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.

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 & 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.

Applications include

- Energy storage systems (batteries)
- Utility / service tunnels
- Heating plant rooms
- Manufacturing / Petroleum industries
- Parking garages / Loading bays
- Power generation
- Refrigerated storage
- Waste handling facilities
- Agriculture
- Water treatment / sewerage plants
- Health care / Hospitals
- Food / beverage industry

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.

Features

- Wide range of gases to support most application needs:
    - Carbon Monoxide (ppm)
    - Flammable gases (% LEL)
    - Oxygen (% v/v)
    - Carbon Dioxide (% v/v, ppm)
- Aspirated gas sampling technology:
    - Capable of remote sampling – no need to enter detection zone
    - Centralized maintenance & service – saves time & money
    - Detector protected against the harshness of the environment – reliable long term performance
- Multi-point gas sampling:
    - Greater coverage area
    - Increased design flexibility
    - Reliable detection in high airflows
- Integral alarm status LEDs
- Field replaceable gas sensor cartridges
- Smart device application (Sensepoint App) enables faster detector commissioning, maintenance and service
- Bluetooth Wireless Interface (compatible smart device iOS10 / Android 4.3 or above)
- Multiple output options (configurable relays, 4-20 mA 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 CH_4), AS 1668.2

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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:

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.

Ordering Codes

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

Spare Parts

Replacement Gas Sensor	Part Number
Flammable (CAT)	XCL-SC-CH4
Oxygen	XCL-SC-O2
Carbon Monoxide	XCL-XRL-SC-CO
Carbon Dioxide (ppm)	XCL-SC-CO2PP
Carbon Dioxide (% v/v)	XCL-SC-CO2VV

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

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 0.6W total
Maximum Inrush Current: 850 mA

Dimensions (WxHxD)
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

Wire/Terminal size
Connects to ASD pipe networks 25mm (0.98"), 27mm (1.06") OD

Output
Analog: 0 to 22 mA
Digital: Modbus RTU
2 Relays (24V DC / 240V AC, 5A)