

Системы повышения давления или продувки корпуса типа Z и Ex pzc серии 7500

Технические характеристики

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Type Z & Ex pzc purge and pressurization system

BEBCO EPS®

7500-01-AA-STD-UNV-PNO

- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22
- Must be used in conjunction with an EPV-7500-* vent
- Low cost, compact design, easy to use
- Universal power: AC or DC
- Touch screen display with LEDs for easy visual indication
- Easy setup with pre-set purge programs for your application
- Automatic pressure compensation with digital manifold
- Rugged, corrosion-resistant housing

7500 series type Z & Ex pzc purge and pressurization control unit



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.

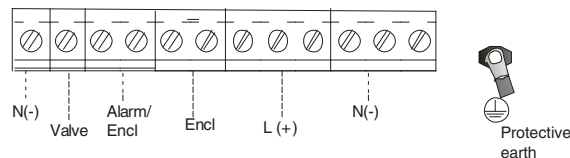
A digital manifold system such as the 5500-MAN-... can be used to make the 7500 a fully automatic system. Enclosure pressure and leakage are monitored. If a loss in enclosure pressure occurs, the solenoid valve engages to restore the defined pressure settings and/or trigger a pressure drop alarm.

The 7500 series system has NEC, CE Code, ATEX, CCC, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex Ppc.

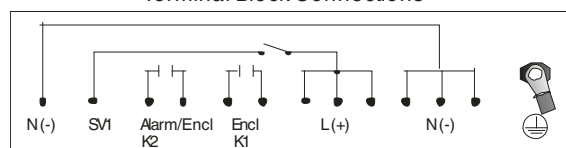
Connection

Electrical Connections

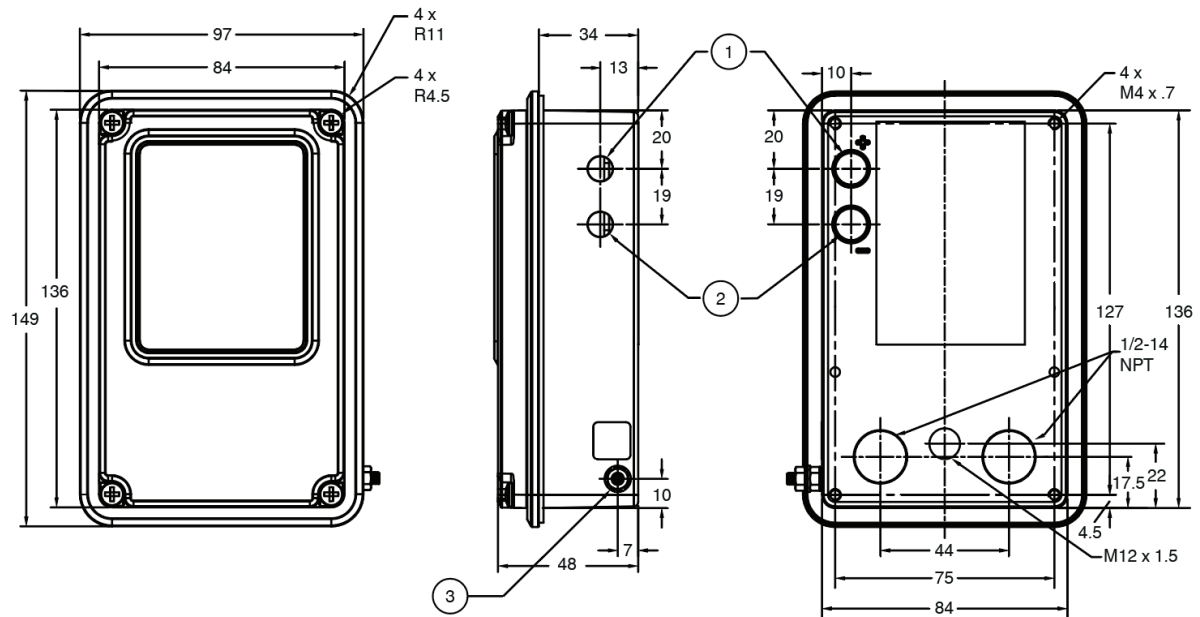
Terminal Block



Terminal Block Connections



Dimensions



1	High-pressure port 1/8-27 NPT
2	Low-pressure port 1/8-27 NPT
3	Protective earth stud, torque 12 in lb (1.35 Nm)

Technical Data

General specifications

Equipment architecture	max. enclosure size 12.7 m ³ (450 ft ³) For complete technical data, see the 7500 Control Unit and 7500-MAN-MV-01 datasheets
Operating mode	fully automatic (FA)
Series	7500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

Supply

Rated voltage	U _r	20 ... 30 V DC at 0.1 A 90 ... 250 V AC , 50 ... 60 Hz at 0.04 A without solenoid valve Supply voltage can be line-to-line or line-to-neutral, single phase OVC II
Power consumption		max. 2.7 W / 7.3 VA without valve

Electrical specifications

Connection	screw terminals -- see manual for specifications on wire size and torque values
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Output

Output I		
Connection	K1, terminals, 1 x NO	
Output type	enclosure power contacts	
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A	
Output II		
Connection	K2, terminals, 1 x NO	

Technical Data

Output type	alarm and control contacts
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A
Output III	
Connection	SV1, terminals, L1 powered contact
Output type	solenoid manifold, contact
Contact loading	0.5 A at 250 V AC , 0.5 A
Indicators/settings	
LED indication	K1: Green - Contact K1 is energized (enclosure contacts) K2: Amber - Contact K2 is energized (alarm/control contacts) P/SV: Blue - Safe pressure P1 (minimum enclosure pressure) P/SV: Amber - Solenoid manifold is energized (purging/pressure compensation)
Pneumatic parameters	
Protective gas supply	compressed air or inert gas, 40 µm filter, free from oil
Pressure requirement	supply pressure: 1.4 ... 8.2 bar (20 ... 120 psig)
Safe pressure	For model 7500-01*: P1 for gas: 0.12 inch w.c. (0.30 mbar) P1 for dust: 0.52 inch w.c. (1.29 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing : -0.31 / +0 mbar (-0.125 / +0 in wc) For model 7500-03*: P1 for gas: 0.23 inch w.c. (0.57 mbar) P1 for dust: 0.63 inch w.c. (1.57 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing: -0.43 / +0 mbar (0.175 / +0 in wc)
Enclosure pressure	For model 7500-01*: 0 ... 12.9 mbar (0 ... 5 in wc) For model 7500-03*: 0 ... 25.8 mbar (0 ... 10 in wc)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
Conformity	
Electromagnetic compatibility	EN 61326-3-2:2008, EN 61000-6-2:2005
Emitted interference	FCC CFR 47, part 15, subpart B: 2017 , ICES-003, Issue 6:2016, Class A ITE
Ambient conditions	
Ambient temperature	-40 ... 50 °C (-40 ... 122 °F) at T6 -40 ... 65 °C (-40 ... 149 °F) at T5 -40 ... 70 °C (-40 ... 158 °F) at T4
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 90 %, non-condensing
Altitude	max. 2000 m
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Connection type	electrical: 2 x 1/2 inch NPTF (open from factory) 1 x M12 opening (plugged from factory) pneumatic: high-pressure port - 1/8 in NPTF, low-pressure port - 1/8 in NPTF
Degree of protection	Type 4X , IP66
Material	Lens: Makrolon® GP-V polycarbonate Screws: AISI 316 (1.4401), 304, or 18-8 stainless steel Housing: A380, A356, or 6061-T6 aluminum Mounting gasket: Bisco® HT-800 medium cellular silicone Mounting tabs: SAE 304 stainless steel M12 plug: 6061-T6 aluminum
Mass	710 g (1 lb 10 oz)
Dimensions	150 x 100 x 50 mm (5.9 x 4 x 2 in)
Data for application in connection with hazardous areas	

