

Features

- Maximum enclosure size 450 ft³ (12.7 m³)
- Pressure relief vent with flow and pressure monitoring at the exhaust
- Universal mounting in any orientation
- 6000 Control Unit supports 2 vents
- Different vents for different applications

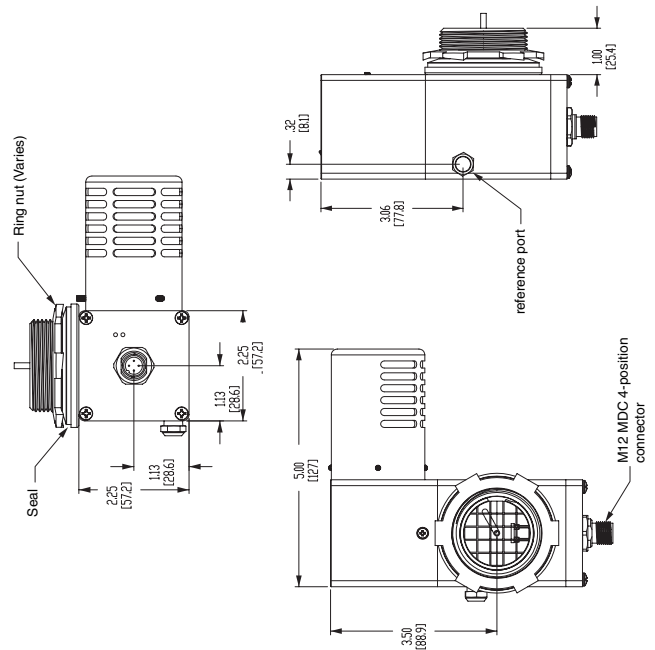
Function

The EPV-6000 vent exhausts excess pressure from the enclosure and measures flow and pressure during operation. The 6000 series vent has a pressure transducer and thermal flow sensor that is connected to the 6000 EPCU. It is intrinsically safe through the galvanic isolation barrier within the 6000 EPCU.

Because measurement of the flow is always at the exhaust of the pressurized enclosure, the vent is located on the enclosure(s) such that it is venting to the atmosphere. The EPV-6000 vent can be mounted vertically or horizontally and is not gravity dependent.

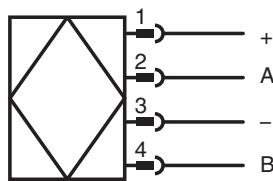
The EPV-6000 vent can be mounted external or internally to the enclosure. When mounting internally, only the vent cap is exposed to the outside atmosphere.

Assembly

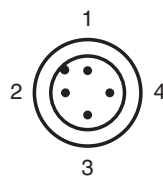


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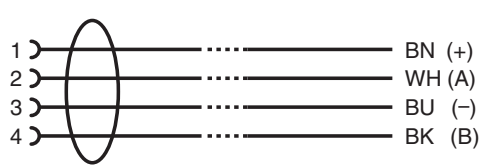
Connection



