VESDA SENSEPOINT XCL
MICRO BORE

♦ xtralis®

Aspirated Gas Detection for Micro Bore ASD System (VESDA-E VEA Addressable Aspirating Smoke Detection)

Xtralis the manufacturer of the market leading VESDA Aspirating Smoke Detection (ASD) technology has developed with its sister company Honeywell Analytics a new concept of aspirated gas detectors. When used with the VESDA-E VEA; VESDA Sensepoint XCL provides early warning of the presence of gases for occupant protection and system monitoring whilst at the same time ensuring protection against fire threats.

Through its embedded Bluetooth interface, customers can pair the VESDA Sensepoint XCL detector with their smart device to perform installation, commissioning and maintenance, allowing faster detector configuration, simplified operation and service.
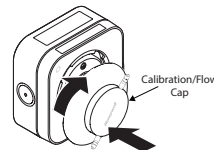
Applications include

- Residential
- Commercial premises
- Hospitals
- Hotels
- Car parks (underground / enclosed)
- Laboratories
- High tech manufacturing
- Universities and schools

- Chemical / Pharmaceutical
- Indoor air quality monitoring
- Battery rooms
- Fuel storage areas
- Confined spaces
- Food & beverage
- Refrigerated systems (leak detection)
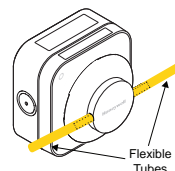- Greenhouses

Installation

VESDA Sensepoint XCL is designed to be inserted in-line to the VESDA-E VEA microbore tube network using flexible tubes as shown below:
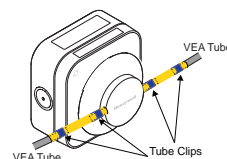
Insert the calibration/flow cap into the detector module and turn clockwise until locked into place.

Calibration/Flow Cap

Insert the supplied flexible tubes (cut to 50mm (2 in) length) over the full length of both nozzles of the calibration / flow cap.

Flexible Tubes

Insert VEA tubes at least 15mm (0.6 in) into flexible tubes. Secure VEA and flexible tubing parts with the supplied tube clips.

VEA Tube
VEA Tube   Tube Clips

Features

- Available Sensors:
  - Carbon Monoxide (CO): 300ppm (adjustable 50 – 1000ppm)
  - Combustible (CAT): 0 – 100% LEL (Methane, Hydrogen, Propane, Ethanol, Butane, Octane, etc.)
  - Hydrogen (H_2): 1000ppm
  - Carbon Dioxide (CO_2): 5.0% v/v (adjustable 1.0 – 5.0% v/v)
  - Carbon Dioxide (CO_2): 5000ppm (adjustable 1000 – 5000ppm)
- Factory calibrated detector
  - (CAT: Factory calibrated to CH_4)
- Integral alarm status LEDs
- Wireless Interface: Bluetooth 4.0 (Bluetooth Low Energy)
  - Connect up to 10m away (mobile device dependent). Use compatible smart device running iOS 10 / Android 4.3 or above
- Integrates with PLCs/HVAC/BMS/FACP
- Configurable relays
- 4-20 mA analog outputs or RS 485 Modbus output
- VSC and VSM4 integration for remote access to detectors (Modbus version) operating status

Tube Size Compatibility

- Connects to VESDA-E VEA micro bore tube 6 mm (1/4") OD using flexible tubes (supplied)

Approvals

- Electrical safety
  - Conforms to EN/UL/IEC61010-1
  - Certified to 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

VESDA SENSEPOINT XCL
TECHNICAL SPECIFICATIONS

How it works

VESDA Sensepoint XCL can be added to existing or new VESDA-E VEA installations to actively monitor the presence of gases. It integrates with other building systems, including fire alarm control panels, PLCs, HVAC and building management systems, and provides real-time situational awareness for intelligent emergency response.

VESDA Sensepoint XCL is capable of remote sampling up to 100m (328ft) providing significant installation and routine maintenance cost savings with easy access to the detector unit for diagnostic information and servicing. Sensor cartridges are easily replaced in the field through simple steps.

Flexible Output Options

VESDA Sensepoint XCL is available with either a 4-20 mA analog output or Modbus RTU, both versions being equipped with 2 programmable relays. The result is a flexible solution that can be easily incorporated into legacy systems as well as new installations. For VESDA Sensepoint XCL (Modbus version) installations requiring additional detector relay outputs, users can opt to network detectors to the VESDA Sensepoint 301C Gas Controller (Data Sheet Doc No. 36443, Installation Manual Doc No. 36442).