Technical Data

Certificate		
Marking		Ⓜ II 3 G Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ⓜ II 3 D Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc
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
International approvals		
UL approval		
cULus		Class I, Division 2, Groups A, B, C, D T6 ... T4 Class II, Division 2, Groups F, G T6 ... T4
IECEx approval		Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc
General information		

Type Code

Structure of the type code

7500	-	(1)	-	(2)	-	(3)	-	UNV	-	(4)
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7500	Device Type
7500	7500 Series Purge System

(1)	Model Options
01	Maximum sensor pressure of 5" H2O
02	Maximum sensor pressure of 10" H2O
03	Maximum sensor pressure of 10" H2O, low minimum pressure
XX	Any other 2-character alphanumeric combination to identify other customer options

(2)	Housing Material
SS	304 or 316 Stainless steel
AA	Aluminum

(3)	Mounting Configuration
STD	Standard housing type
XXX	Any other 3-character alphanumeric combination to identify other mounting options within the certification aspects such as the entry hub, pressure port fittings, etc.

UNV	Voltage Requirement
UNV	Universal (20–30 V DC or 90–250 V AC)

(4)	Wiring Entrance for Power Connection
PNO	No fittings or cable glands
XXX	Any other 3-character alphanumeric combination to identify fittings installed in threaded wire entry holes



Type Z & Ex pzc purge and pressurization system

BEBCO EPS®

7500-MTD-BXSW-01

- Must be used in conjunction with an EPV-7500-* vent
- External mount, square box
- Universal power: AC or DC
- Touch screen display with LEDs for easy visual indication
- Easy setup with pre-set purge programs for your application
- Automatic pressure compensation with digital manifold
- Rugged, corrosion-resistant housing
- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22
- Manual valve, no electrical power requirement
- Purge and pressurization valving in one device

Type Z & Ex pzc purge and pressurization system, external mount, square box



Function

The 7500 series panel/external mount purge and pressurization system consists of a control unit and a 7500-MAN-MV-01 manual manifold mounted to a panel.

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. See the 7500 control unit datasheet for technical data.

The 7500-MAN-MV-01 manifold combines in one compact housing a ball valve for purging and a needle valve for pressurizing an enclosure.

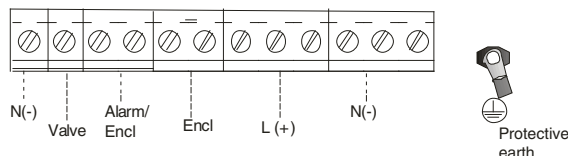
The ball valve has a handle for easy actuation. To provide security and prevent tampering, the needle valve requires a slot-head screwdriver to set the enclosure pressure. See the 7500-MAN-MV-01 manifold datasheet for technical data.

The 7500 series system has NEC, CE Code, ATEX, CCC, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex Ppc.

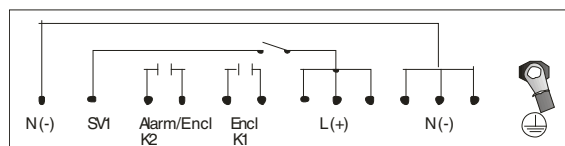
Connection

Electrical Connections

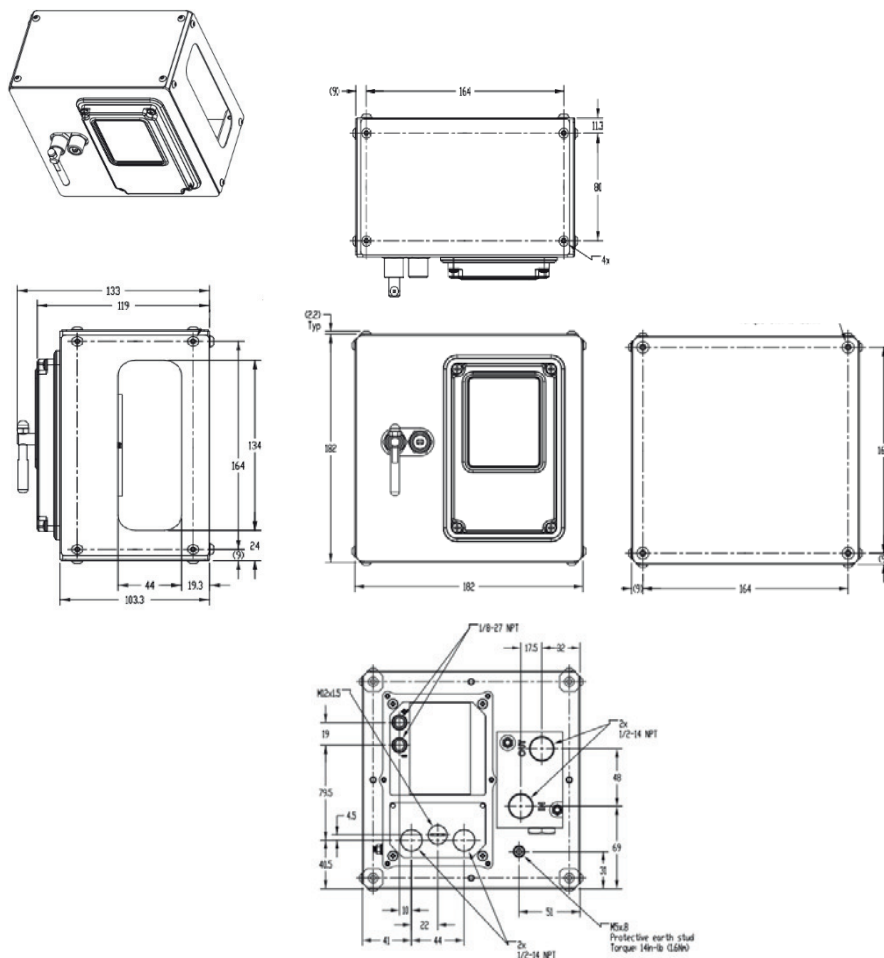
Terminal Block



Terminal Block Connections



Dimensions



Technical Data

General specifications

Equipment architecture	max. enclosure size 12.7 m ³ (450 ft ³) For complete technical data, see the 7500 Control Unit and 7500-MAN-MV-01 datasheets
Operating mode	fully automatic (FA)
Series	7500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

