



## Enclosure protection vent

### EPV-\* -SA-\*

- Top or side mount configurations
- Seamless cap
- Friction free valve assembly
- Spark arresting exhaust
- Can only be purchased in conjunction with corresponding Purge system or as a replacement

Pressure relief vent for use with the Pepperl+Fuchs BebcO EPS® purge and pressurization systems



## Function

The EPV (enclosure protection vents) are self-seating, gravity controlled, low pressure relief valve designed to ventilate excessive enclosure pressures created by the Rapid Exchange® process, or the failure of the enclosure pressure control devices. Each vent features a seamless cap, a spark arresting (SA) style exhaust element, a friction-free valve assembly, a base, and a mounting hub. The mounting hub, along with associated pipe fittings, permits direct mounting through a round cutout on the top or side of a protected enclosure. This device functions only in conjunction with Pepperl+Fuchs BebcO EPS® purge systems, to reduce the hazardous (classified) area rating within protected enclosure(s), in accordance with the NEC - NFPA 70, Article 500, NFPA 496, and ISA 12.4.

## Technical Data

### General specifications

Series	EPV
System	Type Z Purge
Hazardous environment	gas or dust

### Pneumatic parameters

Protective gas supply	instrument grade air or inert gas
Pressure requirement	2" ...5" wc (50.8 mm ... 127 mm wc)
Maximum pressure	5" ... 7" wc (127 mm ... 177 mm wc)
Breaking pressure	0.65" wc (16.5 mm wc)

### Ambient conditions

Ambient temperature	-29 ... 49 °C (-20.2 ... 120.2 °F)
Relative humidity	5 ... 95 %, noncondensing

### Mechanical specifications

Material	<p>Body:</p> <ul style="list-style-type: none"> <li>cap - 3003 drawn aluminum</li> <li>base - A.S.E. 306, 308 cast aluminum</li> <li>mounting hub - zinc plated steel</li> <li>pipe fittings - schedule 40 3003 aluminum</li> <li>nameplates - Lexan®</li> <li>hardware - 316 SS</li> </ul> <p>Exhaust elements:</p> <ul style="list-style-type: none"> <li>spark arrestor - 316 SS</li> <li>element cap - 6061 aluminum</li> </ul> <p>Valve assembly:</p> <ul style="list-style-type: none"> <li>base - 14 Ga. machined 316 ss</li> <li>seat disc - 14 Ga. machined 316 SS</li> <li>hinge - Zytel® 8018, 14% glass fill</li> <li>pin &amp; rivets - 316 SS</li> <li>disc adhesive - urethane epoxy</li> </ul>
----------	--

## Technical Data

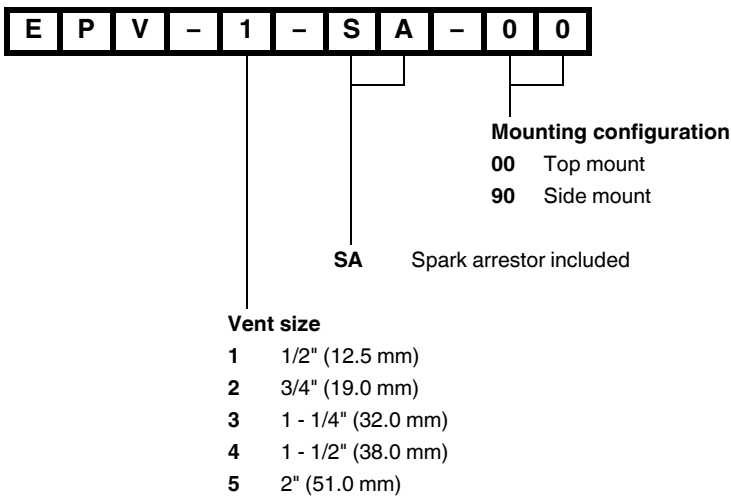
Mass	EPV-1-SA-00: 3 lb (1.36 kg) EPV-1-SA-90: 4 lb (1.81 kg) EPV-2-SA-00: 3 lb (1.36 kg) EPV-2-SA-00: 4 lb (1.81 kg) EPV-3-SA-00: 4 lb (1.81 kg) EPV-3-SA-90: 5 lb (2.27 kg) EPV-4-SA-00: 7 lb (3.18 kg) EPV-4-SA-00: 9 lb (4.08 kg) EPV-5-SA-00: 10 lb (4.54 kg) EPV-5-SA-00: 12 lb (5.44 kg)
Mounting	-00: top mount -90: side mount
<b>General information</b>	
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> . Vents are only certified for use with Pepperl+Fuchs Bebcos EPS® purge and pressurization systems. See specific purge and pressurization system for associated certifications.

