Sensepoint

Honeywell





The Sensepoint range of flammable, toxic and Oxygen gas detectors offer users a high quality, low cost solution to their industrial gas monitoring needs.

Sensepoint



Fit For Purpose

- Flammable, toxic and Oxygen versions available
- High performance, low cost
- Suitable for new and retro fit applications

Proven Sensor Technology

- Surecell[™] electrochemical sensors
- Poison resistant catalytic bead
- Fast and reliable
- Typical 2 to 5 years operational life

ATEX/IECEx Certified

- Complies with the latest standards
- Hazardous area approval and performance
- IP65/67 for use in harsh environments

Easy to Use

- Factory set operation
- Simple to replace
- Minimal training required

Range of Accessories

- Weatherproof cap
- Flow adaptor
- Duct mounting kitCollecting cone

The Sensepoint range of flammable, toxic and Oxygen gas detectors offer users a high quality, low cost solution to their industrial gas monitoring needs. Installation in potentially explosive atmospheres is made by the use of a suitable Ex d or Ex e approved junction box. The industry standard outputs from Sensepoint are connected to either a choice of Honeywell Analytics' controllers or 3rd party DCS/ PLC systems. Both flammable and toxic versions are certified to the latest ATEX/ IECEx safety and performance standards.



The flammable detector is available in either % LEL or PPM detection range versions and provides an industry standard mV bridge output. Typical life expectancy is greater than 5 years, after which the detector is simply replaced with a new one.

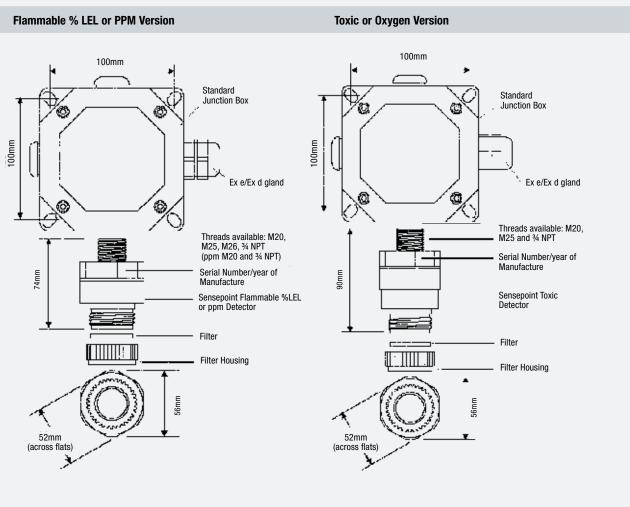
The toxic detectors are supplied pre calibrated for easy installation and provide an industry standard 2 wire 4-20mA loop output. User connections are Ex d, while front end Intrinsic Safety (IS) design allows for easy exchange of the replaceable sensor while powered. IS design also removes the need for a sinter enabling very fast speed of response and detection of 'sticky' gases such as Chlorine and Ammonia.

Sensepoint has proven its suitability across a wide range of demanding applications by delivering high performance and reliability at an affordable cost.

Installation Details



Dimensions



Sensepoint flammable and toxic gas detectors are installed using suitable Ex d or Ex e junction boxes. The standard junction box available from Honeywell Analytics includes an earth continuity plate for added RFI protection. The detectors have a choice of mounting thread size to match local preferences.

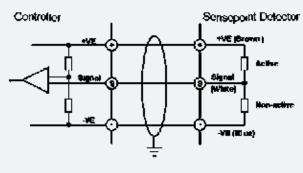
The Sensepoint range of flammable and toxic detectors are designed for use with a wide range of controllers available from Honeywell Analytics or with 3rd party control equipment accepting their industry standard output signals.