EPV-6000-**-**



Cordset, M12, 4-pin, shielded



6000 Control Unit

General specifications	
Series	6000 Series
Number of volume exchanges	4 to 19
Hazardous environment	gas, dust, gas and dust
Electrical specifications	
Connection	
Power	Intrinsically Safe back to 6000 control unit
Signal	BUS back to 6000 control unit
Connection	M12 connector, 4-pin
Indicators/settings	
LED indication	power: green vent number: yellow, on for second vent
Pneumatic parameters	
Protective gas supply	instrument grade air or inert gas
Safe pressure	Gas: 0.25" wc (6.4 mm wc) (0.625 mbar) (62 Pa) Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa) Gas and Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa)
Enclosure pressure	0 ... 9.9" wc (25 mbar) (250 mm wc)
Max. enclosure pressure	25" wc (62 mbar) (625 mm wc)
Purge flow rate	Maximum flow rate measurement for enclosure size (enclosure volume:flow rate): < 20 ft ³ (0.57m ³): 5, 12 SCFM (56, 141, 340 l/min), or dynamic 20 ... 30 ft ³ (0.57 ... 0.85 m ³): 5, 12, 20 SCFM (56, 141, 340, 565 l/min), or dynamic > 30 ft ³ (0.85m ³): 5, 12, 20, 30 SCFM (56, 141, 340, 565, 850 l/min), or dynamic
Purge flow and enclosure pressure rate	With EPV-6000-xx-01, EPV-6000-xx-02 5 SCFM @ 1.5" wc, (141 l/min @ 3.7 mbar) 12 SCFM @ 2.0" wc, (340 l/min @ 5.0 mbar) 20 SCFM @ 2.7" wc, (565 l/min @ 6.7 mbar) 30 SCFM @ 4.1" wc, (850 l/min @ 10.2 mbar) With EPV-6000-xx-03, EPV-6000-xx-04 5 SCFM @ 2.1" wc, (141 l/min @ 5.2 mbar) 12 SCFM @ 2.6" wc, (340 l/min @ 6.5 mbar) 20 SCFM @ 4.1" wc, (565 l/min @ 10.2 mbar) 30 SCFM @ 5.3" wc, (850 l/min @ 13.2 mbar) With EPV-6000-xx-05, 06 5 SCFM @ 1.8" wc, (141 l/min @ 4.5 mbar) 12 SCFM @ 2.9" wc, (340 l/min @ 7.3 mbar) 20 SCFM @ 7.4" wc, (565 l/min @ 18.5 mbar)
Flow rate for leakage compensation	Depends on enclosure seal. With EPV-6000-xx-01, EPV-6000-xx-02 0.35 SCFM @ 0.25" wc (10.0 l/min @ .63 mbar) 1.0 SCFM @ 0.75" wc (28.0 l/min @ 1.9 mbar) With EPV-6000-xx-03, 04 0.22 SCFM @ 0.25" wc (6.2 l/min @ .63 mbar) 0.58 SCFM @ 0.75" wc (16.4 l/min @ 1.9 mbar) With EPV-6000-xx-05, 06 0.15 SCFM @ 0.25" wc (4.2 l/min @ .63 mbar) 0.35 SCFM @ 0.75" wc (10.0 l/min @ 1.9 mbar)
Breaking pressure	EPV-6000-xx-01, EPV-6000-xx-02: 0.8" wc (2.0 mbar) EPV-6000-xx-03, EPV-6000-xx-04: 1.3" to 1.4" wc (3.2 to 3.5 mbar) EPV-6000-xx-05, EPV-6000-xx-06: 1.4" to 1.5" wc (3.5 to 3.8 mbar)
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-30 ... 80 °C (-22 ... 176 °F)
Relative humidity	5 ... 95 %, noncondensing
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Material	EPV-6000-AA-.... Cap: 5052 anodized aluminum, 6061T6 anodized aluminum EPV-6000-SS-.... Cap: 316L (UNS S31603) stainless steel; Body: 6061T6 anodized aluminum
Spark arrestor	304 (UNS S30400) stainless steel
Installation	- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Mass	approx. 1.4 kg (3.1 lb)
Dimensions	127.5 x 146 x 82.5 mm (5.05 x 5.75 x 3.25 inch)

Release date 2019-08-19 23:20 Date of issue 2019-08-19 514686_eng.xml

Mounting	1 1/2" NPT knockout (50.8 mm (2") hole) with sealed nut
Data for application in connection with hazardous areas	
EU-type examination certificate	
Marking	II 2 G Ex ib [pxb] IIC T4 Gb II 2 D Ex ib [pxb] IIIC T135 °C Db -20 °C ≤ Ta ≤ 60 °C DEMKO 15 ATEX 1622X
Directive conformity	
Directive 94/9/EC	IEC/EN 60079-0 IEC/EN 60079-1 IEC/EN 60079-2 IEC/EN 60079-7 IEC/EN 60079-11 IEC/EN 60079-31
International approvals	
UL approval	cULus Class I, Division 1, Groups A, B, C, D IP66/Type 4X Class I, Zone 1, Groups IIC, T4 Class II, Division 1, Groups E, F, G Class II, Zone 21, Group IIIC T135 °C -20 °C ≤ TA ≤ 60 °C Ex i intrinsically safe
IECEX approval	Ex ib [pxb] IIC T4 Gb Ex ib [pxb] IIIC T135 °C Db -20 °C ≤ Ta ≤ 60 °C IECEX UL 15.0147X
General information	
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 www.pepperl-fuchs.com .

Type code/model number

E	P	V	-	6	0	0	0	-	A	A	-	0	1
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Configuration

- 01 standard configuration
- 02 standard configuration, 2nd vent
- 03 low leakage rate for pressurization/low flow
- 04 low leakage rate for pressurization, 2nd vent
- 05 very low leakage rate for pressurization/low flow
- 06 very low leakage rate for pressurization/low flow, 2nd vent

Body type

- AA anodized aluminum body and cap
- SS anodized aluminum body and 316L stainless steel cap