

Features

- Must be used in conjunction with a 7500-01-AA* or 7500-MTD-* purge and pressurization control unit
- Low cost, universal mounting, easy to use
- Not gravity dependent
- Various enclosure protection vents for different applications
- Rugged, corrosion-resistant housing
- Mechanical with no cables
- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22

Application



The EPV-7500 vent works with a 7500 series control unit and a manual or automatic manifold to complete a certified purge and pressurization system for enclosures. The EPV-7500 vent is intended for use only with the 7500 series purge and pressurization system.

Vents are a required component for all pressurized enclosure systems. The EPV-7500 functions as a pressure relief device, allowing the purge gas to exit the enclosure, and it includes a spark arrestor. The vent also provides a seal when the enclosure is pressurized and operating.

The 7500 series purge and pressurization system has NEC, CEC, ATEX, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex pzc.

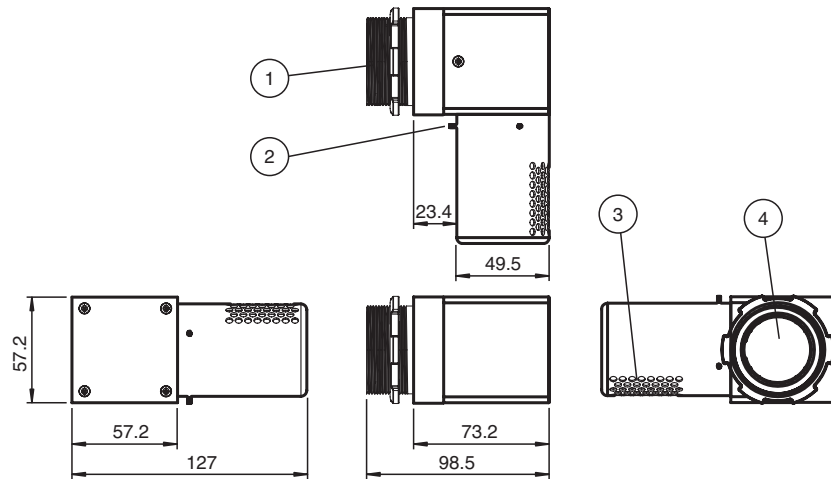


BEBCO EPS®

General specifications	
Equipment architecture	max. enclosure size 450 ft ³ (12.7 m ³)
Series	7500
Hazardous environment	gas or dust
Pneumatic parameters	
Protective gas supply	compressed air or inert gas, 5 µm filter, free from oil
Maximum pressure	See tables
Purge flow rate	See tables
Flow rate for leakage compensation	EPV-7500....-01: approx. 25 scfh (707 l/hr) at 0.25 in wc (0.63 mbar) approx. 65 scfh (1838 l/hr) at 0.75 in wc (1.9 mbar) EPV-7500....-02: approx. 20 scfh (565 l/hr) at 0.25 in wc (0.63 mbar) approx. 48 scfh (1357 l/hr) at 0.75 in wc (1.9 mbar) EPV-7500....-03 and EPV-7500-AA-04: approx. 15 scfh (424 l/hr) at 0.25 in wc (0.63 mbar) approx. 25 scfh (707 l/hr) @ 0.75 in wc (1.9 mbar)
Breaking pressure	EPV-7500....-01: 0.8 in wc (2.0 mbar) EPV-7500....-02: 1.4 in wc (3.5 mbar) EPV-7500....-03: 1.5 in wc (3.8 mbar) EPV-7500-AA-04: 1.4 in wc (3.5 mbar)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 , FCC CFR 47, part 15, subpart B: 2017, Class A ICES-003, Issue 6:2016, Class A ITE
RoHS	
Directive 2011/65/EU (RoHS)	EN 50581:2012
Conformity	
Degree of protection	Directive conformity: see Declaration of Conformity
Ambient conditions	
Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)
Storage temperature	-40 ... 80 °C (-40 ... 176 °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-7500....-01/02/04: mounting only Type 4X / IP66 EPV-7500....-03: Mounting and unit Type 4X / IP66
Material	EPV-7500-AA... : body and cap 6061T6 aluminum EPV-7500-SS... : body: 6061T6 aluminum, cap: AISI 316 (1.4401) stainless steel Spark arrestor : 304 stainless steel
Housing	EPV-7500-AA... body and cap 6061T6 aluminum body and cap: 6061T6 aluminum EPV-7500-SS... body: 6061T6 aluminum, cap: AISI 316L (1.4404) 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. 1005 g (2.2 lb)
Dimensions	127 x 94 x 69 mm (5 x 3.7 x 2.7 in)
Mounting	EPV-7500....-01/02/03: mounting hole 1.5 in NPT knockout (50.8 mm) hole sealing nut (provided) EPV-7500-AA-04: mounting hole 37 mm with sealing nut (provided)
Data for application in connection with hazardous areas	
Certificate	
Marking	 II 3 G  II 3 D part of 18ATEX2025X
Directive conformity	
Directive 2014/34/EU	IEC/EN 60079-0 , IEC/EN 60079-2 , IEC/EN 60079-7 , IEC/EN 60079-15 , IEC/EN 60079-31 Supplements: EN 61010-1:2010, EN 61326-3-2:2008, EN 61000-6-2:2005
International approvals	
UL approval	
cULus	Class I, Division 2, Groups A, B, C, D T4 (-40 °C ≤ Ta ≤ 70 °C) Class I, Division 2, Groups A, B, C, D, T6 (-40 °C ≤ Ta ≤ 50 °C) Class II, Division 2, Groups F, G T4 (-40 °C ≤ Ta ≤ 70 °C) Class II, Division 2, Groups F, G T6 (-40 °C ≤ Ta ≤ 50 °C)
IECEX approval	part of IECEX UL 18.0022X

