Features

- · A selection of vents for specific applications
- · Intrinsically safe operation
- Continuous flow vents for precise flow rates for dilution applications
- Continuous flow outputs for dilution, purging, and pressurization
- Low leakage rate vents for air or inert gas conversation
- · High flow rate vents for fast, large enclosure systems
- Universal mounting in any orientation including most of the unit inside the enclosure
- Maximum enclosure size 12.75 cu.meters (450 cu.ft.)
- ATEX/IECEx, Zone 1/21 certified for "pyb" and "pxb"

Application

The 6500 system consists of the 6500 control unit, EPV-6500 pressure relief and monitoring vent, and a valve for pressurization, purging, and with some models dilution for analyzer applications. The EPV-6500 vents are available in different configurations for specific or general applications. The housings are the same but the flows and pressures are different for specific applications. The continuous flow vent allows for precise flow rate measurements that allows for dilution applications in gas analyzers that is dealing with any hazardous gas. Safe flow rates are user-selectable through the 6500 control unit for safe operation and control of the 6500-MAN-PV (proportional valve). The EPV-6500 vents can be mounted in any orientation and the body can be mounted inside the pressurized enclosure with just the vent cap outside for clean, un-intrusive look. The EPV-6500-SS-* model includes reference pressure tubing and hardware for internal mount. The EPV-6500 vent is intrinsically safe when used with the 6500 control unit. No I.S. barrier is required with the 6500 control unit.

Connection

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2		4-PIN
((🔅)) 3	1	+ (brown
4	2	A (white)
	3	- (blue)
	4	B (black)
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General specifications	
Series	6500
Number of volume exchanges	5 to 19
Hazardous environment	gas, dust, gas and dust
Electrical specifications	
Connection	
Signal	BUS back to the 6500 control unit
Connection	M12 connector, 4-pin, cable length 5 meters (provided)
Cable length	max. 60 meters at 50 pf/ft and 0.2 μ H/ft
Indicators/settings	
LED indicator	POWER: green
Pneumatic parameters	FOWER. green
-	instrument grade eir er inert gee
Protective gas supply	instrument grade air or inert gas
Maximum pressure	depends on the integrity of the enclosure (strength) max. vent pressure: 25" wc (635 mm wc) (62 mbar / 6200 pa) vent pressure range: 0 to 9.9" wc (0 to 25 mbar)
Safe pressure	Gas: 0.35" wc (8,88 mm wc) (0.88 mbar/ 88 pa) Dust: 0.35" wc (8,88 mm wc) (0.88 mbar/ 88 pa) Gas+Dust: 0.35" wc (8,88 mm wc) (0.88 mbar/ 88 pa)
Purge flow rate	See graphs Readout on display is in increments of 28 l/min (1 scfm). Minimum and maximum reading depends on type of vent and supply pressure. EPV-6500-*-07, 08 will readout continuous flow.
Purge flow and enclosure pressure rate	See graphs Readout on display is in increments of 28 l/min (1 scfm). Minimum and maximum reading depends on type of vent and supply pressure. EPV-6500-*-07, 08 will readout continuous flow.
Flow rate for leakage compensation	EPV-650001: 593 l/hr (21 scfh) @ .63mbar (.25"wc) 1640 l/hr (58 scfh) @ 1.9mbar (0.75"wc) EPV-650003: 395 l/hr (14 scfh) @ .63mbar (.25"wc) 961 l/hr (34 scfh) @ 1.9mbar (0.75"wc) EPV-650005: 260 l/hr (9.2 scfh) @ .63mbar (.25"wc) 622 l/hr (22 scfh) @ 1.9mbar (0.75"wc) EPV-650007: n/a EPV-650008: n/a
Breaking pressure	EPV-650001: 2.0 mbar (0.8" wc) EPV-650003: 3.5 mbar (1.4" wc) EPV-650005: 3.8 mbar (1.5" wc) EPV-650007: n/a EPV-650008: n/a
Conformity	
Degree of protection	EN 60529
Shock resistance	EN 60068-2
Ambient conditions	
Ambient temperature	-20 70 °C (-4 158 °F)
Storage temperature	-40 70 °C (-40 158 °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
·	00 y, 11 mo, all anco
Mechanical specifications	
Degree of protection	IP66
Material	
Housing	EPV-6500-AA body: 6000 series aluminum anodized cap: 5000 series aluminum anodized EPV-6500-SS body: 6000 series Aluminum anodized cap: 316L stainless steel
Spark arrestor	304 (UNS S30400) stainless steel
Installation	- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Masa	
Mass	approx. 1.4 kg (3.1 lb)
Mass Dimensions Mounting	

