

Frequently Asked Questions | VESDA Sensepoint XCL – Micro / Large Bore Gas Detectors



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Q: What is VESDA Sensepoint XCL – Micro Bore ASD Detector?

A: VESDA Sensepoint XCL – Micro Bore is an aspirated gas detector that connects to VEA tube networks and provides single point gas detection.

Q: What is VESDA Sensepoint XCL – Large Bore ASD Detector?

A: VESDA Sensepoint XCL – Large Bore is an aspirated gas detector that connects to ASD pipe networks and provides multi-point gas detection.

Q: What gases does VESDA Sensepoint XCL – Micro / Large Bore detect?

A:

Gases	Micro Bore	Large Bore
Carbon Monoxide (CO, ppm)	✓	✓
Flammable gases (CH ₄ , H ₂ , etc. % LEL)	✓	✓
Carbon Dioxide (CO ₂ , % v/v, ppm)	✓	✓
Hydrogen (H ₂ , ppm)	✓	✓
Oxygen (O ₂ , % v/v)		✓
Hydrogen Sulphide (H ₂ S, ppm)		✓
Nitrogen Dioxide (NO ₂ , ppm)		✓
Ammonia (NH ₃ , ppm)		✓

Q: What outputs versions are supported by VESDA Sensepoint XCL – Micro / Large Bore?

A:

- Relay output:
 - 2x Relays @ 5A (250vAC / 24VDC)
 - Fault
 - Alarm
- Analog output:
 - Current loop output; supporting signals in the range 0 to 22mA.
- Digital output:
 - Modbus RTU digital communications.

Q: What networking options are available for VESDA Sensepoint XCL - Micro / Large Bore?

A: The following remote configuration / monitoring options apply to the Modbus version detectors:

- VSC and VSM4 integration
- VESDA Sensepoint 301C Gas Controller
- Third party control systems

Q: What approvals are available for VESDA Sensepoint XCL – Micro / Large Bore?

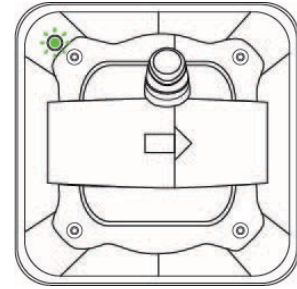
A:

- Electrical safety:
 - EN/UL/IEC61010-1
 - CSA-C22.2 No. 61010-1-12
- CE – EMC: EN 50270
- RADIO: RED, FCC, BT SIG
- UL2075 (CO and CH₄), AS 1668.2

Q: What are the visual status indicators on VESDA Sensepoint XCL – Micro / Large Bore?

A:

- Green: Normal (gas concentration is within normal range).
- Red (flashes): Alarm (gas concentration is beyond the alarm threshold).
- Yellow (flashes): Fault state.
- Blue (flashes): Bluetooth pairing between detector and smart device is in progress.
- Blue (steady): Bluetooth connection is established.



Q: How does VESDA Sensepoint XCL – Micro Bore connect to a VEA tube?

A: VESDA Sensepoint XCL – Micro Bore connects to VEA tubes 6mm (1/4") OD using flexible tubes (supplied).

Q: How does VESDA Sensepoint XCL – Large Bore connect to a pipe?

A: VESDA Sensepoint XCL – Large Bore connects to pipes using 60° elbows (supplied).

Q: Where does VESDA Sensepoint XCL – Micro Bore connect on a VEA tube?

A: VESDA Sensepoint XCL – Micro Bore can connect at any point along the length of the VEA tube.

Q: Where does VESDA Sensepoint XCL – Large Bore connect on a pipe?

A: VESDA Sensepoint XCL – Large Bore can connect at any point of the pipe network. Use ASPIRE pipe modelling tool to validate pipe network performance (transport time, hole pressure/flow) under such conditions.

Q: How many VESDA Sensepoint XCL – Micro Bore detectors can connect to a single VEA tube?

A: x2 VESDA Sensepoint XCL – Micro Bore detectors per tube, total of 80 per VEA unit.

Q: How many VESDA Sensepoint XCL – Large Bore detectors can connect to a single pipe?

A: Multiple VESDA Sensepoint XCL – Large Bore detectors can connect on a single pipe. Use ASPIRE pipe modelling tool to validate pipe network performance (transport time, hole pressure/flow) under such conditions.

Q: What is the flow orientation for the VESDA Sensepoint XCL – Micro / Large Bore detectors?

A:

- VESDA Sensepoint XCL – Micro Bore can operate in any flow orientation.
- VESDA Sensepoint XCL – Large Bore flow orientation is marked on the flow cap.

Q: Why do you bump test the VESDA Sensepoint XCL detectors?

A: To verify:

- Accuracy of gas reporting.
- Activation of output signals.
- Integrity of VESDA Sensepoint XCL – Micro Bore and VEA tube connections.

Q: How often do you bump test the VESDA Sensepoint XCL detectors?

