

# 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.

## **Sieger 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<sup>™</sup> electrochemical sensors
- Poison resistant catalytic bead
- Fast and reliable
- Typical 2 to 5 years operational life

## **ATEX Certified**

- Complies with the latest European standards
- Hazardous area approval AND performance
- IP 65/66 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 kit
- Collecting 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 Exd or Exe 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 European ATEX 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 Exd, 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.

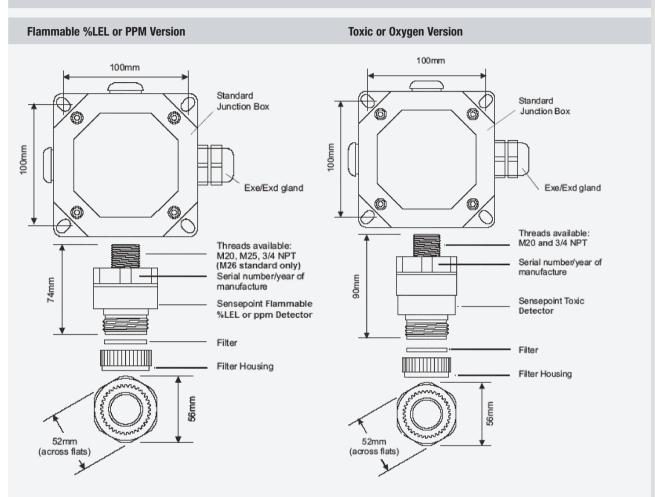
> Sensepoint has proven its suitability across a wide range of demanding applications by delivering high performance and reliability at an affordable cost.



## **Installation Details**



Dimensions

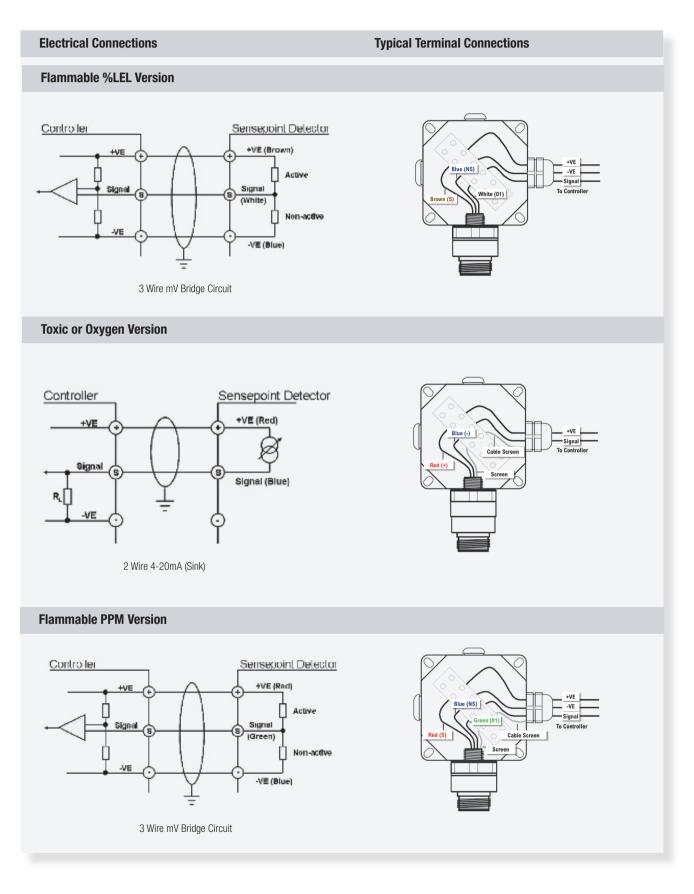


Sensepoint flammable and toxic gas detectors are installed using suitable Exd or Exe junction boxes. The standard junction box available from Honeywell Analytics includes an earth continuity plate for added RFI protection. The detectors have a choice of mounting thread size to match local preferences.