Supply

Rated voltage	U _r	20 ... 30 V DC at 0.1 A 90 ... 250 V AC , 50 ... 60 Hz at 0.04 A without solenoid valve Supply voltage can be line-to-line or line-to-neutral, single phase OVC II
Power consumption		max. 2.7 W / 7.3 VA without valve

Electrical specifications

Connection	screw terminals -- see manual for specifications on wire size and torque values
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Output

Output I		
Connection	K1, terminals, 1 x NO	
Output type	enclosure power contacts	
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A	
Output II		
Connection	K2, terminals, 1 x NO	

Technical Data

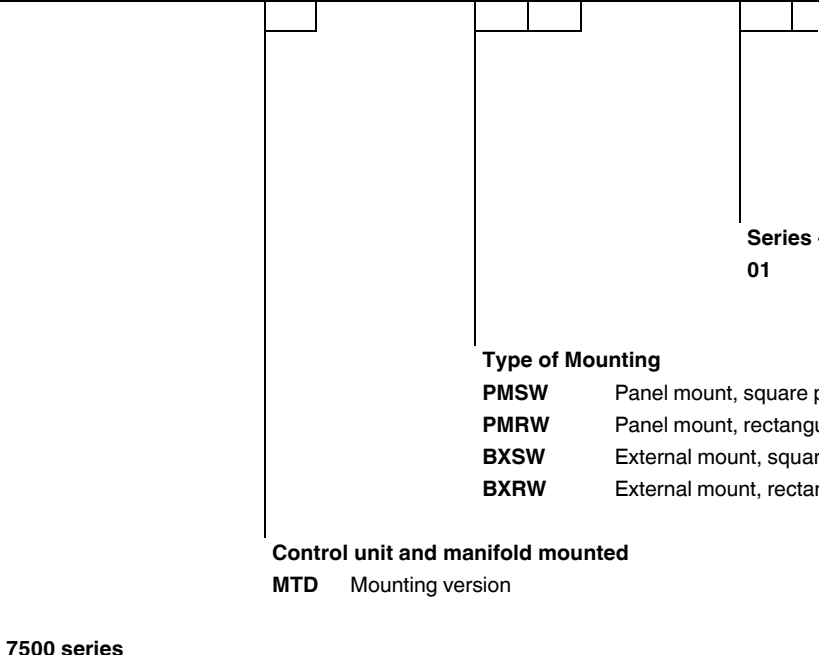
Output type	alarm and control contacts
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A
Output III	
Connection	SV1, terminals, L1 powered contact
Output type	solenoid manifold, contact
Contact loading	0.5 A at 250 V AC , 0.5 A
Indicators/settings	
LED indication	K1: Green - Contact K1 is energized (enclosure contacts) K2: Amber - Contact K2 is energized (alarm/control contacts) P/SV: Blue - Safe pressure P1 (minimum enclosure pressure) P/SV: Amber - Solenoid manifold is energized (purging/pressure compensation)
Pneumatic parameters	
Protective gas supply	compressed air or inert gas, 40 µm filter, free from oil
Pressure requirement	supply pressure: 1.4 ... 8.2 bar (20 ... 120 psig)
Safe pressure	P1 for gas: 0.12 inch w.c. (0.30 mbar) P1 for dust: 0.52 inch w.c. (1.29 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing: ± 0.125 in wc (0.31 mbar)
Enclosure pressure	0 ... 12.9 mbar (0 ... 5 in wc)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
Conformity	
Electromagnetic compatibility	EN 61326-3-2:2008, EN 61000-6-2:2005
Emitted interference	FCC CFR 47, part 15, subpart B: 2017 , ICES-003, Issue 6:2016, Class A ITE
Ambient conditions	
Ambient temperature	-40 ... 50 °C (-40 ... 122 °F) at T6 -40 ... 65 °C (-40 ... 149 °F) at T5 -40 ... 70 °C (-40 ... 158 °F) at T4
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 90 %, non-condensing
Altitude	max. 2000 m
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Connection type	electrical: 2 x 1/2 inch NPTF (open from factory) 1 x M12 opening (plugged from factory) pneumatic: high-pressure port - 1/8 in NPTF, low-pressure port - 1/8 in NPTF
Degree of protection	Mounting to enclosure Type 4X / IP66
Material	Lens: Makrolon® GP-V polycarbonate Screws: AISI 316 (1.4401), 304, or 18-8 stainless steel Housing: A380, A356, or 6061-T6 aluminum Mounting gasket: Bisco® HT-800 medium cellular silicone Mounting tabs: SAE 304 stainless steel M12 plug: 6061-T6 aluminum
Mass	2.5 kg (5 lb 10 oz)
Data for application in connection with hazardous areas	
Certificate	
Marking	Ⓔ II 3 G Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ⓔ II 3 D Ex mc tc [pzc Dc] IIIC T60 °C ... T80 °C Dc
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
International approvals	

Technical Data

UL approval	
cULus	Class I, Division 2, Groups A, B, C, D T6 ... T4 Class II, Division 2, Groups F, G T6 ... T4
IECEx approval	
Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc	
General information	

Type Code

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Series - option
01 standard housing type

Type of Mounting
PMSW Panel mount, square panel
PMRW Panel mount, rectangular panel
BXSW External mount, square box
BXRW External mount, rectangular box

Control unit and manifold mounted
MTD Mounting version

7500 series



Type Z & Ex pzc purge and pressurization system

7500-MTD-PMRW-01

- Must be used in conjunction with an EPV-7500-* vent
- Panel mount, rectangular panel
- Universal power: AC or DC
- Touch screen display with LEDs for easy visual indication
- Easy setup with pre-set purge programs for your application
- Automatic pressure compensation with digital manifold
- Rugged, corrosion-resistant housing
- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22
- Manual valve, no electrical power requirement
- Purge and pressurization valving in one device

Type Z & Ex pzc purge and pressurization system, panel mount, rectangular panel



Function

The 7500 series panel/external mount purge and pressurization system consists of a control unit and a 7500-MAN-MV-01 manual manifold mounted to a panel.

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. See the 7500 control unit datasheet for technical data.

The 7500-MAN-MV-01 manifold combines in one compact housing a ball valve for purging and a needle valve for pressurizing an enclosure.

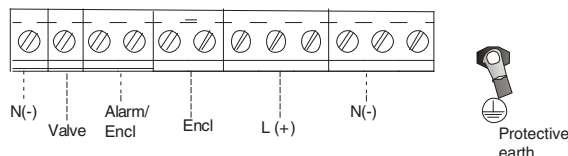
The ball valve has a handle for easy actuation. To provide security and prevent tampering, the needle valve requires a slot-head screwdriver to set the enclosure pressure. See the 7500-MAN-MV-01 manifold datasheet for technical data.

The 7500 series system has NEC, CE Code, ATEX, CCC, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex Ppc.

