



Enclosure protection vent EPV-*-GP-90

- Top or side mount configurations
- Seamless cap
- Friction free valve assembly
- Spark arresting exhaust

Pressure relief vent for use with the Pepperl+Fuchs Bebcu 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 (GP) 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.

Technical Data

General specifications	
Series	EPV
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	Body: cap - 3003 drawn aluminum base - A.S.E. 306, 308 cast aluminum mounting hub - zinc plated steel pipe fittings - schedule 40 3003 aluminum nameplates - Lexan® hardware - 316 SS Exhaust elements: spark arrestor - 316 SS element cap - 6061 aluminum Valve assembly: base - 14 Ga. machined 316 ss seat disc - 14 Ga. machined 316 SS hinge - Zytel® 8018, 14% glass fill pin & rivets - 316 SS disc adhesive - urethane epoxy
Mass	EPV-1-GP-90: 4 lb (1.81 kg) EPV-2-GP-90: 4 lb (1.81 kg) EPV-3-GP-90: 5 lb (2.27 kg) EPV-4-GP-90: 9 lb (4.08 kg) EPV-5-GP-90: 12 lb (5.44 kg)
Mounting	Side or Top Mount

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Assembly



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Type Code



Mounting configuration
90 Side mount

GP Spark arrestor included

Vent size

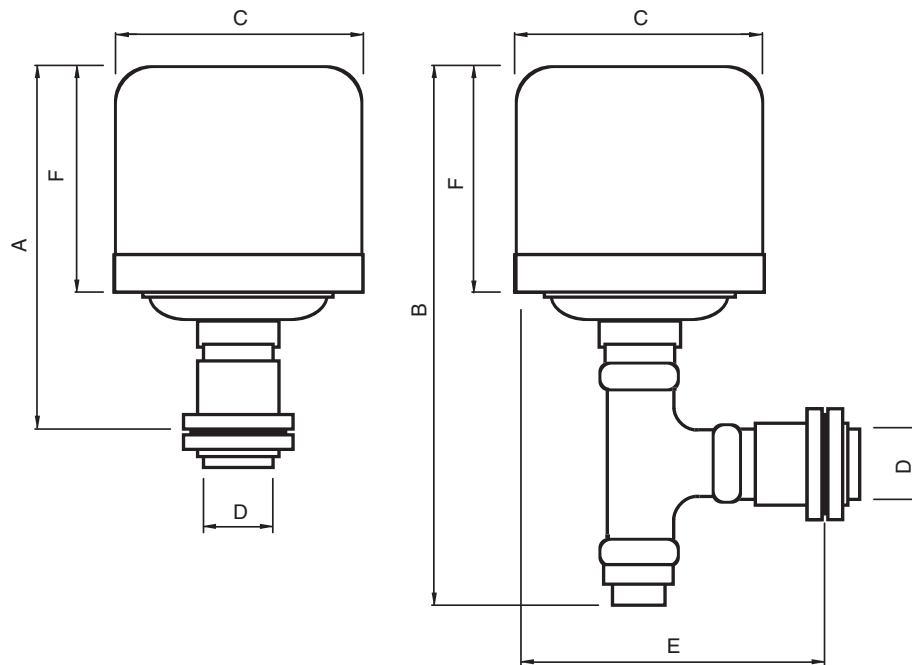
1	1/2" (12.5 mm)
2	3/4" (19.0 mm)
3	1 - 1/4" (32.0 mm)
4	1 - 1/2" (38.0 mm)
5	2" (51.0 mm)

Additional Information

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Vent Flow Rate Chart		
Vent model	SCFH (l)/hr @ 3" (76.2 mm)	SCFH (l)/hr @ 7" (177.8 mm)
EPV-1-GP	568 (16086)	1044 (29566)
EPV-2-GP	685 (19399)	122 (34041)
EPV-3-GP	1143 (32370)	1971 (55819)
EPV-4-GP	2510 (71083)	4387 (124240)
EPV-5-GP	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
Hub size	1/2"	3/4"	1 - 1/4"	1 - 1/2"	2"
A	4.75 (120.70)	4.88 (123.8)	5.25 (133.4)	7 (177.8)	7 (177.8)
B	7 (177.8)	7.36 (187.3)	8 (203.2)	11 (279.4)	11.5 (292.1)
C	4 (101.6)	4.63 (117.5)	5 (127)	8 (203.2)	8 (203.2)
D	0.88 (22.2)	1.13 (28.6)	1.75 (44.5)	2 (50.8)	2.5 (63.5)
E	4.25 (108)	5.25 (133.4)	5.5 (139.7)	9 (228.6)	9 (228.6)
F	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.					



(Optional top mount configuration)

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