VESDA-E VEP WITH ESSERBUS® TRANSPONDER

VEP-A00-1P-EBTI, VEP-A00-P-EBTI, VEP-A10-P-EBTI

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, and now the integrated model (VEP-EBTI) has the ability to directly work with esserbus® and esserbus®-PLus through the built-in transponder which allows the connection into the Esser range of fire alarm control panels. It is compatible with the FlexES Control panel with the pre-alarm feature supported. It is also compatible with IQ8Control and Compact panels but without the pre-alarm feature. 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 alarms.

Installation, Commissioning and Operation

VESDA-E VEP is equipped with a powerful aspirator that enables use of a total of 130 m of sampling pipe in the one pipe model and 560 m 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. In addition, the application-specific project planning of the esserbus® transponder is supported via the tools 8000 programming software in order to guarantee quick and trouble-free start-up of the fire alarm system.

VESDAnet™

VESDA devices communicate on VESDAnet which provides a robust bi-directional communication network allowing continued redundant operation even during single point wiring failures. VESDAnet enables primary reporting, centralized configuration, control, maintenance and monitoring. Furthermore, the latest iVESDA application can be used for monitoring devices on VESDAnet.

Ethernet Connectivity

The detector can be added to a corporate network, allowing for PC's installed with Xtralis monitoring and configuration software to connect to the detector via the network.

Loop Connectivity

The VEP-EBTI is connected directly on the esserbus®. All devices are member of the esserbus® loop and will be easily programmed with the commissioning software tools 8000.
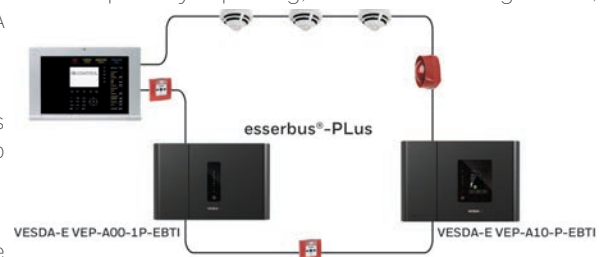
Features
- One and four pipe models for different applications
- Flair detection technology delivers reliable very early warning in a wide range of environments with minimal nuisance alarms
- Multi stage filtration and optical protection with clean air barriers ensures lifetime detection performance
- 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
- 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 stick
- Two pre-configured GPI's; 1 unmonitored for Remote Reset function through the panel, and 1 monitored for normal detector operation (inaccessible to the user)
- Field replaceable sub-assemblies enable faster service and maximum uptime
- Direct connection to the esserbus® loop technology of Esser fire alarm control panels without the need for extra equipment or loop modules
- Integrated loop isolator
- Evaluation of faults of the VESDA-E detector
- Evaluation of pre-alarms of the VESDA-E detector in combination with FlexeS Control
- Signal evaluation and loop monitoring in compliance with EN 54-13
- Optional low voltage monitoring of the external power supply
- Three spare inputs to add e.g. detailed PSU fault warnings like battery fault, earth fault, mains fault to the system
- Programmable reset functionality of the detector.
- Secure start-up via tools 8000
- Individual programming via tools 8000

Listings / Approvals
- VdS
- CE
- EN 54-17
- EN-54-18
- EN 54-20
  Four Pipe VEP
  - 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.

Regional approvals listings and regulatory compliance vary between product models. Refer to www.xtralis.com for the latest product approvals matrix.

