

VESDA® by Concept

VESDA-E VEP VEP-A00-1P, VEP-A00-P, VEP-A10-P



Description

The VESDA-E VEP series of smoke detectors bring the latest and most advanced detection technology to provide very early warning and the best nuisance alarm rejection to a wide range of applications. Built on the Flair detection technology and years of application experience, VEP detectors achieve consistent performance over their lifetime via absolute calibration. In addition, the VEP delivers a range of revolutionary features that provide user value.

Flair Detection Technology

Flair is the revolutionary detection chamber that forms the core of the VESDA -E VEP, providing higher stability and increased longevity. Direct imaging of the sampled particles using a CMOS imager combined with multiple photo-diodes allows better detection and fewer nuisance

Installation, Commission & Operation VESDA-E VEP is equipped with a powerful aspirator that enables use of a total of 130m (427ft) of sampling pipe in the one pipe model and 560m (1,837ft) of pipe in the four pipe model. Out of box operation is made possible with AutoConfig which allows airflow normalisation and AutoLearn Smoke and Flow to be initiated from within the detector. VEP is fully supported by the ASPIRE and Xtralis VSC software applications which facilitate ease of pipe network design, system commissioning and maintenance.

VESDAnet™

VESDA devices communicate on VESDAnet which provides a robust bidirectional communication network allowing continued redundant operation even during single point wiring failures. VESDAnet enables primary reporting,

centralized configuration, control, maintenance and monitoring.

Ethernet connectivity
VESDA-E detectors offer connectivity to corporate networks via Ethernet, allowing for devices installed with Xtralis monitoring and configuration software to connect to the detector.

Backward Compatibility

VESDA-E VEP is compatible with existing VESDA installations. The detector occupies the same mounting footprint, pipe, conduit and electrical connector positioning as VESDA VLP. VEP is also compatible with existing VESDAnet installations allowing monitoring of both VESDA-E and legacy detectors via the latest iVESDA application.

Features

- Suitable for Class 1 Division 2
- applications Groups A,B,C & D.

 One and four pipe models for different applications.
- Flair detection technology delivers reliable very early warning in a wide range of environments with minimal nuisance
- Multi stage filtration and optical protection with clean air barriers ensures lifetime detection performance.
- Four alarm levels and a wide sensitivity range deliver optimum protection for the widest range of applications.
- Intuitive LCD icon display provides instant status information for immediate response
- Flow fault thresholds per port
- accommodate varying airflow conditions.
- Smart on-board filter retains dust count and remaining filter life for predictable maintenance
- Extensive event log (20,000 events) for event analysis and system diagnostics.

- AutoLearn[™] smoke and flow for reliable and rapid commissioning.
- Referencing to accommodate external environmental conditions to minimise nuisance alarms
- · Backward compatible with VLP and VESDAnet.
- Remote monitoring with iVESDA for system review and proactive maintenance
- Ethernet for connectivity with Xtralis software for configuration, secondary monitoring and maintenance
- USB for PC configuration, and firmware upgrade using a memory

Listings/Approvals

- ULC
- **CSFM**
- NF-SSI (www.marque-nf.com)
- VNIIPO
- CF
- ActivFire CCC
- EN 54-20, ISO 7240-20
 - Four Pipe VEP
- EN 54-20, ISO 7240-20
- Class A (40 holes / Fire 1 = 0.028% obs/m)
- Class B (80 holes / Fire 1 = 0.027% obs/m)
- Class C (100 holes / Fire 1 = 0.056% obs/m) Classification of any configuration is determined using ASPIRE.

Make Concept Gas Fire Suppression Ltd and VESDA part of your fire protection plan



