

Features

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

Application

The EPV-5500 vent works with the 5500 control unit and manifold valve to form a certified purge and pressurization system for enclosures.

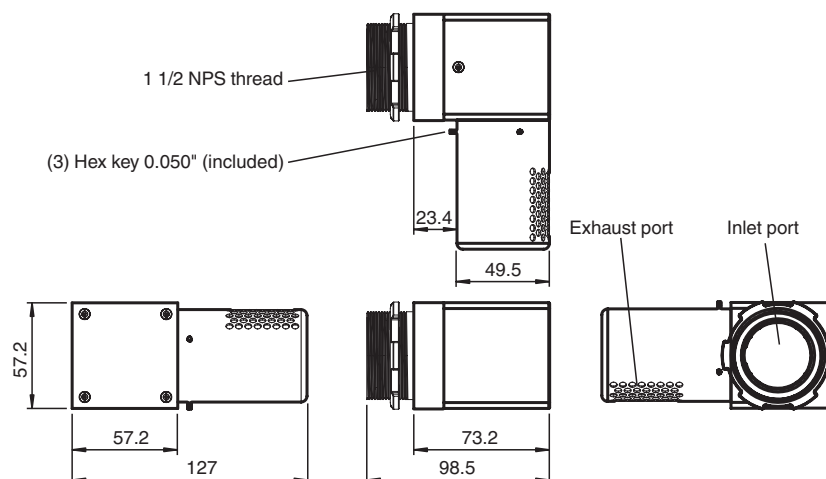
Vents are a required component for all pressurized enclosure systems. The EPV-5500 functions as a pressure relief device, allowing the purge gas to exit the enclosure and includes a spark arrestor. The vent also provides a seal when enclosure is pressurized and operating.

The 5500 series purge and pressurization system has NEC, CEC, ATEX and IECEx third part certifications for Class I, II/Div. 2 and Zone 2/22.



BEBCO EPS®

Dimensions



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
Flow rate for leakage compensation	EPV-5500....-01: approx. 21 scfh (593 l/hr) @ 0.25" w.c. (0.63 mbar) approx. 58 scfh (1640 l/hr) @ 0.75" w.c. (1.9 mbar) EPV-5500....-02: approx. 14 scfh (395 l/hr) @ 0.25" w.c. (0.63 mbar) approx. 34 scfh (961 l/hr) @ 0.75" w.c. (1.9 mbar) EPV-5500....-03: approx. 9.2 scfh (260 l/hr) @ 0.25" w.c. (0.63 mbar) approx. 22 scfh (622 l/hr) @ 0.75" w.c. (1.9 mbar)
Breaking pressure	EPV-5500....-01: 0.8" w.c. (2.0 mbar) EPV-5500....-02: 1.4" w.c. (3.5 mbar) EPV-5500....-03: 1.5" w.c. (3.8 mbar)
Conformity	
Degree of protection	EN 60529
Shock resistance	EN 60068-2
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
Relative humidity	5 ... 90 %, 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 EPV-5500....-03: Type 4X
Material	
Housing	EPV-5500-AA... body and cap: 6061T6 aluminum EPV-5500-SS... body: 6061T6 aluminum, cap: 316L stainless steel
Spark arrestor	316L, (1.4404) stainless steel
Installation	- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Mass	approx. 1005 g (2.2 lb)
Dimensions	see dimensions
Mounting	mounting hole 1 1/2" NPT knockout (50.8mm) hole sealing nut (provided)
Data for application in connection with Ex-areas	
EC-Type Examination Certificate	ATEX UL / DEMKO 14 ATEX 1282X
Group, category, type of protection, temperature class	⊕ Ex II 3 G Ex ic nA nC [ic pz IIC Gc] IIC T4 Gc (-20°C ≤ Tamb ≤ 60°C) ⊕ Ex II 3 G Ex ic nA nC [ic pz IIC Gc] IIC T6 Gc (-20°C ≤ Tamb ≤ 40°C) ⊕ Ex II 3 D Ex ic tc [pD ic IIIC Dc] IIIC T80°C Dc (-20°C ≤ Tamb ≤ 60°C) ⊕ Ex II 3 D Ex ic tc [pD ic IIIC Dc] IIIC T60°C Dc (-20°C ≤ Tamb ≤ 40°C)
Directive conformity	
Directive 94/9/EC	EN 60079-0:2006 , EN 60079-2:2007 , EN 60079-15:2005 , EN 61241-0:2004 , EN 61241-1:2004 , EN 61241-4:2006
International approvals	
UL approval	
cULus	Class I Division 2, Group A, B, C, D T4 (-20°C ≤ Tamb ≤ 60°C) Class I Division 2, Group A, B, C, D T6 (-20°C ≤ Tamb ≤ 40°C) Class II Division 2, Group F, G T4 (-20°C ≤ Tamb ≤ 60°C) Class II Division 2, Group F, G T6 (-20°C ≤ Tamb ≤ 40°C)
IECEx approval	IECEx UL/DEMKO 14.0019X Ex ic nA nC [ic pz IIC Gc] IIC T4 Gc (-20°C ≤ Tamb ≤ 60°C) Ex ic nA nC [ic pz IIC Gc] IIC T6 Gc (-20°C ≤ Tamb ≤ 40°C) Ex ic tc [pD ic IIIC Dc] IIIC T80°C Dc (-20°C ≤ Tamb ≤ 60°C) Ex ic tc [pD ic IIIC Dc] IIIC T60°C Dc (-20°C ≤ Tamb ≤ 40°C)
General information	
Supplementary information	EC-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 .