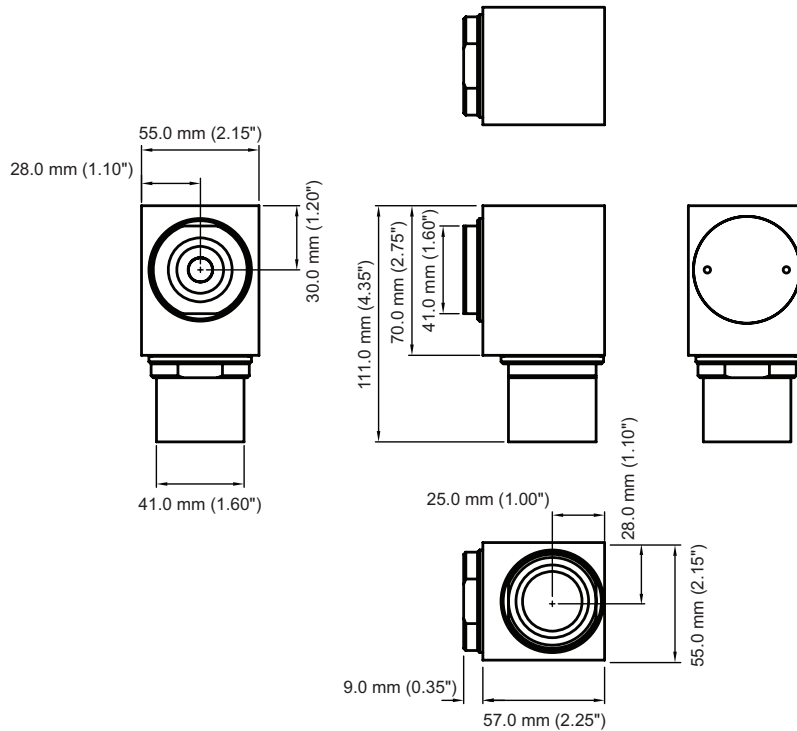
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Dimensions - EPV-7500-...-01/02/03 Vents



1	1 1/2 NPS thread
2	(3) hex key 0.05 inch (included)
3	Exhaust port
4	Inlet port

Dimensions - EPV-7500-AA-04



Flow Rate Tables

EPV-7500-...-01 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
5	1.28
7	1.44
10	1.64
12	1.80

l/m	mbar
141	3.19
198	3.59
283	4.09
339	4.48

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ft ³ /m	Inches of water
15	2.10
17	2.30
20	2.53
25	2.95
30	3.50
35	4.15

l/m	mbar
424	5.23
481	5.73
566	6.30
707	7.35
849	8.71
991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
5	2.15
7	2.35
10	2.65
12	2.85
15	3.15
17	3.35
20	3.65
25	4.25
30	4.75
35	5.25

l/m	mbar
141	5.36
198	5.85
283	6.60
339	7.10
424	7.84
481	8.34
566	9.09
707	10.58
849	11.82
991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
4	2.00
6	2.20
8	2.40
10	2.70
12	3.50
14	4.65
16	6.10

l/m	mbar
113	4.98
170	5.48
226	5.98
282	6.72
339	8.71
396	11.58
452	15.18

EPV-7500-AA-04 Vent Flow vs. Enclosure Pressure

ft ³ /m	Inches of water
3	2.50
4	2.75
5	3.10
6	3.40
7	3.80
8	4.20
9	4.60
10	5.00
11	5.50
12	6.10
13	6.80
14	7.70

l/m	mbar
85	6.23
113	6.85
141	7.72
170	8.47
198	9.46
226	10.46
254	11.45
339	12.45
311	13.69
339	15.18
368	16.93
396	19.17

Type Code

E P V - 7 5 0 0 - A A - 0 1

Series of vent
7500 7500 Series

Configuration

- 01 35 SCFM (990 l/min) max flow, brk. press. 0.8" wc (2 mbar)
- 02 35 SCFM (990 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)
- 03 16 SCFM (452 l/min) max flow, brk. press. 1.5" wc (3.8 mbar)
- 04* 14 SCFM (396 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)

Material

- AA Body and cap: 6061T aluminum
- SS Body: 6061T Aluminum, Cap: 316L stainless steel

* The only possible combination with these options is "EPV-7500-AA-04"

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