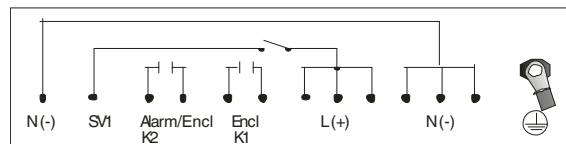
Connection

Electrical Connections

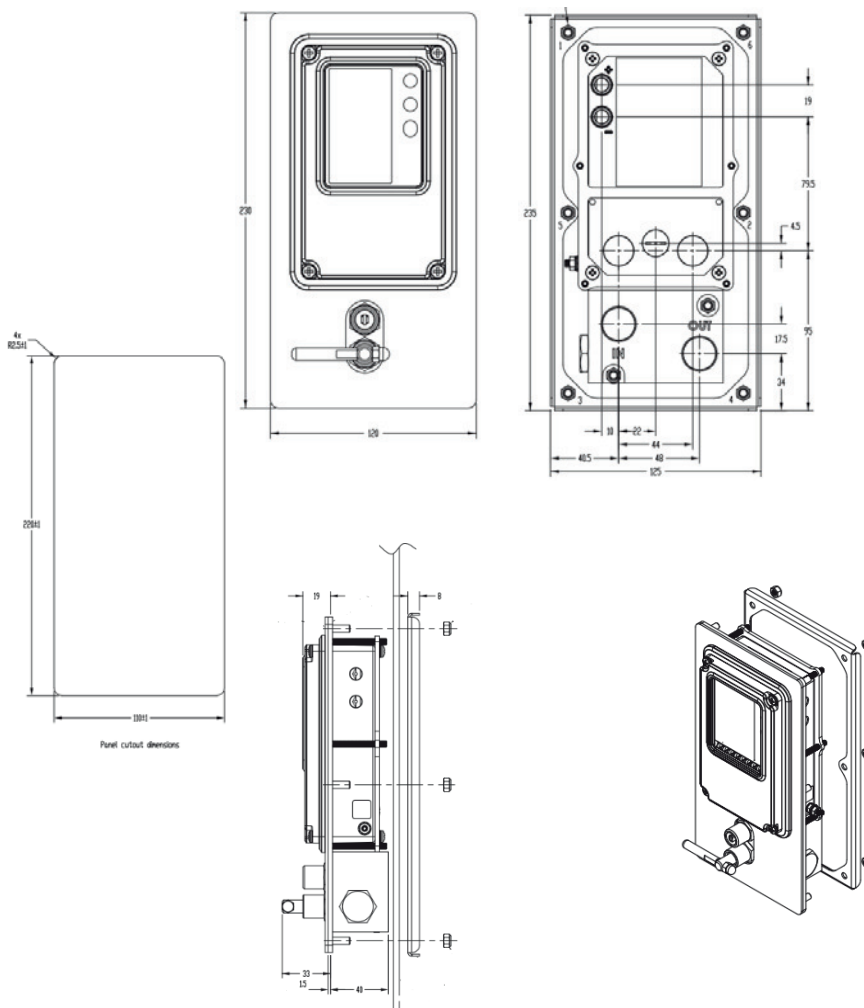
Terminal Block



Terminal Block Connections



Dimensions



Technical Data

General specifications

Equipment architecture		max. enclosure size 12.7 m ³ (450 ft ³) For complete technical data, see the 7500 Control Unit and 7500-MAN-MV-01 datasheets
Operating mode		fully automatic (FA)
Series		7500
System		Type Z Purge ; Ex pzc Purge
Hazardous environment		gas or dust

Supply

Rated voltage	U _r	20 ... 30 V DC at 0.1 A 90 ... 250 V AC , 50 ... 60 Hz at 0.04 A without solenoid valve Supply voltage can be line-to-line or line-to-neutral, single phase OVC II
Power consumption		max. 2.7 W / 7.3 VA without valve

Electrical specifications

Connection		screw terminals -- see manual for specifications on wire size and torque values
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Output

Output I		
Connection		K1, terminals, 1 x NO
Output type		enclosure power contacts
Contact loading		5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A

Technical Data

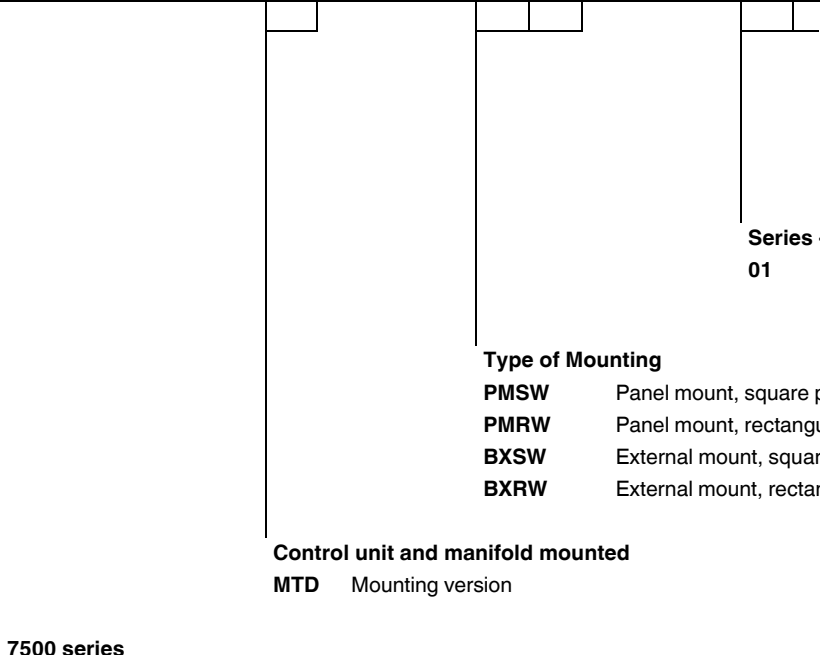
Output II		
Connection		K2, terminals, 1 x NO
Output type		alarm and control contacts
Contact loading		5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A
Output III		
Connection		SV1, terminals, L1 powered contact
Output type		solenoid manifold, contact
Contact loading		0.5 A at 250 V AC , 0.5 A
Indicators/settings		
LED indication		K1: Green - Contact K1 is energized (enclosure contacts) K2: Amber - Contact K2 is energized (alarm/control contacts) P/SV: Blue - Safe pressure P1 (minimum enclosure pressure) P/SV: Amber - Solenoid manifold is energized (purging/pressure compensation)
Pneumatic parameters		
Protective gas supply		compressed air or inert gas, 40 µm filter, free from oil
Pressure requirement		supply pressure: 1.4 ... 8.2 bar (20 ... 120 psig)
Safe pressure		P1 for gas: 0.12 inch w.c. (0.30 mbar) P1 for dust: 0.52 inch w.c. (1.29 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing: ± 0.125 in wc (0.31 mbar)
Enclosure pressure		0 ... 12.9 mbar (0 ... 5 in wc)
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
RoHS		
Directive 2011/65/EU (RoHS)		EN IEC 63000:2018
Conformity		
Electromagnetic compatibility		EN 61326-3-2:2008, EN 61000-6-2:2005
Emitted interference		FCC CFR 47, part 15, subpart B: 2017 , ICES-003, Issue 6:2016, Class A ITE
Ambient conditions		
Ambient temperature		-40 ... 50 °C (-40 ... 122 °F) at T6 -40 ... 65 °C (-40 ... 149 °F) at T5 -40 ... 70 °C (-40 ... 158 °F) at T4
Storage temperature		-40 ... 80 °C (-40 ... 176 °F)
Relative humidity		5 ... 90 %, non-condensing
Altitude		max. 2000 m
Vibration resistance		5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance		30 g, 11 ms, all axes
Mechanical specifications		
Connection type		electrical: 2 x 1/2 inch NPTF (open from factory) 1 x M12 opening (plugged from factory) pneumatic: high-pressure port - 1/8 in NPTF, low-pressure port - 1/8 in NPTF
Degree of protection		Mounting to enclosure Type 4X / IP66
Material		Lens: Makrolon® GP-V polycarbonate Screws: AISI 316 (1.4401), 304, or 18-8 stainless steel Housing: A380, A356, or 6061-T6 aluminum Mounting gasket: Bisco® HT-800 medium cellular silicone Mounting tabs: SAE 304 stainless steel M12 plug: 6061-T6 aluminum
Mass		2.5 kg (5 lb 10 oz)
Data for application in connection with hazardous areas		
Certificate		
Marking		Ⓔ II 3 G Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ⓔ II 3 D Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc
Directive conformity		

