



5500 series vent EPV-5500 Vent System

- One design, three flow rate variants to support your design requirements
- Anodized aluminum with an optional stainless steel cap
- Universal mounting

5500 series purge and pressurization system vent

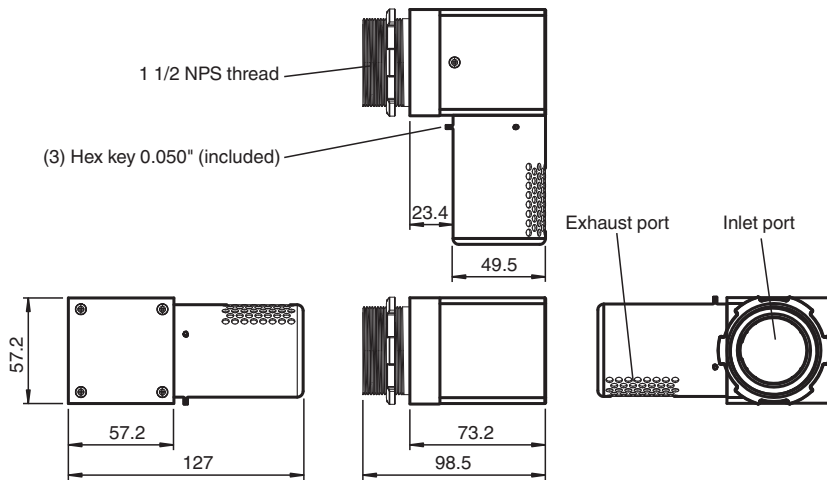


Function

The EPV-5500 vent works with the 5500 control unit and manifold valve to form a certified purge and pressurization system for enclosures. It can not be used alone.

Vents are a required component for all pressurized enclosure systems. The EPV-5500 functions as a pressure relief device, allowing the purge gas to exit the enclosure and includes a spark arrestor. The vent also provides a seal when enclosure is pressurized and operating.

Dimensions



Technical Data

General specifications

Series	5500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

Pneumatic parameters

Protective gas supply	instrument grade air or inert gas
Maximum pressure	depends on the integrity of the enclosure (strength)
Purge flow rate	See graphs

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Technical Data

Flow rate for leakage compensation	EPV-5500....-01: Less than 9.9 l/min (0.35 scfm) @ 0.63 mbar (0.25 in w.c.) Less than 27.3 l/min (0.97 scfm) @ 1.9 mbar (0.75 in w.c.) EPV-5500....-02: Less than 6.6 l/min (0.23 scfm) @ 0.63 mbar (0.25 in w.c.) Less than 16.0 l/min (0.57 scfm) @ 1.9 mbar (0.75 in w.c.) EPV-5500....-03: Less than 1 l/min (0.035 scfm) @ 0.63 mbar (0.25 in w.c.) Less than 1 l/min (0.035 scfm) @ 1.9 mbar (0.75 in w.c.)
Breaking pressure	EPV-5500....-01: 2.0 mbar (0.8 in. w.c.) EPV-5500....-02: 3.5 mbar (1.4 in. w.c.) EPV-5500....-03: 3.8 mbar (1.5 in. w.c.)
Conformity	
Degree of protection	EN 60529
Shock resistance	EN 60068-2
Ambient conditions	
Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity	5 ... 95 %, non-condensing
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Degree of protection	EPV-5500....-01/02: mounting only Type 4X / IP66 EPV-5500....-03: Type 4X / IP66
Material	
Housing	EPV-5500-AA... body and cap: 6061T6 aluminum EPV-5500-SS... body: 6061T6 aluminum, cap: 316L stainless steel
Spark arrestor	AISI 316L, (1.4404) stainless steel
Installation	- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Mass	approx. 1 kg (2.2 lb)
Dimensions	see dimensions
Mounting	mounting hole 1.5 in NPT knockout (50.8 mm) hole sealing nut (provided)
Data for application in connection with hazardous areas	
Directive conformity	
Directive 2014/34/EU	part of DEMKO 14 ATEX 1282X
International approvals	
UL approval	
cULus	UL File E184741
IECEX approval	part of IECEX UL 14.0019X
General information	
Supplementary information	Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Technical Features

Flow Rate Tables

EPV-5500-...-01 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
5	1
10	1.4
12.5	1.75
15	2.05
17.5	2.4
20	2.75
22.5	3.1
25	3.5
27.5	3.9
30	4.5

l/m	mbar
141	2.5
283	3.5
354	4.4
424	5.1
495	6.0
566	6.8
636	7.7
707	8.7
778	9.7
849	11.2

EPV-5500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
5	1.8
10	2.1
12.5	2.5
15	2.9
17.5	3.4
20	3.8
22.5	4.3
25	4.9
30	5.7

l/m	mbar
141	4.5
283	5.2
354	6.2
424	7.2
495	8.5
566	9.5
636	10.7
707	12.2
849	14.2

EPV-5500-...-03 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
2	1.2
5	1.8
7	2.0
10	2.2
12	2.4
15	3.7
20	6.5
22	7.7

l/m	mbar
57	3.0
142	4.4
198	4.9
283	5.4
340	6.0
425	9.3
566	16.2
623	19.2

Type Code



Series of vent
5500 5500 Series

Material

- AA** Body EPV-...-01: Body: 6061T Al, Cap: 6061T Al
- SS** Body EPV-...-02: Body: 6061T Al, Cap: 316L stainless steel

Configuration

- 01** 30 SCFM (850 l/min) max flow, brk press. 0.8" w.c. (2 mbar)
- 02** 20 SCFM (565 l/min) max flow, brk press. 1.4" w.c. (3.5 mbar)
- 03** 12 SCFM (340 l/min) max flow, brk. press. 1.5" w.c. (3.8 mbar)

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