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**





# **Technical Specification**



| Gas & Range                     | Flammable<br>0-100%LEL  | Flammable<br>PPM (Typically<br>0-10%LEL)   | Hydrogen<br>Sulfide (H <sub>2</sub> S)<br>20/ 50/100ppm                  | Carbon<br>Monoxide (CO)<br>100/200/500ppm | Ammonia<br>(NH <sub>3</sub> )<br>50/ 1000ppm | Chlorine<br>(Cl <sub>2</sub> )<br>5/15ppm | 0xygen<br>(0 <sub>2</sub> )<br>25% V/V | Hydrogen<br>(H <sub>2</sub> )<br>1000/ 10000ppm | Sulfur Dioxide<br>(SO <sub>2</sub> )<br>15/50ppm | Nitric Oxide<br>(NO)<br>100ppm | Nitrogen<br>Dioxide (NO <sub>2</sub> )<br>10ppm |  |  |
|---------------------------------|---|--|--|---|--|---|--|---|--|--------------------------------|---|--|--|
| Operating Temp.                 | -55 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-condensing). Intermittent: 10 to 99% RH (non-condensing).   |  |  |   |  |   |  |   |  |                                |   |  |  |
| Storage Conditions              | 0 to 25°C;  | 30 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.                                      |  |  |
| T90                             | < 10  | ) secs.  | < 40 secs.   | < 30 secs.                                | < 65 secs.                                   | < 105 secs.                               | < 10 secs.                             | < 45 secs.                                      | < 90 secs.                                       | < 30 secs.                     | < 60 secs.                                      |  |  |
| Supply                          | 200mA; 0.7W maximum.  |  | 18 to 30V dc; 0.9W maximum.  |   |  |   |  |   |  |                                |   |  |  |
| Signal Output                   | mV b  | oridge.  | Loop powered 4 to 20mA.  |   |  |   |  |   |  |                                |   |  |  |
| Linearity                       | < 5% fsd or ±   | 10% of reading   |  | < 5% fsd.                                 |  |   |  |   |  |                                |   |  |  |
| Operating Life                  | 5 years (typical).  |  | 2 years (typical).   |   | 18 months (typical).                         |   | 1 year (typical).                      | 18 months (typical).                            |  |                                |   |  |  |
| Storage Life                    | Typically, over 5 years when<br>in original sealed packaging.   |  | 6 months.  |   |  |   |  |   |  |                                |   |  |  |
| Stability (zero)                |   |  |  |   |  |   |  |   |  |                                |   |  |  |
| with time*                      | < ±3%   | 6 fsd/yr.  |  |   |  |   | $< \pm 2\%$ fsd/yr.                    |   |  |                                |   |  |  |
| with temperature**              | $<\pm1\%~{ m fsd}^2$  | < ±3% fsd.   | < ±5   | % fsd.                                    | < ±6% fsd.                                   | < ±2% fsd.                                |  | < ±2% fsd.                                      |  | $<\pm5\%$ fsd.                 |   |  |  |
| with humidity                   | < ±1  | % fsd.   | < ±10% fsd. < ±2% fsd. < ±   |   | $<\pm10\%$ fsd.                              | < ±2% fsd.                                |  | < ±2% fsd. < ±10% fsd                           |  | $<\pm10\%$ fsd.                |   |  |  |
| Stability (span)                |   |  |  |   |  |   |  |   |  |                                |   |  |  |
| with time*                      | < ±39   | 6 fsd/yr.  | < ±2% fsd/yr. < ±4% fsd/yr. < ±20% fsd/                                  |   | $< \pm 20\%$ fsd/yr.                         | < 10% fsd/yr.                             | < ±20% fsd/yr.                         | < ±2% fsd/yr.                                   |  |                                |   |  |  |
| with temperature***             | < ±3% fsd   | < ±8% fsd.   | < ±25% fsd.  | < ±20% fsd.                               | $<\pm20\%$ fsd.                              | < 40% fsd.                                | < ±10% fsd.                            | < ±60% fsd.                                     | $<\pm15\%$ fsd.                                  | < ±2                           | 5% fsd.   |  |  |
| with humidity                   | < ±2  | 1% fsd.  | < ±10% fsd.  | < ±2% fsd.                                | $<\pm10\%$ fsd.                              | < ±2% fsd.                                | < ±1% fsd.                             | < ±2% fsd.                                      |  | < ±10% fsd.                    |   |  |  |
| Weight                          | 190g.   |  | 185g.  |   |  |   | 205g.                                  | 185g.   |  |                                |   |  |  |
| Construc. Materials             |   |  |  |   | Po   | lyphenylene sulfide (P                    | PS)                                    |   |  |                                |   |  |  |
| I.P. (NEMA) Rating              | IP65 (standard), IP67 (with weather protection fitted)  |  |  |   |  |   |  |   |  |                                |   |  |  |
| Certification Details<br>(ATEX) | T6 (Tamb = -<br>T5 (Tamb = -<br>BAS98A  | D EEx d IIC<br>-55°C to +55°C)<br>55°C to +70°C) <sup>3</sup><br>TEX2156X/4<br>16X (Performance) | Ex II 2 GD EEx dia IIC<br>T4 (Tamb = -55°C to +65°C)<br>BAS90ATEX2157X/5 |   |  |   |  |   |  |                                |   |  |  |
| Other Certifications            | Australian: SAA, Russian: GOST  |  |  |   |  |   |  |   |  |                                |   |  |  |
| Applicable Standards            | This product complies with the relevant CE standards including: EMC to EN50270, Flammable to EN50054/57, Toxic to EN445544 (H,S only) |  |  |   |  |   |  |   |  |                                |   |  |  |