Technical Data

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
International approvals		
UL approval		
cULus		Class I, Division 2, Groups A, B, C, D T6 ... T4 Class II, Division 2, Groups F, G T6 ... T4
IECEx approval		Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc
General information		

Type Code

7	5	0	0	-	M	T	D	-	P	M	S	W	-	0	1
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Type Z & Ex pzc purge and pressurization system

7500-MTD-PMSW-01

- Must be used in conjunction with an EPV-7500-* vent
- Panel mount, square panel
- Universal power: AC or DC
- Touch screen display with LEDs for easy visual indication
- Easy setup with pre-set purge programs for your application
- Automatic pressure compensation with digital manifold
- Rugged, corrosion-resistant housing
- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22
- Manual valve, no electrical power requirement
- Purge and pressurization valving in one device

Type Z & Ex pzc purge and pressurization system, panel mount, square panel



Function

The 7500 series panel/external mount purge and pressurization system consists of a control unit and a 7500-MAN-MV-01 manual manifold mounted to a panel.

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. See the 7500 control unit datasheet for technical data.

The 7500-MAN-MV-01 manifold combines in one compact housing a ball valve for purging and a needle valve for pressurizing an enclosure.

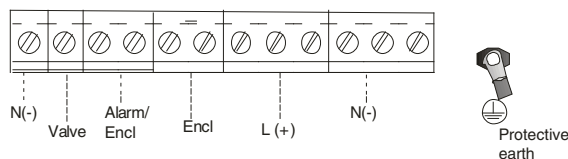
The ball valve has a handle for easy actuation. To provide security and prevent tampering, the needle valve requires a slot-head screwdriver to set the enclosure pressure. See the 7500-MAN-MV-01 manifold datasheet for technical data.

The 7500 series system has NEC, CE Code, ATEX, CCC, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex Ppc.

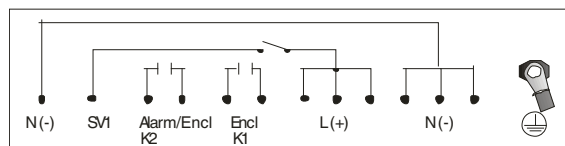
Connection

Electrical Connections

Terminal Block



Terminal Block Connections

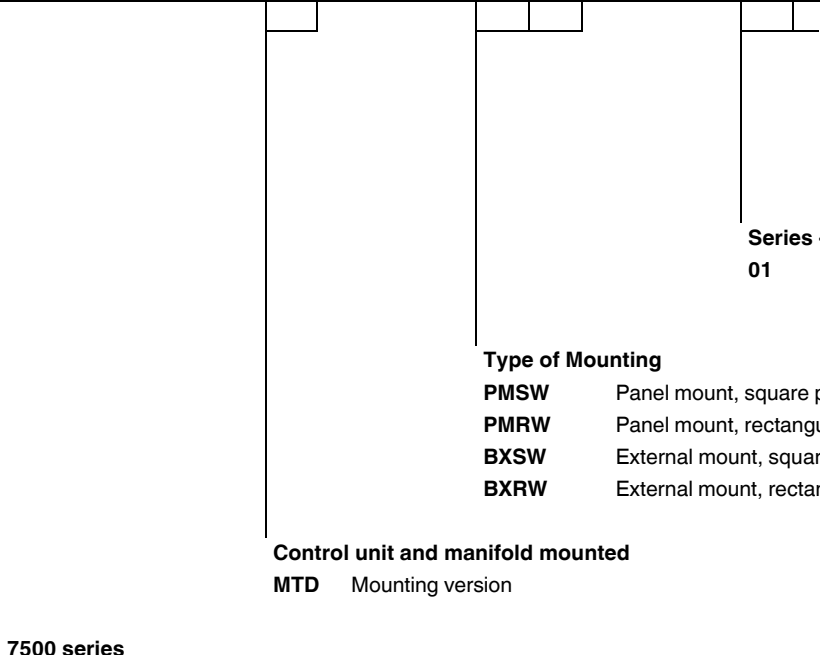


Technical Data

LED indication	K1: Green - Contact K1 is energized (enclosure contacts) K2: Amber - Contact K2 is energized (alarm/control contacts) P/SV: Blue - Safe pressure P1 (minimum enclosure pressure) P/SV: Amber - Solenoid manifold is energized (purging/pressure compensation)	
Pneumatic parameters		
Protective gas supply	compressed air or inert gas, 40 µm filter, free from oil	
Pressure requirement		supply pressure: 1.4 ... 8.2 bar (20 ... 120 psig)
Safe pressure	P1 for gas: 0.12 inch w.c. (0.30 mbar) P1 for dust: 0.52 inch w.c. (1.29 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing: ± 0.125 in wc (0.31 mbar)	
Enclosure pressure		0 ... 12.9 mbar (0 ... 5 in wc)
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 61326-1:2013	
RoHS		
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018	
Conformity		
Electromagnetic compatibility	EN 61326-3-2:2008, EN 61000-6-2:2005	
Emitted interference		FCC CFR 47, part 15, subpart B: 2017 , ICES-003, Issue 6:2016, Class A ITE
Ambient conditions		
Ambient temperature		-40 ... 50 °C (-40 ... 122 °F) at T6 -40 ... 65 °C (-40 ... 149 °F) at T5 -40 ... 70 °C (-40 ... 158 °F) at T4
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)	
Relative humidity		5 ... 90 %, non-condensing
Altitude	max. 2000 m	
Vibration resistance		5 ... 100 Hz , 1 g, 12 m/s², all axes
Impact resistance	30 g, 11 ms, all axes	
Mechanical specifications		
Connection type	electrical: 2 x 1/2 inch NPTF (open from factory) 1 x M12 opening (plugged from factory) pneumatic: high-pressure port - 1/8 in NPTF, low-pressure port - 1/8 in NPTF	
Degree of protection		Mounting to enclosure Type 4X / IP66
Material	Lens: Makrolon® GP-V polycarbonate Screws: AISI 316 (1.4401), 304, or 18-8 stainless steel Housing: A380, A356, or 6061-T6 aluminum Mounting gasket: Bisco® HT-800 medium cellular silicone Mounting tabs: SAE 304 stainless steel M12 plug: 6061-T6 aluminum	
Mass		2.5 kg (5 lb 10 oz)
Data for application in connection with hazardous areas		
Certificate		
Marking	Ⓜ II 3 G Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ⓜ II 3 D Ex mc tc [pzc Dc] IIIC T60 °C ... T80 °C Dc	
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	
International approvals		
UL approval		
cULus	Class I, Division 2, Groups A, B, C, D T6 ... T4 Class II, Division 2, Groups F, G T6 ... T4	
IECEx approval	Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ex mc tc [pzc Dc] IIIC T60 °C ... T80 °C Dc	
General information		

