



7500 series vent

EPV-7500-AA-03

- 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
- The -03 version of the EPV-7500 has a leakage rate of <1 L/min.

7500 series purge and pressurization system vent, aluminum body and cap



Function

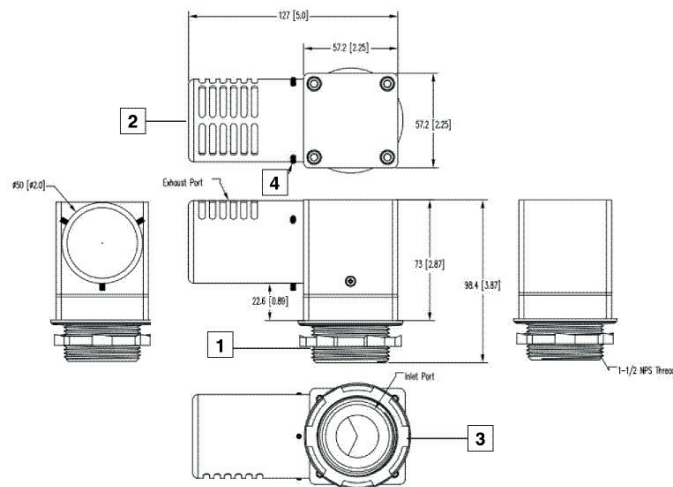
The EPV-7500 vent works with the 7500 control unit and manifold valve to form a certified purge and pressurization system for enclosures. It can not be used alone.

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

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

Dimensions

EPV-7500-...-03 Vent



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

Technical Data

General specifications

Equipment architecture	max. enclosure size 12.7 m ³ (450 ft ³)
Series	7500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

Pneumatic parameters

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

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Technical Data

Protective gas supply	compressed air or inert gas, 40 µm filter, free from oil
Maximum pressure	See tables
Purge flow rate	See tables
Flow rate for leakage compensation	EPV-7500....-01: Less than 11.8 l/min (0.42 scfm) @ 0.63 mbar (0.25 in. w.c.) Less than 30.6 l/min (1.08 scfm) @ 1.9 mbar (0.75 in. w.c.) EPV-7500....-02: Less than 9.4 l/min (0.33 scfm) @ 0.63 mbar (0.25 in. w.c.) Less than 22.6 l/min (0.8 scfm) @ 1.9 mbar (0.75 in. w.c.) EPV-7500....-03 and EPV-7500-AA-04: 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-7500....-01: 2.0 mbar (0.8 in. w.c.) EPV-7500....-02: 3.5 mbar (1.4 in. w.c.) EPV-7500....-03: 3.8 mbar (1.5 in. w.c.) EPV-7500-AA-04: 3.5 mbar (1.4 in. w.c.)
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/s², 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	
Housing	EPV-7500-AA... body and cap: 6061-T6 aluminum EPV-7500-SS... body: 6061-T6 aluminum cap: AISI 316L (1.4404) stainless steel
Spark arrestor	304 Stainless steel
Installation	- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Mass	approx. 1000 g (2.2 lb)
Dimensions	See "Dimensions" section.
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 3GD (part of DEMKO 18 ATEX 2025 X)
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 61326-3:2008, 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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Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

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

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

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

ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

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Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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Series of vent
7500 7500 Series

- Material
- AA Body and cap: 6061-T6 aluminum
 - SS Body: 6061-T6 Aluminum, Cap: 316L stainless steel

- 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)
(*Very low leakage rate during normal operation.)
 - 04 14 SCFM (396 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)