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Specifications

	One Pipe VEP Four Pipe VEP			peVEP	
Supply Voltage	18-30 VDC (24 V Nominal)				
Power Consumption @ 24VDC	VEP-A00-1P	VEP-A00-P VEP-A10-P			
Aspirator Setting	Fixed	1	5	1	5
Power (Quiescent)	8.8 W	7.0 W	8.8 W	8.2 W	10.0 W
Power (In Alarm)	9.6 W	7.8 W	9.6W	10.4 W	11.6 W
Dimensions (WHD)	350 mm x 225 mm	m x 135 mm (13.8 in x 8.9 in x 5.3 in)			
Weight	4.4 kg (9.7 lbs)	4.4 kg (9.7 lbs) 4.5 kg (9.9 lbs)			
Operating Conditions	Ambient: 0°C to 39°C (32°F to 102°F) Sampled Air20°C to 60°C (-4°F to 140°F) Tested to: -20°C to 55°C (-4°F to 131°F) UL: -20°C to 50°C (-4°F to 122°F) Humidity: 5% to 95% RH, non-condensing				
Area Coverage	1,000 m² (10,760 sq. ft)				
Min. airflow per pipe	15 l/m				
Pipe Length (Linear)	100 m (328 ft)	280 m (919 ft)			
Pipe Length (Branched)	130 m (427 ft)	427 ft) 560 m (1,837 ft)			
Dina lanatha danandina an	1 Pipe	1 Pipe	2 Pipe	3 Pipe	4 Pipe
Pipe lengths depending on number of pipes in use	100 m (328 ft)	110 m (361 ft)	100 m (328 ft)	80 m (262 ft)	70 m (230 ft
StaX	PSU	PSU, Auto Pipe Clean			
No. of holes (A/B/C)	30/40/45	40/80/100			
Computer design tool	ASPIRE				
Pipe	Inlet: External diameter 25 mm or 1.05 in (3/4 in IPS) Exhaust: External diameter 25 mm or 1.05 in (3/4 in IPS) via adaptor				
Relays	7 programmable relays (latching or non-latching states) Contacts rated 2 A @ 30 VDC (Resistive)				
IP rating	IP40				
Cable access	4 x 26 mm (1.02 in) cable entries				
Cable termination	Screw Terminal blocks 0.2–2.5 sq mm (24–14 AWG)				
Dynamic Range	0.000%/m to 32%/m (0.0000%/ft to 10%/ft)				
Sensitivity Range	0.005 to 20% obs/	m (0.0016	% to 6.25%	obs/ft)	
Threshold setting range	Alert: 0.005% to 2.0% obs/m (0.0016% to 0.625% obs/ft) Action: 0.005% to 2.0% obs/m (0.0016% to 0.625% obs/ft) Fire1: 0.010% to 2.0% obs/m (0.0031% to 0.625% obs/ft) Fire2: 0.020% to 20.0% obs/m (0.0063% to 6.25% obs/ft)				
Software features	Event log: Up to 20,000 events Smoke level, user actions, alarms and faults with time and date stamp AutoLearn: Detector learns Alarm Thresholds and Flow Fault thresholds by monitoring the environment.				

Spare Parts

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VSP-960	VESDA-E Mounting Bracket	VSP-964-03	VESDA-E Smake Detection Chamber – MK3	
VSP-961	VESDA-E Exhaust adaptor US	VSP-965	VESDA-E Sampling Module	
VSP-962	VESDA-E Flitter	VSP-968	VESDA-E VEP-A00-P/1P Front Cover Plastic (LEDs)	
VSP-962-20	VESDA-E Fliter - 20 Pieces	VSP-969	VESDA-E VEP-A10-P Front Cover Plastic (3.5" Display)	
VSP-963	VESDA-E Aspirator	VKT-850	VESDA-E VEP Demo Kit	
VSP-964	SP-964 VESDA-E Smoke Detection Chamber			

3.5" Display



LED	Description
@	Fire 2
仓	Fire 1
A	Action
Δ	Alert
	Disabled
Ţ	Fault
ı	Power

Home Page

Icon on Display	Description	
F	Smoke and Alarm Threshold Levels	
Ø	Detector OK	
Ë	Detector Fault	
%	Aspirator Fault	
≋	Airflow Fault	
ধ	Power Fault	
-⊠+	Filter Fault	
<u></u> «0	Smoke Chamber Fault	
- Ba	VESDAnet Fault	
Œ °	StaX Module Fault	

Ordering Information

Ordering Code	Description
VEP-A00-1P	VESDA-E VEP with LEDs, 1 pipe, Plastic Enclosure
VEP-A00-P	VESDA-E VEP with LEDs, 4 pipe, Plastic Enclosure
VEP-A10-P	VESDA-E VEP with 3.5" Display, 4 pipe, Plastic Enclosure

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