Type Code

7	5	0	0	-	M	T	D	-	P	M	S	W	-	0	1
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Series - option
01 standard housing type

Type of Mounting
PMSW Panel mount, square panel
PMRW Panel mount, rectangular panel
BXSW External mount, square box
BXRW External mount, rectangular box

Control unit and manifold mounted
MTD Mounting version

7500 series



7500 series vent

EPV-7500-AA-01

- 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

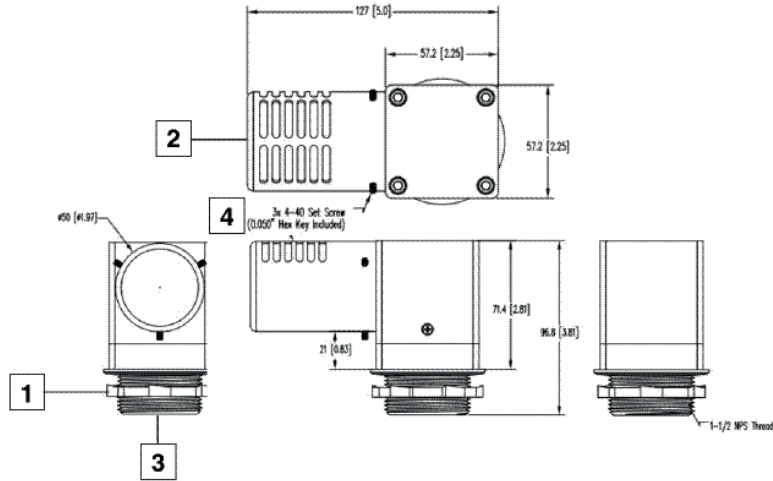


Function

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-...-01/02 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

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/s², 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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

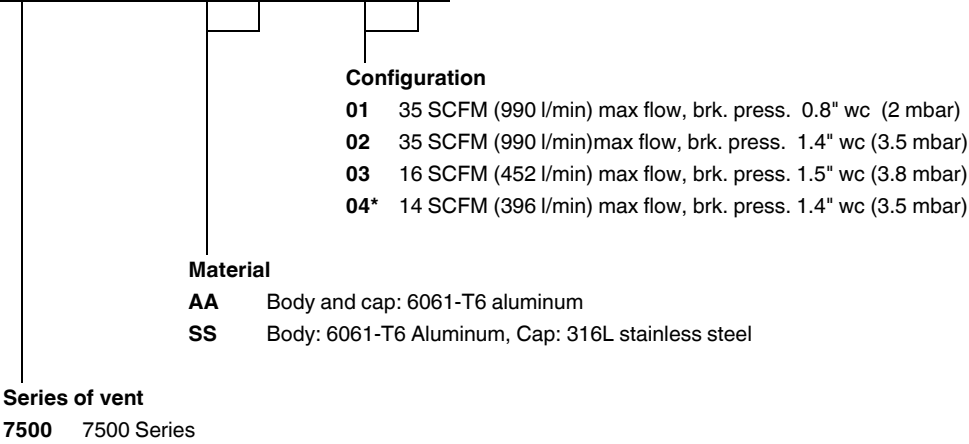
ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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* The only possible combination with these options is “EPV-7500-AA-04”



7500 series vent EPV-7500-AA-02

- 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

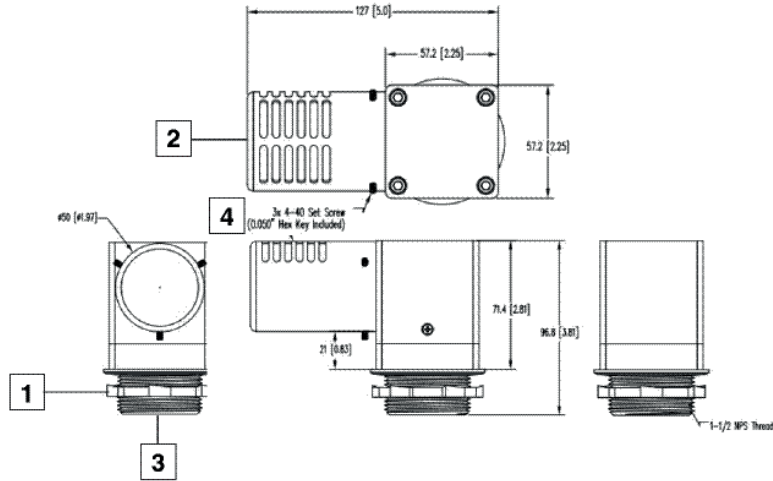


Function

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-...-01/02 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

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
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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/s², 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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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Series of vent
7500 7500 Series

Material

AA Body and cap: 6061-T6 aluminum

SS Body: 6061-T6 Aluminum, Cap: 316L stainless steel

Configuration

01 35 SCFM (990 l/min) max flow, brk. press. 0.8" wc (2 mbar)

02 35 SCFM (990 l/min)max flow, brk. press. 1.4" wc (3.5 mbar)

03 16 SCFM (452 l/min) max flow, brk. press. 1.5" wc (3.8 mbar)

04* 14 SCFM (396 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)