Refer to "General Notes Relating to Pepperl+Fuchs Product Information". Pepperl+Fuchs Group www.pepperl-fuchs.com

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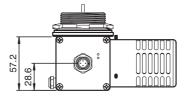
Germany: +49 621 776 2222 pa-info@de.pepperl-fuchs.com

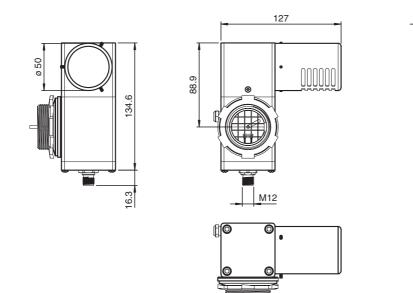
Singapore: +65 6779 9091 pa-info@sg.pepperl-fuchs.com



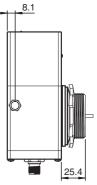
EC-Type Examination Certificate	ATEX UL / DEMKO 15 ATEX 1622X
Directive conformity	
Directive 94/9/EC	EN 60079-0:2012, EN 60079-2:2014, EN 60079-11:2011
International approvals	
IECEx approval	IECEx UL / DEMKO 15.0147X
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

Dimensions





47.6



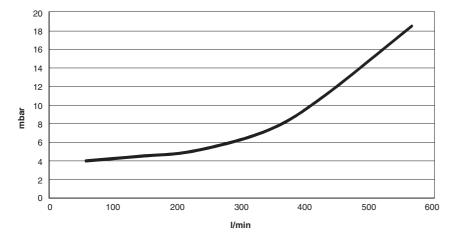
Flow Rate Curves

Standard Vent Pressure / Flow Curves

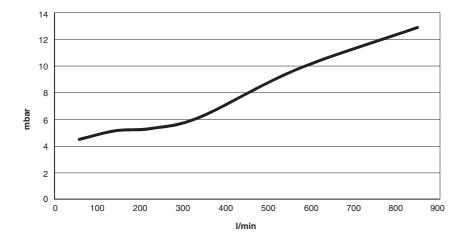
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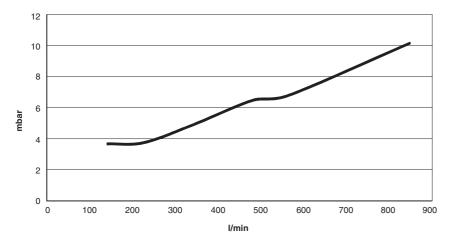






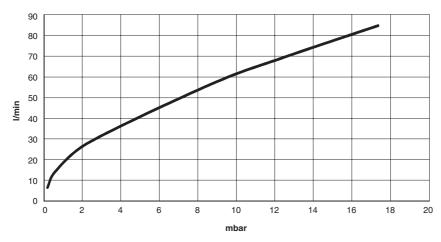


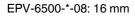


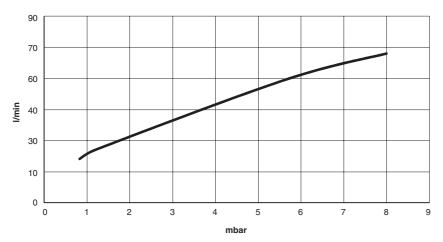


EPV-6500-*-01

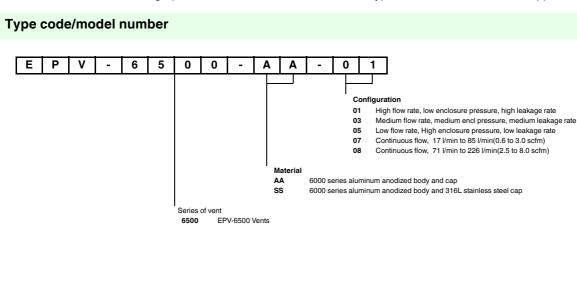
EPV-6500-*-07: 8 mm Orifice







Note: These graphs should only be used for representation of flow and pressure through each type of vent and not used for calculating purge time. They can be used for estimating purge time but the actual purge time will be automatically calculated by the 6500 control unit. These graphs are used to determine which vent type will be best suited for the application.



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