A: In between calibration

Q: When do you calibrate VESDA Sensepoint XCL detectors?**A:**

- After installation
- After gas sensor replacement
- Every 6 months
- When bump test fails

Q: Where can I get information for the installation, commissioning and servicing of VESDA Sensepoint XCL – Micro / Large Bore gas detectors?**A:**

- VESDA Sensepoint XCL – Micro Bore Installation Manual: Doc. No: 33889.
- VESDA Sensepoint XCL – Large Bore Installation Manual: Doc. No: 35563.

Q: What is Sensepoint App?

A: Sensepoint App is a smart device app that is used to connect and interact with VESDA Sensepoint XCL detectors for commissioning, maintenance and general operation without the need to open the detector. For details on Sensepoint App, refer to Sensepoint App User Manual (Doc. No: 35245).

Q: What activities are performed through the Sensepoint App?**A:**

- View / configure general settings.
- View / adjust alarm settings.
- Perform calibration.
- Replace sensor.

Q: Where can I find the Sensepoint App?

A: The Sensepoint App can be obtained free-of-charge from Google Play Store and Apple App Store.

Q: What is the smart device requirement for installing Sensepoint App?**A:**

- Android 4.3 (Jelly Bean) / iOS 10 or above.
- Bluetooth 4.0 wireless interface

Q: What is the max distance covered by Wireless interface?

A: 10m (33ft) – smart device dependent.

Q: What value do VESDA Sensepoint XCL gas detectors bring to customers?**A:**

- Lower Installation Cost: Leverages multi-hole ASD pipe networks to replace multiple fixed spot gas detectors reducing installation costs.
 - Lower Commissioning Cost: Allows quick and simple configuration using smart devices via Bluetooth to reduce commissioning and setup costs.
 - Lower Maintenance Cost: Eliminates the need to enter the detection zone allowing for accessible, efficient and cost-effective service and maintenance.
 - Cumulative Sampling: Mitigates the effects of gas dispersion using multi-hole cumulative sampling for reliable gas detection.
 - Detector Longevity: Capitalizes on ASD Application Engineering techniques to ensure reliable long-term performance in harsh environments.
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Q: What are the benefits of remote gas sampling?**A:**

For routine detector service / maintenance no need to:

- Use special equipment to access high ceilings.
- Enter areas of high risk or undergo training for access (machinery, high voltage, confined spaces).
- Access restricted areas (battery rooms).
- Access concealed spaces (ducts, shafts).
- Access secure areas (military).
- Access 24x7 service areas (hospitals).

Q: What are the benefits of multi-point aspirated gas sampling?**A:**

- Greater area coverage than a spot (point) point gas detector – cost effective solution.
- Increases confidence level where gas source is not precisely known or where environments have variable airflows.
- Reliable detection of gas dispersed under airflow conditions.
- Single detector can simultaneously protect compartmentalised spaces.
- Reliable performance in a wide range of environments – air drawn to the detector can be conditioned to remove moisture, particulates and other contaminants that would otherwise impact detector performance.

Q: How many sample holes does the VESDA Sensepoint XCL – Large Bore support?**A:** This will vary depending on:

- Target gas concentration.
- Number of sample holes upstream the VESDA Sensepoint XCL detector.
- Dilution of gas in the pipe.
- VESDA Sensepoint XCL lower alarm level (LAL).

Refer to the VESDA Sensepoint XCL Large Bore Alarm Setting Calculator Sheet (Doc. No. 35758) for setting detector alarm levels for given target gas concentration and supported number of sampling holes.

Q: What are the key applications areas for VESDA Sensepoint XCL?**A:**

Gas Offering	Key Application Areas	
Flammable Gases (% LEL) (methane, propane, ethanol, hydrogen, etc.)	Fuel storage / distribution lines Food / beverage industry High-tech manufacturing	IAQ Confined spaces Agriculture / Livestock Water treatment plants
Hydrogen (ppm)	Energy storage spaces (batteries) Fuel storage / distribution lines Laboratories	Food industry Chemical industry
Carbon Monoxide (ppm)	Residential / commercial heating plants Road tunnels Confined spaces	IAQ Car parks / loading bays Vehicle test facilities
Carbon Dioxide (ppm, % v/v)	Industrial processes Storage / distribution lines IAQ Food / beverage industry	Artificial atmospheres (greenhouses) Hospitals
Hydrogen Sulphide (ppm)	Underground areas (tunnels, chambers) Landfill sites	Confined spaces Water treatment plants

Gas Offering	Key Application Areas	
Nitrogen Dioxide (ppm)	Parking garages / loading bays Vehicle test facilities Petroleum / metal refining industries	Road tunnels Confined spaces Water treatment plants
Oxygen (% v/v)	MRI rooms (cryogenic gas leaks) Food / beverage industry Underground areas (tunnels, chambers) Pharmaceuticals / Chemical Laboratories	Confined spaces Water treatment plants Laboratories Hospitals
Ammonia (ppm)	Agriculture Petroleum / Chemical industries Hospitals	Refrigerated plants Pulp and Paper industry Food / beverage industry

Q: Who do I contact for VESDA Sensepoint XCL enquiries?

A: If you have any questions on VESDA Sensepoint XCL – Large Bore gas detectors, please contact your Xtralis regional Sales and Technical teams.