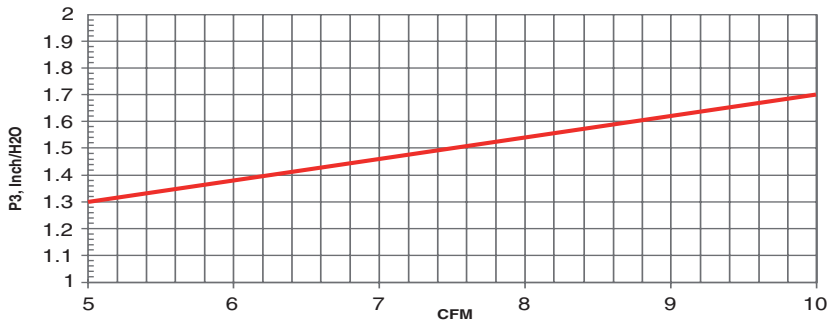
Flow Rate Curves

If you are using the EPV-5500...-01 you will use one of the following three curves to determine your flow rate. The size of your enclosure will determine what curve to use. The first curve is for an enclosure up to 5 cubic feet, the second curve is for an

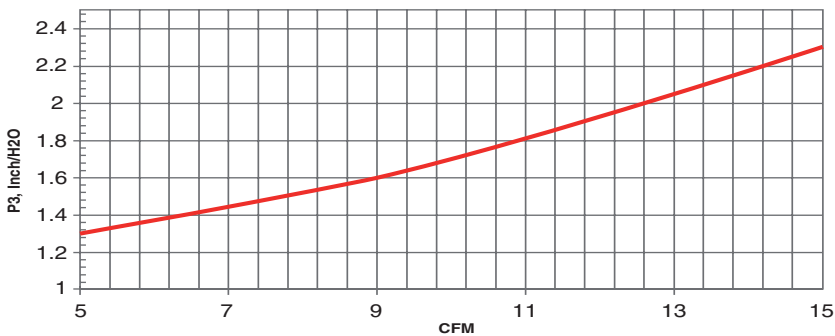
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enclosure between 5-15 cubic feet and the third curve is for an enclosure 15 cubic feet and larger. Once you determine which curve matches your application you can determine your flow rate from the pressure reading.

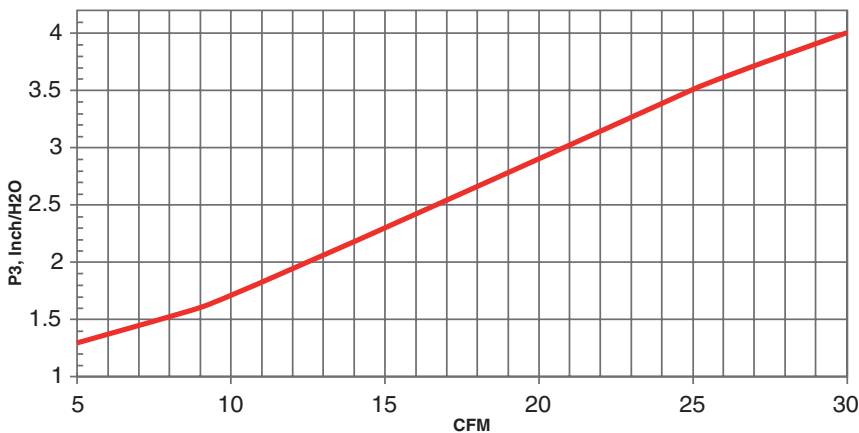
Vent Flow vs. Pressure (EPV-5500-...-01)
Enclosure up to 5 Cubic Feet