#### NOTES

 $^{1}$  High temp range version available -55 to +150  $^{\circ}\mathrm{C}$  – See separate datasheet DS0303

<sup>2</sup> Over temp range -20 to +55°C

 $^{\rm 3}$  LEL version T4 -55 to +80°C, T3 -55 to +150°C

\* = % of range (fsd) per year

\*\* Over operating temperature range

\*\*\* = % of applied concentration

## **Ordering Information**

### Accessories

| 00780-A-0100 | Term Hsg – Bartec DE1155 With Continuity Plate<br>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 & Toxic)                                      |
| 02000-A-3120 | Series 2000 Flow Housing Assembly Plastic   |
| 2106B1110    | Catalytic Bridge To 4-20mA Converter  |
| 2106B2114    | Toxic Calibration Kit including calibration cover,<br>removal tool, potentiometer adjustment tool |
| 2106D2055    | M36/M40 thread adaptor  |
| 225-262-138  | Cable gland and caps, 20mm, Nylon   |
|              |   |
| Spares       |   |
|              |   |

| 02 Electrochemical Cell Exchange Kit                         |
|--|
| SO <sub>2</sub> Electrochemical Cell Exchange Kit            |
| Cl <sub>2</sub> Electrochemical Cell Exchange Kit            |
| CO Electrochemical Cell Exchange Kit                         |
| H <sub>2</sub> S Electrochemical Cell Exchange Kit           |
| NO Electrochemical Cell Exchange Kit                         |
| NH <sub>3</sub> 0-1000 ppm Electrochemical Cell Exchange Kit |
| NH <sub>3</sub> 0-50 ppm Electrochemical Cell Exchange Kit   |
| H <sub>2</sub> 0-1000 ppm Electrochemical Cell Exchange Kit  |
| H <sub>2</sub> 0-10000 ppm Electrochemical Exchange Kit      |
| NO <sub>2</sub> 0-10 ppm Electrochemical Exchange Kit        |
|  |

#### **Calibration Equipment**

Contact your local Honeywell Analytics representative for details of suitable calibration equipment

### Find out more

www.honeywellanalytics.com

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## **Sensepoint Combustible**

| Sensepoint 0-100% LEL Flammable Sensor M20                   |
|--|
| Sensepoint 0-100% LEL Flammable Sensor M25                   |
| Sensepoint 0-100% LEL Flammable Sensor M26                   |
| Sensepoint 0-100% LEL Flammable Sensor M26 (VQ1AB pellistor) |
| Sensepoint 0-100% LEL Flammable Sensor 3/4NPT                |
| Sensepoint ppm (0-10% LEL) Flammable Sensor M20              |
| Sensepoint ppm (0-10%LEL) Flammable Sensor 3/4NPT            |
|  |