Specifications

	One Pipe VEP-EBTI	Four Pipe VEP-EBTI			
Supply Voltage	18-28 V DC (24 V Nominal)				
Maximum Power @ 28 V DC	Quiescent	In Alarm – Four Transponder Zone Connection - Maximum			
	10.4 W	14.2 W			
Power Consumption @ 24 V DC	VEP-A00-1P-EBTI	VEP-A00-P-EBTI		VEP-A10-P-EBTI	
Aspirator Setting	Fixed	1	5	1	5
Power (Quiescent)	9.1 W	7.3 W	9.1 W	8.5 W	10.3 W
Power (In Alarm – One Transponder Zone Connection – Standard)	10.4 W	8.6 W	10.4 W	11.2 W	12.4 W
Power (In Alarm – Four Transponder Zone Connection – Maximum)	11.8 W	10.0 W	11.8 W	12.6 W	13.8 W
Dimensions (WxHxD)	350 mm x 225 mm x 135 mm				
Weight	4.47 kg	4.47 kg		4.57 kg	
Operating Conditions	Ambient: 0°C to 39°C Sampled Air: -20°C to 60°C Tested to: -10°C to 50°C Humidity: 5% to 95% RH, non-condensing				
Area Coverage	1,000 m²	2,000 m²			
Min. airflow per pipe	15 l/m				
Pipe Length (Linear)	100 m	280 m			
Pipe Length (Branched)	130 m	560 m			
Pipe lengths depending on number of pipes in use	1 Pipe	1 Pipe	2 Pipe	3 Pipe	4 Pipe
	100 m	110 m	100 m	80 m	70 m
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 Exhaust: External diameter 25 mm				
Relays	7 pre-configured relays (latching or non-latching states) - inaccessible to the end user.				
IP rating	IP 40				
Connection to the Fire Alarm Control Panel	Direct connection to the esserbus® loop through recommended wiring				
Cable access	4 x 26 mm cable entries				
Cable termination	Screw Terminal blocks 0.2–2.5 mm² (24 - 14 AWG)				
Dynamic Range	0.000% - 32% obs/m				
Sensitivity Range	0.005% - 20% obs/m				
Threshold setting range	Alert: 0.005% - 2.0% obs/m Action: 0.005% - 2.0% obs/m Fire1: 0.010% - 2.0% obs/m Fire2: 0.020% - 20.0% obs/m				
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

VSP-960	VESDA-E Mounting Bracket	VSP-964	VESDA-E Smoke Detection Chamber
VSP-961	VESDA-E Exhaust adaptor US	VSP-964-03	VESDA-E Smoke Detection Chamber – MK3
VSP-962	VESDA-E Filter	VSP-965	VESDA-E Sampling Module
VSP-962-20	VESDA-E Filter - 20 pieces	VSP-968	VESDA-E VEP-A00-P/1P Front Cover Plastic (LEDs)
VSP-963	VESDA-E Aspirator	VSP-969	VESDA-E VEP-A10-P Front Cover Plastic (3.5" Display)

3.5" Display
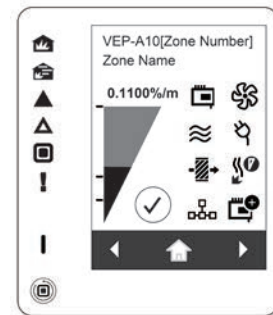
LED	Description
🏠	Fire 2
🔥	Fire 1
▲	Action
△	Alert
▣	Disabled
!	Fault
I	Power

Home Page

Icon on display	Description
◣	Smoke and Alarm Threshold Levels
✓	Detector OK
▣	Detector Fault
✱	Aspirator Fault
≋	Airflow Fault
⚡	Power Fault
-Ⱬ→	Filter Fault
🜂❓	Smoke Chamber Fault
⊟⊟	VESDAnet Fault
🗝＋	StaX Module Fault

Ordering Information

Ordering Code	Description
VEP-A00-1P-EBTI	VESDA-E VEP 1-Pipe with LEDs with ESSERBUS TI
VEP-A00-P-EBTI	VESDA-E VEP with LEDs with ESSERBUS TI
VEP-A10-P-EBTI	VESDA-E VEP with 3.5" display with ESSERBUS TI

Approvals Compliance

Please refer to the Product Guide for details regarding compliant design, installation and commissioning.