## Assembly



Release date: 2025-02-10 Date of issue: 2025-02-10 Filename: 515455\_eng.pdf

**Type Code**



**Technical Features**

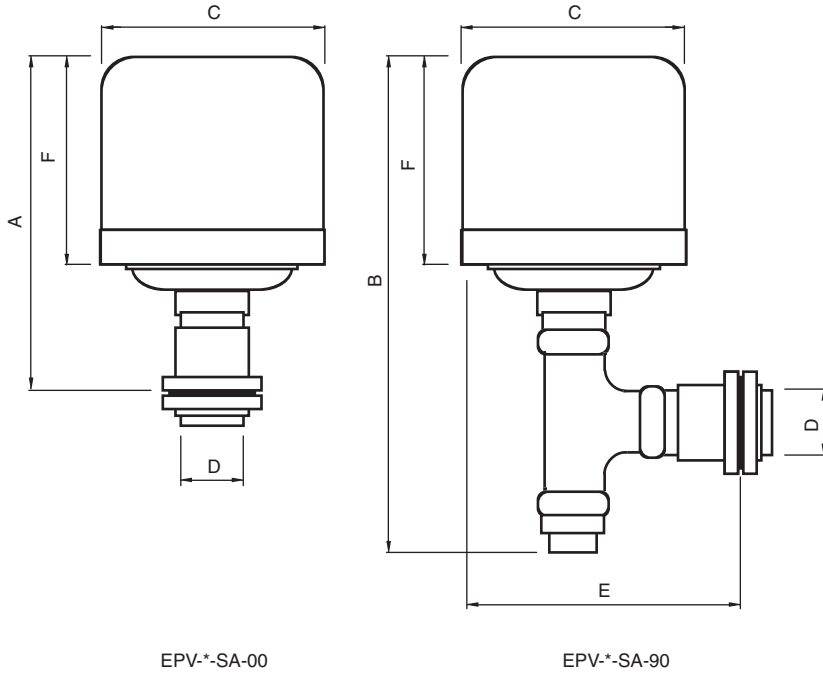
Vent Compatibility & Flow Rate Chart				
Vent model	Required use	Optional use	SCFH (l)/hr @ 3" (76.2 mm)	SCFH (l)/hr @ 7" (177.8 mm)
EPV-1-SA		11, 1011, 1001A & 2001A	568 (16086)	1044 (29566)
EPV-2-SA	1012, 1002 & 2002		685 (19399)	122 (34041)
EPV-3-SA	1003, 2003, 3003 & 4004	1001C & 201B	1143 (32370)	1971 (55819)
EPV-4-SA	1004, 2004, 3004, & 4004	1001C & 2001C	2510 (71083)	4387 (124240)
EPV-5-SA	1005 & 2005		4280 (121210)	4479 (126845)

Normal SCFH measured with enclosure pressure @ 3" (76.2 mm) of water  
 Max SCFH measured @ 7" (177.8 mm) of water

Overall Vent Dimensions [inches (mm)]					
Vent model	EPV-1	EPV-2	EPV-3	EPV-4	EPV-5
<b>Hub size</b>	1/2"	3/4"	1 - 1/4"	1 - 1/2"	2"
<b>A</b>	4.75 (120.70)	4.88 (123.8)	5.25 (133.4)	7 (177.8)	7 (177.8)
<b>B</b>	7 (177.8)	7.36 (187.3)	8 (203.2)	11 (279.4)	11.5 (292.1)
<b>C</b>	4 (101.6)	4.63 (117.5)	5 (127)	8 (203.2)	8 (203.2)
<b>D</b>	0.88 (22.2)	1.13 (28.6)	1.75 (44.5)	2 (50.8)	2.5 (63.5)
<b>E</b>	4.25 (108)	5.25 (133.4)	5.5 (139.7)	9 (228.6)	9 (228.6)
<b>F</b>	2.75 (69.9)	2.75 (69.9)	2.75 (69.9)	3.75 (95.3)	3.75 (95.3)

Hub Size indicates standard trade conduit size. All vents require 4" to 7" (101.6 mm to 177.8 mm) underside clearance for testing.

Release date: 2025-02-10 Date of issue: 2025-02-10 Filename: 515455\_eng.pdf



Release date: 2025-02-10 Date of issue: 2025-02-10 Filename: 515455\_eng.pdf