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



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

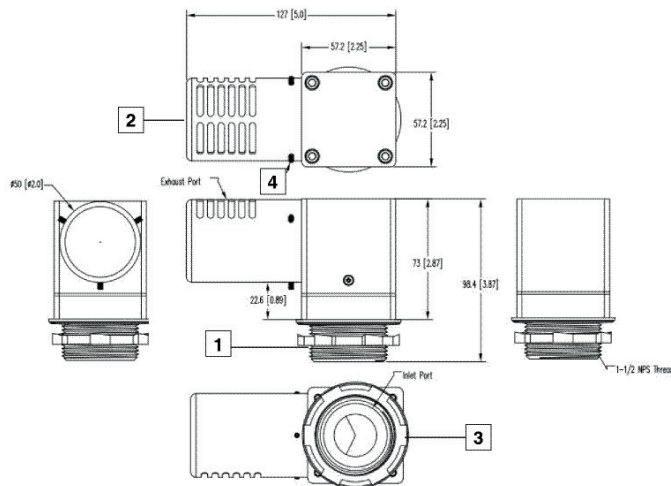
The 7500 series purge and pressurization system consists of a control unit, an enclosure protection vent, and a manual or automatic manifold. The control unit's menu-driven touch screen display makes it easy to select pre-programmed and user-selected variables. The display has 4 LED indicators that allow 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

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
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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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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Configuration
01 35 SCFM (990 l/min) max flow, brk. press. 0.8" wc (2 mbar)
02 35 SCFM (990 l/min)max flow, brk. press. 1.4" wc (3.5 mbar)
03 16 SCFM (452 l/min) max flow, brk. press. 1.5" wc (3.8 mbar)
04* 14 SCFM (396 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)

Material
AA Body and cap: 6061-T6 aluminum
SS Body: 6061-T6 Aluminum, Cap: 316L stainless steel

Series of vent
7500 7500 Series

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



7500 series vent

BEBCO EPS®

EPV-7500-SS-01

- 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, stainless steel cap

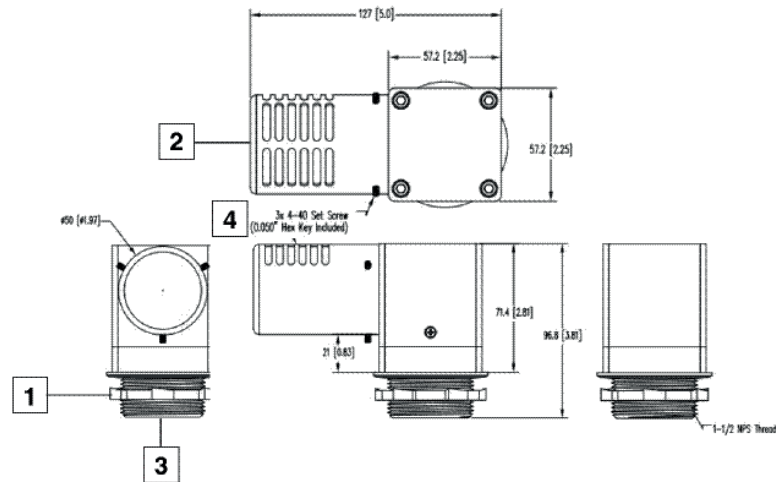


Function

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-...-01/02 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

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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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Series of vent
7500 7500 Series

Material

AA Body and cap: 6061-T6 aluminum

SS Body: 6061-T6 Aluminum, Cap: 316L stainless steel

Configuration

01 35 SCFM (990 l/min) max flow, brk. press. 0.8" wc (2 mbar)

02 35 SCFM (990 l/min)max flow, brk. press. 1.4" wc (3.5 mbar)

03 16 SCFM (452 l/min) max flow, brk. press. 1.5" wc (3.8 mbar)

04* 14 SCFM (396 l/min) max flow, brk. press. 1.4" wc (3.5 mbar)

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



7500 series vent EPV-7500-SS-02

- 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, stainless steel cap

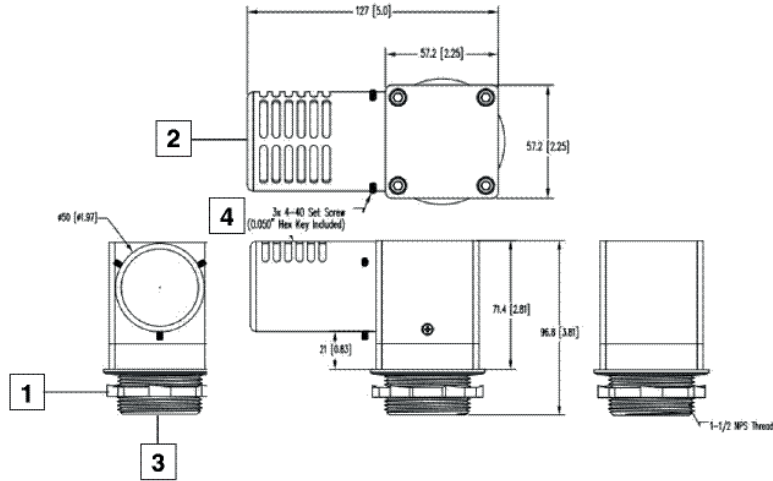


Function

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-...-01/02 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

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/s², 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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

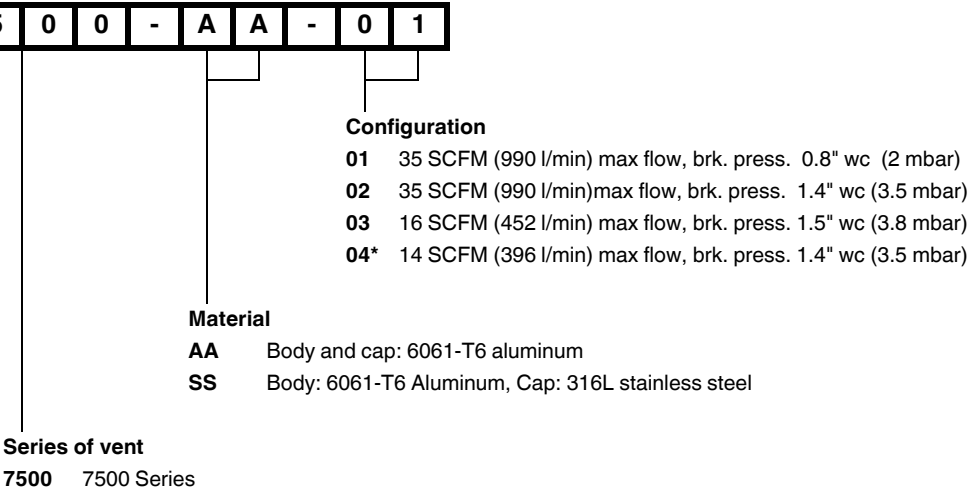
ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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* The only possible combination with these options is “EPV-7500-AA-04”



7500 series vent EPV-7500-SS-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, stainless steel cap



Function

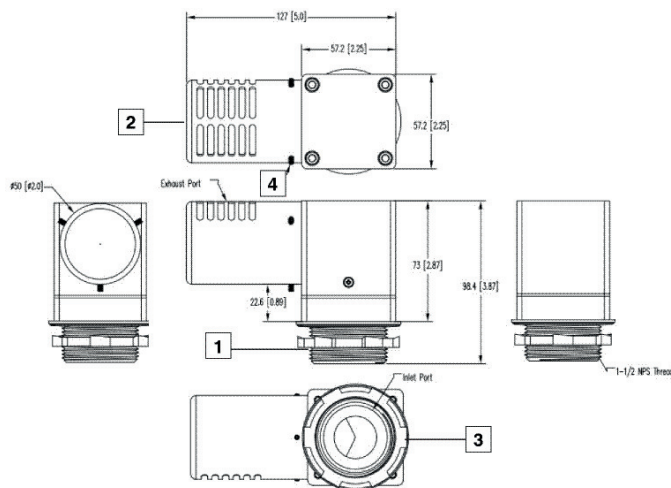
The 7500 series purge and pressurization system consists of a control unit, an enclosure protection vent, and a manual or automatic manifold. The control unit's menu-driven touch screen display makes it easy to select pre-programmed and user-selected variables. The display has 4 LED indicators that allow 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