Installation Details

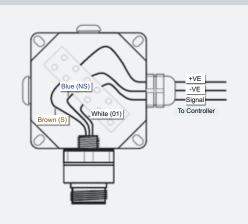


Electrical Connections

Flammable % LEL Version



3 Wire mV Bridge Circuit



Cable Screen

Scre

+VE Signal To Controller

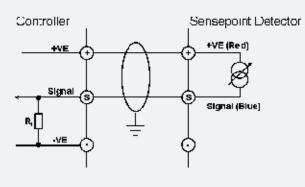
+VE

-VE

Signal To Controller

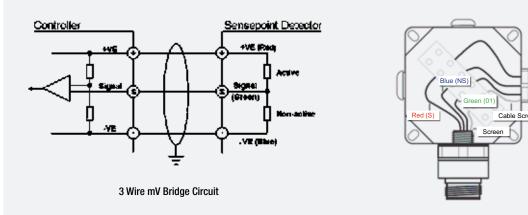
Typical Terminal Connections

Toxic or Oxygen Version



2 Wire 4-20mA (Sink)

Flammable PPM Version



Technical Specification



Gas & Range	Flammable 0-100% LEL	Flammable PPM (Typically 0-10% LEL)	Hydrogen Sulphide (H ₂ S) 20/50/100ppm	Carbon Monoxide (CO) 100/200/500ppm	Ammonia (NH ₃) 50/1000ppm	Chlorine (Cl ₂) 5/15ppm	0xygen (0 ₂) 25% V / V	Hydrogen (H ₂) 1000/10000ppm	Sulfur Dioxide (SO ₂) 15/50ppm	Nitric Oxide (NO) 100ppm	Nitrogen Dioxide (NO ₂) 10ppm	
Operating Temp	-40 to +80°C1	-30 to +65°C	-25 to +50°C	-20 to +50°C	-20 to +40°C	-20 to +50°C			-15 to +40°C			
Operating Humidity				Continuous: 20 to	90% RH (non-con	densing). Intermitte	ent: 10 to 99% RI	H (non-condensing)				
Storage Conditions	0 to 25°C; 3	0 to 70% RH	0 to 25°C; 30 to 70% RH									
Operating Pressure		90 to 110kPa										
Warm-up Time	< 10 minutes < 20 minutes			< 3 minutes		< 5 minutes		< 3 minutes		12 hours	1 hour	
Response Time												
T20			< 6 secs	< 5 secs	-	< 10 secs	< 3 secs	-	-	< 3 secs	< 15 secs	
T50	< 5	Secs	< 15 secs	< 12 secs	< 10 secs	< 20 secs	< 5 secs	< 10 secs	< 10 secs	< 5 secs	< 30 secs	
Т90	< 10) secs	< 40 secs	< 30 secs	< 65 secs	< 105 secs	< 10 secs	< 45 secs	< 90 secs	< 30 secs	< 60 secs	
Supply	200mA; 0.7	W maximum	18 to 30VDC; 0.9W maximum									
Signal Output	mV I	bridge	Loop powered 4-20mA									
Linearity	< 5% fsd or ±	10% of reading					< 5% fsd					
Operating Life	5 years (typical)		2 years	s (typical)	18 month	18 months (typical) 1 year (typical		18 months (typical)				
Storage Life	Typically, over 5 years when in original sealed packaging		6 months.									
Stability (zero)												
with time*	< ±3%	5 fsd / yr					$<\pm2\%$ fsd / yr					
with temperature**	$<\pm1\%~{\rm fsd^2}$	$< \pm 3\%$ fsd	< ±	5% fsd	$<\pm6\%$ fsd	$< \pm 2\%$ fsd		$< \pm 2\%$ fsd	$<\pm5\%$ fsd			
with humidity	< ±1	% fsd	$<\pm10\%$ fsd	$<\pm2\%$ fsd	$<\pm10\%$ fsd	$< \pm 2\%$ fsd		$< \pm 2\%$ fsd	< ±10% fsd			
Stability (span)												
with time*	$<\pm3\%$ fsd / yr		$<\pm2\%$ fsd / yr	$<\pm4\%$ fsd / yr	$<\pm20\%$ fsd / yr	< 10% fsd / yr	$<\pm20\%$ fsd / yr		$<\pm2\%$ fsd / yr			
with temperature***	$< \pm 3\%$ fsd	$< \pm 8\%$ fsd	< ±25% fsd	$< \pm 20\%$ fsd	< ±20% fsd	< 40% fsd	$<\pm10\%$ fsd	$< \pm 60\%$ fsd	< ±15% fsd	< ±2	25% fsd	
with humidity	< ±2	2% fsd	< ±10% fsd	$<\pm2\%$ fsd	< ±10% fsd	$< \pm 2\%$ fsd	$< \pm 1\%$ fsd	< ±2% fsd	$<\pm10\%$ fsd			
Weight	19	90g		185	ōg		205g		185g			
Construc. Materials	Polyphenylene Sulphide (PPS)											
I.P. (NEMA) Rating					IP65 (standard),	P67 (with weather	protection fitted)					
Certification Details (ATEX/ IECEx)			 II 2 GD Ex d ia IIC T4 Gb T_{amb} -40°C to +65°C III 0.421 IP67 T135°C Db Baseefa08ATEX0263X IECEx BAS08.0070X 									
Other Certifications	Russian: GOST											
Applicable Standards	This product complies with the relevant CE standards including: EMC to EN50270, Flammable sensor to EN60079-29-1											

