VESDA SENSEPOINT XCL
LARGE BORE

VESDA Sensepoint XCL – Large Bore is a gas detection solution that utilizes the ASD pipe network to deliver superior gas detection via multiple hole (multi-point) sampling. The combined solution provides reliable detection of gases for occupant protection and process monitoring whilst simultaneously ensuring protection against fire threats.
The VESDA Sensepoint XCL – Large Bore portfolio has a range of gas sensors that addresses a wide range of applications and through its Bluetooth interface can be paired with a smart device for commissioning and maintenance. The smart device application (Sensepoint App) provides quick access to detector diagnostic information and simplifies detector configuration, calibration and bump testing.

Installation

The VESDA Sensepoint XCL – Large Bore detector is designed to be inserted in-line to the pipe network and is supplied with 60° elbows in the box.

Flexible Output Options

VESDA Sensepoint XCL – Large Bore is available with either 4-20 mA analog or Modbus RTU output, both versions being equipped with relays. The result is a flexible solution that can be integrated to BMS, fire alarm panels, PLCs, HVAC, etc.

Applications include

- Energy storage systems (batteries)
- Fuel storage and distribution lines
- Service tunnels
- Confined / Underground areas
- Heating plant rooms
- Manufacturing / Petroleum / Chemical industries
- Parking garages / Loading bays
- Power generation
- Refrigerated storage
- Waste handling facilities / Landfill sites
- Agriculture
- Water treatment / Sewerage plants
- Health care / Hospitals / Laboratories
- Food / Beverage industry
- Vehicle test facilities

Features

- Wide range of gases to support most application needs:
  - Flammable gases (% LEL)
  - Oxygen (O_2, % v/v)
  - Carbon Monoxide (CO, ppm)
  - Carbon Dioxide (CO_2, % v/v, ppm)
  - Hydrogen (H_2, ppm)
  - Hydrogen Sulphide (H_2S, ppm)
  - Nitrogen Dioxide (NO_2, ppm)
  - Ammonia (NH_3, ppm)
- Aspirated gas sampling technology:
  - Multi-point sampling provides greater coverage and increased design flexibility
  - Remote sampling eliminates the need to enter the protected zone
  - Centralized location saves time & money for service and maintenance
  - Detector protection against environmental conditions ensures reliable long term operation
- Integral alarm status LEDs
- Integral gas port for bump test and calibration
- Field replaceable gas sensor cartridges
- Smart device application (Sensepoint App) enables faster detector commissioning, maintenance and service
- Multiple output options: 2 x configurable relays (Alarm, Fault), Analog 4-20mA or Modbus RTU

Approvals

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

VESDA SENSEPOINT XCL
TECHNICAL SPECIFICATIONS

How it works

VESDA Sensepoint XCL – Large Bore is designed to be easily incorporated to existing or new ASD pipe networks without major construction or electrical cabling / conduit and utilizes the flow in the pipe for the continuous delivery of air samples to the gas sensor for analysis.
It is capable of remote sampling which means the detector can be placed outside the detection zone at a convenient location for maintenance and service where free business operation, restricted access and safety of personnel is important. Air drawn to the detector can be conditioned to remove contaminates which ensures the detector maintains reliable long-term performance in a wide range of environments.
A single VESDA Sensepoint XCL – Large Bore detector delivers multi-point gas sampling capability giving it the advantage of providing larger coverage, increased design flexibility and reliable detection in high airflow areas compared to fixed point gas detectors.

VESDA Sensepoint XCL Ordering Information

The VESDA Sensepoint XCL – Large Bore detector comes complete with the main detector unit (pre-installed with sensor cartridge), flow cap and elbows.

Specifications

Supply Voltage	24 VDC nominal 11 to 32V DC (Analog 4-20 mA) 9 to 32V DC (Modbus) 24V AC 50/60Hz Nominal (20 to 27 VAC) 20 to 27V AC (all versions)
Maximum Power Consumption	4-20 mA: < 1.2 W (toxic), < 1.7W (CAT, CO_2) Modbus: < 0.7 W (toxic), < 1.2W (CAT, CO_2) Relay: additional 0.6 W total Maximum Inrush Current: 850 mA
Dimensions (WHD)	113 x 113 x 59 mm (4.4 x 4.4 x 2.3 in)
Weight	500 g (1.1 lb)
Casing Material	Polycarbonate
Ingress Protection Rating	IP65, Type 4 (NEMA 250)
Operating Conditions	Operating Temperature: -20 to +50 °C (-4 to +122 °F) Storage Temperature: 0 to +30 °C (+32 to +86 °F) Humidity: 0 to 99% (non-condensing) *CAT versions: 10 to 90% RH. Operating the detector outside this range may result in increased drift and a reduction in detector accuracy.*
Atmospheric pressure	90 to 110 kPa
Pipe size compatibility	Connects to ASD pipe networks 25mm (0.98"), 27mm (1.06") OD
Wire/Terminal size	Pluggable rising clamp style. 0.5 to 1.5 mm^2, 20 to 16 AWG
Output	Analog: 0 to 22 mA Digital: Modbus RTU 2 Relays (24V DC / 240V AC, 5A)
Warranty	12 months from date of shipment

Ordering Information

Gas Type / Range	4-20mA Analogue, Relay	Modbus RTU, Relay
Flammable (CAT) 20-100% LEL	XCL-LB-CH4-RA	XCL-LB-CH4-RM
Oxygen 25.0% v/v (Fixed)	XCL-LB-O2-RA	XCL-LB-O2-RM
Carbon Monoxide 50 to 1000 ppm	XCL-LB-CO-RA	XCL-LB-CO-RM
Carbon Dioxide 1000 to 5000 ppm	XCL-LB-CO2PP-RA	XCL-LB-CO2PP-RM
Carbon Dioxide 1.0 to 5.0% v/v	XCL-LB-CO2VV-RA	XCL-LB-CO2VV-RM
Hydrogen 1000ppm (Fixed)	XCL-LB-H2-RA	XCL-LB-H2-RM
Hydrogen Sulphide 10 to 50 ppm	XCL-LB-H2S-RA	XCL-LB-H2S-RM
Nitrogen Dioxide 5 to 50 ppm	XCL-LB-NO2-RA	XCL-LB-NO2-RM
Ammonia 50 to 200 ppm	XCL-LB-NH3-RA	XCL-LB-NH3-RM

Spare Parts

Replacement Gas Sensor	Part Number
Flammable (CAT) (% LEL)	XCL-SC-CH4
Oxygen (% v/v)	XCL-SC-O2
Carbon Monoxide (ppm)	XCL-XRL-SC-CO
Carbon Dioxide (ppm)	XCL-SC-CO2PP
Carbon Dioxide (% v/v)	XCL-SC-CO2VV
Hydrogen (ppm)	XCL-XRL-SC-H2
Hydrogen Sulphide (ppm)	XCL-SC-H2S
Nitrogen Dioxide (ppm)	XCL-SC-NO2
Ammonia (ppm)	XCL-SC-NH3

Spare Parts / Consumables	Part Number
Flow Cap	XCL-LB-CAP
60° Elbows – pk of 4	XCL-LB-ELB
Cable Glands – pk of 10	XCL-M20-CG
Filter CAT, NH_3, CO_2 – pk of 10	XCL-LB-FLT-1
Filter CO, O_2, H_2S, NO_2, H_2 – pk of 10	XCL-LB-FLT-2
Sensor Cover CAT, NH_3, CO_2	XCL-LB-COV-1
Sensor Cover CO, O_2, H_2S, NO_2, H_2	XCL-LB-COV-2

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