



7500 series vent EPV-7500-AA-03

BEBCO EPS*

- 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

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

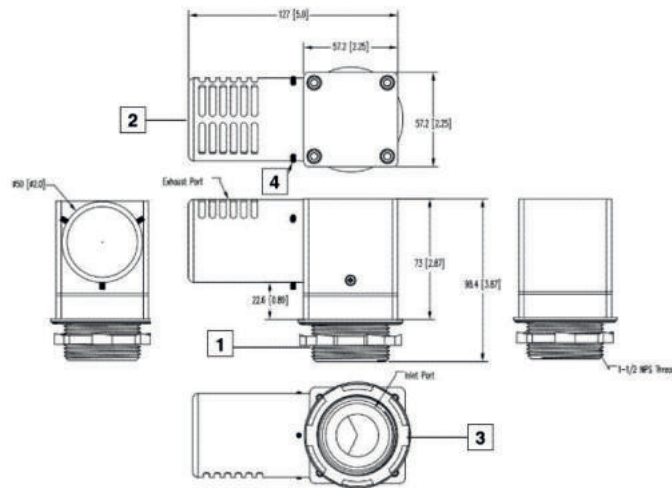


Function

The 7500 series purge and pressurization system consists of a control unit, an enclosure protection vent, and a manual or automatic manifold. The control unit's menu-driven touch screen display makes it easy to select pre-programmed and user-selected variables. The display has 4 LED indicators that allow users to determine system condition from a distance. A digital manifold system such as the 5500-MAN-... can be used to make the 7500 a fully automatic system. Enclosure pressure and leakage are monitored. If a loss in enclosure pressure occurs, the solenoid valve engages to restore the defined pressure settings and/or trigger a pressure drop alarm. 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

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Pneumatic parameters

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: 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) at 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	
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 60079-18 , 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

Release date: 2024-11-07 Date of issue: 2024-11-07 Filename: 70110791_eng.pdf

Technical Features

Flow Rates

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

ft ³ /min	Inches of water
5	1.28
7	1.44
10	1.64
12	1.80
15	2.10
17	2.30
20	2.53
25	2.95
30	3.50
35	4.15

l/min	mbar
141	3.19
198	3.59
283	4.09
339	4.48
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 /min	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/min	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 /min	Inches of water
2	1.23
4	1.44
6	1.92
8	2.10
10	2.20
12	2.35
14	2.86
16	3.71
18	4.70
21	6.31

l/min	mbar
56.6	3.1
113.3	3.6
169.9	4.8
226.5	5.2
283.2	5.5
339.8	5.8
396.4	7.1
453.1	9.2
509.7	11.7
594.7	15.7

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

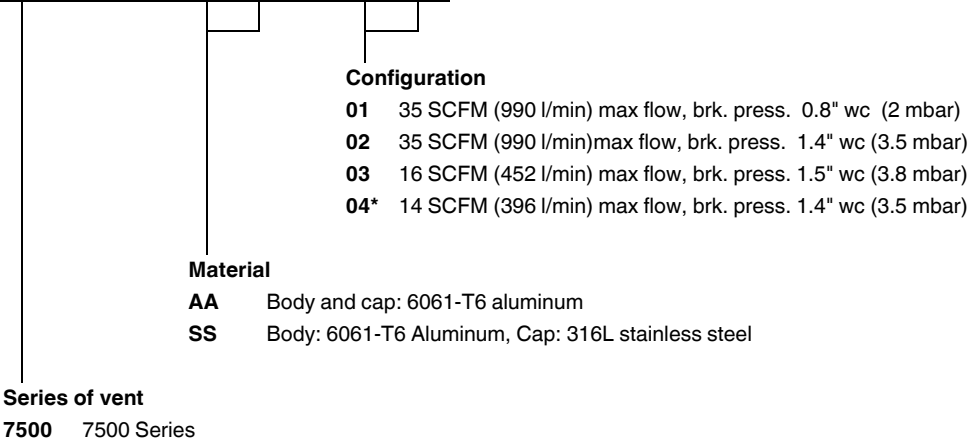
ft ³ /min	Inches of water
3	2.50
4	2.75
5	3.10
6	3.40
7	3.80
8	4.20
9	4.60
10	5.00
11	5.50
12	6.10
13	6.80
14	7.70

l/min	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

Release date: 2024-11-07 Date of issue: 2024-11-07 Filename: 70110791_eng.pdf

Type Code

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



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

Release date: 2024-11-07 Date of issue: 2024-11-07 Filename: 70110791_eng.pdf