NOTES

- ¹ High temp range version available -55 to +150°C See separate datasheet DS0303
- ² Over temp range -20 to +55°C
- * = % of range (fsd) per year
- ** Over operating temperature range
- *** = % of applied concentration

Ordering Information

Accessories					
00780-A-0100	0 Term Hsg – Bartec DE1155 With Continuity Plate 1 x 25mm – 3 x 20mm Entries – ATEX Approved				
00780-A-0160	Right Angle Mounting Bracket For Ceiling Mounting				
02000-A-1635	Series 2000 Weather Housing Use With Toxic Sensor				
02000-A-1640	Series 2000 Weather Housing use With Flammable Sensor				
02000-A-1642	Series 2000 Collecting Cone Use With Flammable Sensor				
02000-A-1645	Series 2000 Calibration Flow Housing Assembly (Flam and Toxic)				
02000-A-3120	Series 2000 Flow Housing Assembly Plastic				
2106B1110	Catalytic Bridge To 4-20mA Converter				
2106B2114	Toxic Calibration Kit including Calibration Cover, Removal Tool, Potentiometer Adjustment Tool				
2106D2055	M36 / M40 Thread Adaptor				
225-262-138	Cable Gland And Caps, 20mm, Nylon				
Spares					
2106B1545	0, Electrochemical Cell Exchange Kit				
2106B1546	SO ₂ Electrochemical Cell Exchange Kit				
2106B1547	Cl ₂ Electrochemical Cell Exchange Kit				
2106B1548	CO Electrochemical Cell Exchange Kit				
2106B1549	H ₂ S Electrochemical Cell Exchange Kit				
2106B1594	NO Electrochemical Cell Exchange Kit				
2106B1595	NH ₃ 0-1000ppm Electrochemical Cell Exchange Kit				
2106B1596	NH ₃ 0-50ppm Electrochemical Cell Exchange Kit				
2106B1597	H ₂ 0-1000ppm Electrochemical Cell Exchange Kit				
2106B1598	H ₂ 0-10000ppm Electrochemical Exchange Kit				
2106B1599	NO ₂ 0-10ppm Electrochemical Exchange Kit				
Calibration Equipment					
	Contact your local Honeywell Analytics representative for details of suitable calibration equipment				