Vent Flow vs. Pressure (EPV-5500-...-01)
Enclosure up to 5-15 Cubic Feet



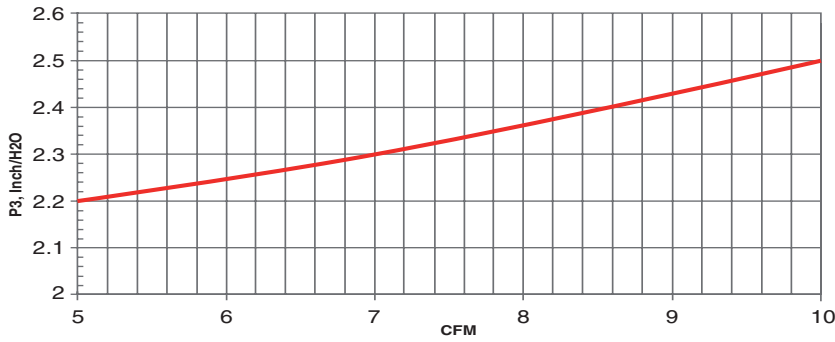
Vent Flow vs. Pressure (EPV-5500-...-01)
Enclosure 15 Cubic Feet and up



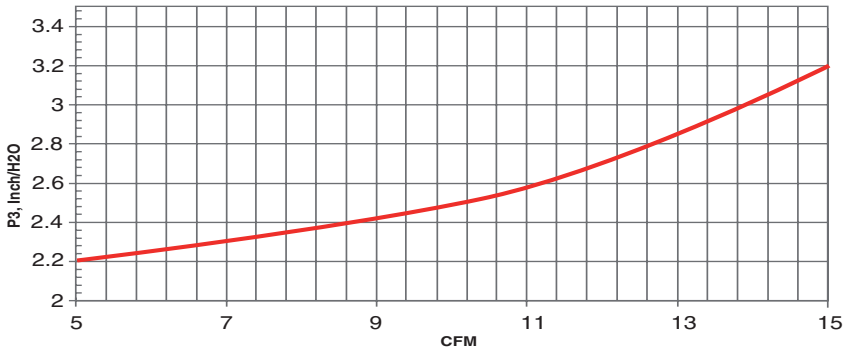
If you are using the EPV-5500...-02 you will use one of the following three curves to determine your flow rate. The size of your enclosure will determine what curve to use. The first curve is for an enclosure up to 5 cubic feet, the second curve is for an enclosure between 5-15 cubic feet and the third curve is for an enclosure 15 cubic feet and larger. Once you determine which curve matches your application you can determine your flow rate from the pressure reading.

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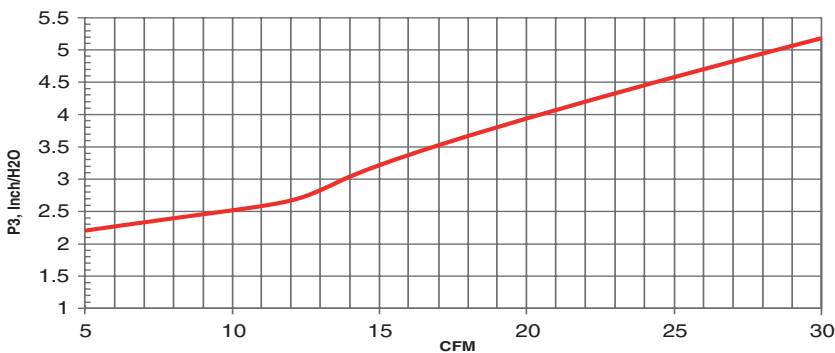
Vent Flow vs. Pressure (EPV-5500-...-02)
Enclosure up to 5 Cubic Feet



Vent Flow vs. Pressure (EPV-5500-...-02)
Enclosure 5-15 Cubic Feet



Vent Flow vs. Pressure (EPV-5500-...-02)
Enclosure 15 Cubic Feet and up

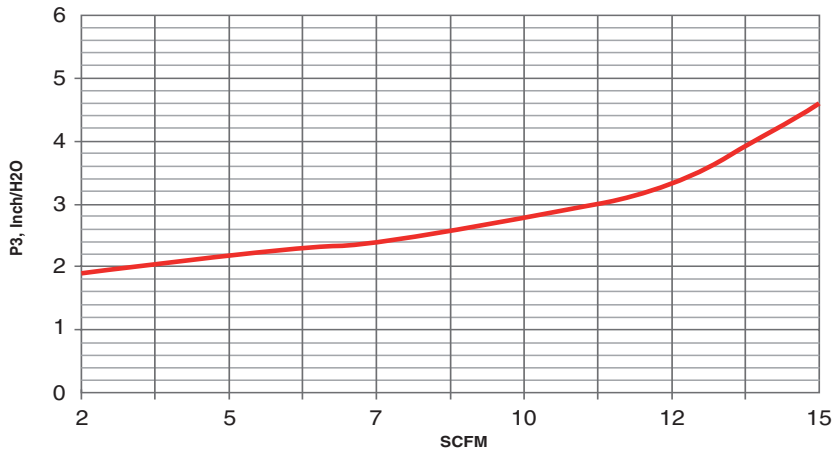


If you are using the EPV-5500...-03 then you will use the curve shown below.

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Vent Flow vs. Pressure (EPV-5500-...-03)



Type code/model number

E P V - 5 5 0 0 - A A - 0 1

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)

Material

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

Series of vent

5500 5500 Series

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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