VESDA Sensepoint XCL Ordering Information

VESDA Sensepoint XCL – Micro Bore ASD System gas detectors come complete with the main detector unit (pre- installed with sensor cartridge), two cable glands, calibration/flow cap, flexible tube and tube clips to connect to VEA tubing. Two variants are available based on detector outputs (mA analog, Modbus RTU).

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)
Maximum Power Consumption (24V DC)	1.2 W (Analog 4-20mA) (toxic), 1.7W (flammable and CO_2) 0.7 W (Modbus) (toxic), 1.2W (flammable and CO_2) Relay Version: additional 0.6W total
Maximum Inrush Current (24V DC)	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)
Ingress Protection Rating	IP65, Type 4 (NEMA 250)
Casing Material	Polycarbonate (charcoal colour)
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) *Flammable catalytic versions: 10 to 90% RH. Operating the detector outside this range may result in increased drift and a reduction in detector accuracy.*
Atmospheric pressure	95 to 110 kPa
Wire/Terminal size	Pluggable rising clamp style. 0.5 to 1.5 mm², 20 to 16 AWG.
Output	Analog Output: 0 to 22 mA Digital Output: Modbus RTU Relay Output: 2 relays (24 V DC / 240 V AC, 5 A)
Warranty	12 months from date of shipment

Ordering Codes

Ordering Code	Description
XCL-VEA-CO-RA	VESDA Sensepoint XCL CO 300ppm 4-20mA Relay for VEA
XCL-VEA-CO-RM	VESDA Sensepoint XCL CO 300ppm Modbus Relay for VEA
XCL-VEA-CH4-RA	VESDA Sensepoint XCL CH_4 0-100% LEL 4-20mA Relay for VEA
XCL-VEA-CH4-RM	VESDA Sensepoint XCL CH_4 0-100% LEL Modbus Relay for VEA
XCL-VEA-H2-RA	VESDA Sensepoint XCL H_2 1000ppm 4-20mA Relay for VEA
XCL-VEA-H2-RM	VESDA Sensepoint XCL H_2 1000ppm Modbus Relay for VEA
XCL-VEA-CO2VV-RA	VESDA Sensepoint XCL CO_2 5% v/v 4-20mA Relay for VEA
XCL-VEA-CO2VV-RM	VESDA Sensepoint XCL CO_2 5% v/v Modbus Relay for VEA
XCL-VEA-CO2PP-RA	VESDA Sensepoint XCL CO_2 5000ppm 4-20mA Relay for VEA
XCL-VEA-CO2PP-RM	VESDA Sensepoint XCL CO_2 5000ppm Modbus Relay for VEA
XCL-VEA-CO-RA-5	5 x VESDA Sensepoint XCL CO 300ppm 4-20mA Relay for VEA
XCL-VEA-CH4-RA-5	5 x VESDA Sensepoint XCL CH_4 0-100% LEL 4-20mA Relay for VEA
XCL-VEA-H2-RA-5	5 x VESDA Sensepoint XCL H_2 1000ppm 4-20mA Relay for VEA

Spare Parts

Ordering Code	Description
XCL-FILTER	VESDA Sensepoint XCL Replacement Filter - Pack of 10
XCL-VEA-CAL	VESDA Sensepoint XCL Calibration/Flow Cap for VEA
XCL-M20-CG	VESDA Sensepoint XCL Cable Glands - Pack of 10
XCL-VEA-TUB	VESDA Sensepoint XCL Tubing Interface for VEA
XCL-COVER	VESDA Sensepoint XCL Sensor Cover with Gasket
XCL-XRL-SC-CO	VESDA Sensepoint XCL/XRL Replacement Sensor - CO 300ppm
XCL-SC-CH4	VESDA Sensepoint XCL Replacement Sensor - CH_4 0-100% LEL
XCL-XRL-SC-H2	VESDA Sensepoint XCL/XRL Replacement Sensor - H_2 1000ppm
XCL-SC-CO2VV	VESDA Sensepoint XCL Replacement Sensor - CO_2 5% v/v
XCL-SC-CO2PP	VESDA Sensepoint XCL Replacement Sensor - CO_2 5000ppm