0	0 - mb - settle la
-	Combustible
2106B1200	Sensepoint 0-100% LEL Flammable Sensor M20
2106B1201	Sensepoint 0-100% LEL Flammable Sensor M25
2106B1202 2106B1203	Sensepoint 0-100% LEL Flammable Sensor M26 Sensepoint 0-100% LEL Flammable Sensor M26 (VQ1AB pellistor)
2106B1203	Sensepoint 0-100% LEL Flammable Sensor 1/20 (VCTAB penistor)
2106B1204	Sensepoint ppm (0-10% LEL) Flammable Sensor M20
2106B1205	Sensepoint ppm (0-10% LEL) Flammable Sensor 3/2 "NPT
Sensepoint 2106B1400	Sensepoint H ₂ S 0-20 ppm Toxic Sensor M20
2106B1400 2106B1401	Sensepoint H_2 S 0-50 ppm Toxic Sensor M20
2106B1401	Sensepoint H_2 0 - 30 ppm Toxic Sensor M20
2106B1500	Sensepoint H_2 S 0-20 ppm Toxic Sensor M25
2106B1501	Sensepoint H ₂ S 0-50 ppm Toxic Sensor M25
2106B1502	Sensepoint H ₂ S 0-100 ppm Toxic Sensor M25
2106B1700	Sensepoint H ₂ S 0-20 ppm Toxic Sensor ¾"NPT
2106B1701	Sensepoint H ₂ S 0-50 ppm Toxic Sensor ¾"NPT
2106B1702	Sensepoint H ₂ S 0-100 ppm Toxic Sensor ¾"NPT
2106B1405	Sensepoint CO 0-100 ppm Toxic Sensor M20
2106B1406	Sensepoint CO 0-200 ppm Toxic Sensor M20
2106B1407	Sensepoint CO 0-500 ppm Toxic Sensor M20
2106B1505	Sensepoint CO 0-100 ppm Toxic Sensor M25
2106B1506	Sensepoint CO 0-200 ppm Toxic Sensor M25
2106B1507	Sensepoint CO 0-500 ppm Toxic Sensor M25
2106B1705	Sensepoint CO 0-100 ppm Toxic Sensor ¾"NPT
2106B1706	Sensepoint CO 0-200 ppm Toxic Sensor ¾"NPT
2106B1707	Sensepoint C0 0-500 ppm Toxic Sensor 3/4"NPT
2106B1410	Sensepoint Cl ₂ 0-5 ppm Toxic Sensor M20 Sensepoint Cl ₂ 0-15 ppm Toxic Sensor M20
2106B1411 2106B1510	Sensepoint Cl_2 0-15 ppm Toxic Sensor M20 Sensepoint Cl_2 0-5 ppm Toxic Sensor M25
2106B1510 2106B1511	Sensepoint Cl_2 0-5 ppm Toxic Sensor M25
2106B1711	Sensepoint Cl ₂ 0-15 ppm Toxic Sensor ¾"NPT
2106B1413	Sensepoint H_2 0-50 ppm Toxic Sensor M20
2106B1410	Sensepoint NH ₂ 0-1000 ppm Toxic Sensor M20
2106B1415	Sensepoint NH ₃ 0-100 ppm Toxic Sensor M20
2106B1513	Sensepoint NH, 0-50 ppm Toxic Sensor M25
2106B1514	Sensepoint NH ₃ 0-1000 ppm Toxic Sensor M25
2106B1515	Sensepoint NH ₃ 0-100 ppm Toxic Sensor M25
2106B1713	Sensepoint NH ₃ 0-50 ppm Toxic Sensor 34"NPT
2106B1714	Sensepoint NH ₃ 0-1000 ppm Toxic Sensor 34"NPT
2106B1715	Sensepoint NH ₃ 0-100 ppm Toxic Sensor ¾"NPT
2106B1416	Sensepoint H ₂ 0-1000 ppm Toxic Sensor M20
2106B1417	Sensepoint H ₂ 0-10000 ppm Toxic Sensor M20
2106B1516	Sensepoint H ₂ 0-1000 ppm Toxic Sensor M25
2106B1517	Sensepoint H ₂ 0-10000 ppm Toxic Sensor M25 Sensepoint H ₂ 0-1000 ppm Toxic Sensor %"NPT
2106B1716 2106B1717	Sensepoint H ₂ 0-1000 ppm Toxic Sensor ¾ NPT Sensepoint H ₂ 0-10000 ppm Toxic Sensor ¾ NPT
2106B1717 2106B1418	Sensepoint NO 0-100 ppm Toxic Sensor M20
2106B1418 2106B1518	Sensepoint NO 0-100 ppm Toxic Sensor M25
2106B1718	Sensepoint NO 0-100 ppm Toxic Sensor W25
2106B1420	Sensepoint SO, 0-15 ppm Toxic Sensor M20
2106B1421	Sensepoint SO_2 0.50 ppm Toxic Sensor M20
2106B1520	Sensepoint SO ₂ 0-15 ppm Toxic Sensor M25
2106B1521	Sensepoint SO ₂ 0-50 ppm Toxic Sensor M25
2106B1720	Sensepoint SO ₂ 0-15 ppm Toxic Sensor ¾"NPT
2106B1721	Sensepoint SO ₂ 0-50 ppm Toxic Sensor ¾"NPT
2106B1422	Sensepoint NO ₂ 0-10 ppm Toxic Sensor M20
2106B1522	Sensepoint NO ₂ 0-10 ppm Toxic Sensor M25
2106B1722	Sensepoint NO ₂ 0-10 ppm Toxic Sensor ¾"NPT
2106B1430	Sensepoint 0 ₂ 25% V/V Toxic Sensor M20
2106B1530	Sensepoint $O_2 25\%$ V/V Toxic Sensor M25
2106B1730	Sensepoint 02 25% V/V Toxic Sensor ¾"NPT

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