change/year in lab air		< 0.05
	Sensitivity drift	% change/year in lab air, monthly test		< 2
Operating life	months until 80% original signal (24 month warranted)		> 24	

ENVIRONMENTAL				
	Sensitivity @ -20°C	% (output @ -20°C/output @ 20°C) @ 20ppm		83 to 93
	Sensitivity @ 50°C	% (output @ 50°C/output @ 20°C) @ 20ppm		102 to 110
	Zero @ -20°C	ppm equivalent change from 20°C		< ± 1
Zero @ 50°C	ppm equivalent change from 20°C		< ± 1	

CROSS SENSITIVITY				
	SO ₂ sensitivity	% measured gas @ 20ppm		< 18
	NO sensitivity	% measured gas @ 50ppm		< 6
	NO ₂ sensitivity	% measured gas @ 10ppm		< -30
	Cl ₂ sensitivity	% measured gas @ 10ppm		< -25
	H ₂ sensitivity	% measured gas @ 400ppm		< 1
	C ₂ H ₄ sensitivity	% measured gas @ 400ppm		< 0.8
	CO sensitivity	% measured gas @ 400ppm		< 4
NH ₃ sensitivity	% measured gas @ 400ppm		< 0.1	

KEY SPECIFICATIONS				
	Temperature range	°C		-30 to 50
	Pressure range	kPa		80 to 120
	Humidity range	% rh		15 to 90
	Storage period	months @ 3 to 20°C (stored in sealed pot)		6
Weight	g		< 13	

NOTE: all sensors are tested at ambient environmental conditions, with 10 ohm load resistor, unless otherwise stated. As applications of use are outside our control, the information provided is given without legal responsibility. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.