## **Sensepoint Toxic**

| 2106B1400 | Sensepoint Hydrogen Sulfide ( $H_2S$ ) 0-20 ppm Toxic Sensor M20            |
|-----------|---|
| 2106B1401 | Sensepoint Hydrogen Sulfide ( $H_2S$ ) 0-50 ppm Toxic Sensor M20            |
| 2106B1402 | Sensepoint Hydrogen Sulfide ( $H_2S$ ) 0-100 ppm Toxic Sensor M20           |
| 2106B1700 | Sensepoint Hydrogen Sulfide (H <sub>2</sub> S) 0-20 ppm Toxic Sensor 3/4NPT |
| 2106B1701 | Sensepoint Hydrogen Sulfide (H <sub>2</sub> S) 0-50 ppm Toxic Sensor 3/4NPT |
| 2106B1702 | Sensepoint Hydrogen Sulfide (H <sub>2</sub> S) 0-20 ppm Toxic Sensor 3/4NPT |
| 2106B1405 | Sensepoint Carbon Monoxide (CO) 0-100 ppm Toxic Sensor M20                  |
| 2106B1406 | Sensepoint Carbon Monoxide (CO) 0-200 ppm Toxic Sensor M20                  |
| 2106B1407 | Sensepoint Carbon Monoxide (CO) 0-500 ppm Toxic Sensor M20                  |
| 2106B1705 | Sensepoint Carbon Monoxide (CO) 0-100 ppm Toxic Sensor 3/4NPT               |
| 2106B1706 | Sensepoint Carbon Monoxide (CO) 0-200 ppm Toxic Sensor 3/4NPT               |
| 2106B1707 | Sensepoint Carbon Monoxide (CO) 0-500 ppm Toxic Sensor 3/4NPT               |
| 2106B1410 | Sensepoint Chlorine (Cl <sub>2</sub> ) 0-5 ppm Toxic Sensor M20             |
| 2106B1411 | Sensepoint Chlorine (Cl <sub>2</sub> ) 0-15 ppm Toxic Sensor M20            |
| 2106B1711 | Sensepoint Chlorine (Cl <sub>2</sub> ) 0-15 ppm Toxic Sensor 3/4NPT         |
| 2106B1413 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-50 ppm Toxic Sensor M20             |
| 2106B1414 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-1000 ppm Toxic Sensor M20           |
| 2106B1415 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-100 ppm Toxic Sensor M20            |
| 2106B1713 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-50 ppm Toxic Sensor 3/4NPT          |
| 2106B1714 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-1000 ppm Toxic Sensor 3/4NPT        |
| 2106B1715 | Sensepoint Ammonia (NH <sub>3</sub> ) 0-100 ppm Toxic Sensor 3/4NPT         |
| 2106B1416 | Sensepoint Hydrogen (H <sub>2</sub> ) 0-1000 ppm Toxic Sensor M20           |
| 2106B1417 | Sensepoint Hydrogen (H <sub>2</sub> ) 0-10000 ppm Toxic Sensor M20          |
| 2106B1716 | Sensepoint Hydrogen (H <sub>2</sub> ) 0-1000 ppm Toxic Sensor 3/4NPT        |
| 2106B1717 | Sensepoint Hydrogen (H <sub>2</sub> ) 0-10000 ppm Toxic Sensor 3/4NPT       |
| 2106B1418 | Sensepoint Nitric Oxide (NO) 0-100 ppm Toxic Sensor M20                     |
| 2106B1718 | Sensepoint Nitric Oxide (NO) 0-100 ppm Toxic Sensor 3/4NPT                  |
| 2106B1420 | Sensepoint Sulfur Dioxide (SO2) 0-15 ppm Toxic Sensor M20                   |
| 2106B1421 | Sensepoint Sulfur Dioxide (SO2) 0-50 ppm Toxic Sensor M20                   |
| 2106B1720 | Sensepoint Sulfur Dioxide (SO <sub>2</sub> ) 0-15 ppm Toxic Sensor 3/4NPT   |
| 2106B1721 | Sensepoint Sulfur Dioxide (SO <sub>2</sub> ) 0-50 ppm Toxic Sensor 3/4NPT   |
| 2106B1422 | Sensepoint Nitrogen Dioxide (NO2) 0-10 ppm Toxic Sensor M20                 |
| 2106B1722 | Sensepoint Nitrogen Dioxide (NO2) 0-10 ppm Toxic Sensor 3/4NPT              |
| 2106B1430 | Sensepoint Oxygen (02) 25% V/V Toxic Sensor M20                             |
| 2106B1730 | Sensepoint Oxygen (02) 25% V/V Toxic Sensor 3/4NPT                          |