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
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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/s², 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

Technical Features

Flow Rates

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

ft ³ /min	Inches of water	l/min	mbar
5	1.28	141	3.19
7	1.44	198	3.59
10	1.64	283	4.09
12	1.80	339	4.48
15	2.10	424	5.23
17	2.30	481	5.73
20	2.53	566	6.30
25	2.95	707	7.35
30	3.50	849	8.71
35	4.15	991	10.33

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

ft ³ /min	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

EPV-7500-...-03 Vent Flow vs. Enclosure Pressure

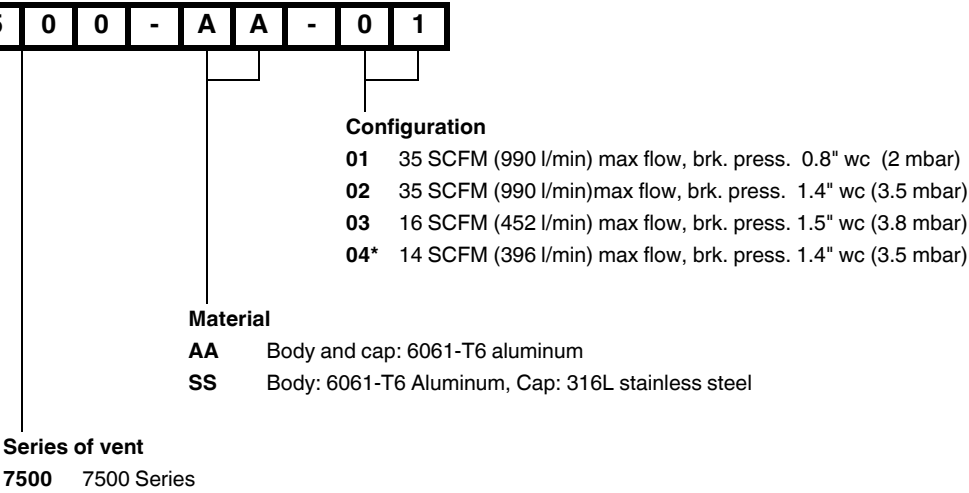
ft ³ /min	Inches of water	l/min	mbar
2	1.23	56.6	3.1
4	1.44	113.3	3.6
6	1.92	169.9	4.8
8	2.10	226.5	5.2
10	2.20	283.2	5.5
12	2.35	339.8	5.8
14	2.86	396.4	7.1
16	3.71	453.1	9.2
18	4.70	509.7	11.7
21	6.31	594.7	15.7

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

ft ³ /min	Inches of water	l/min	mbar
3	2.50	85	6.23
4	2.75	113	6.85
5	3.10	141	7.72
6	3.40	170	8.47
7	3.80	198	9.46
8	4.20	226	10.46
9	4.60	254	11.45
10	5.00	339	12.45
11	5.50	311	13.69
12	6.10	339	15.18
13	6.80	368	16.93
14	7.70	396	19.17

Type Code

E	P	V	-	7	5	0	0	-	A	A	-	0	1
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* The only possible combination with these options is “EPV-7500-AA-04”



7500 series manifold

BEBCO EPS®

7500-MAN-MV-01

- Low cost, compact design, easy to use
- Manual valve, no electrical power requirement
- Rugged, corrosion-resistant housing
- Purge and pressurization valving in one device

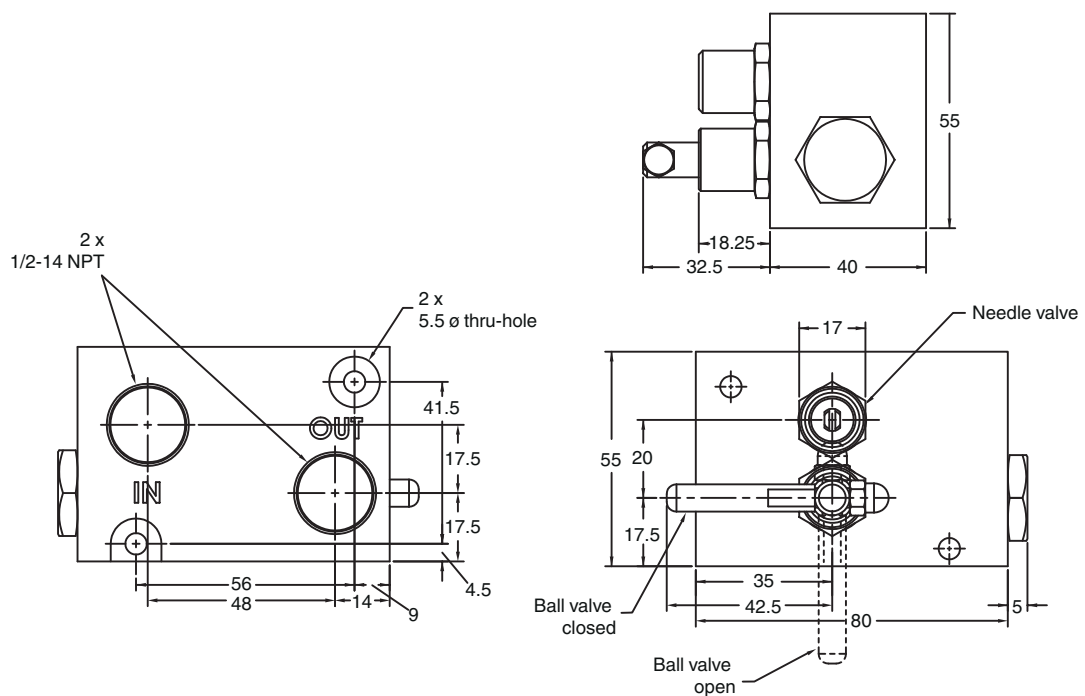
7500 series purge and pressurization system manual manifold



Function

The 7500-MAN-MV-01 manifold combines in one compact housing a ball valve for purging and a needle valve for pressurizing an enclosure. The ball valve has a handle for easy actuation. To provide security and prevent tampering, the needle valve requires a slot-head screwdriver to set the enclosure pressure. The 7500-MAN-MV-01 manifold can be used with 7500 series or 5500 series purge and pressurization systems.

Dimensions



Technical Data**General specifications**

Equipment architecture		max. enclosure size 450 ft ³ (12.7 m ³)
Series		7500
Hazardous environment		gas or dust

Pneumatic parameters

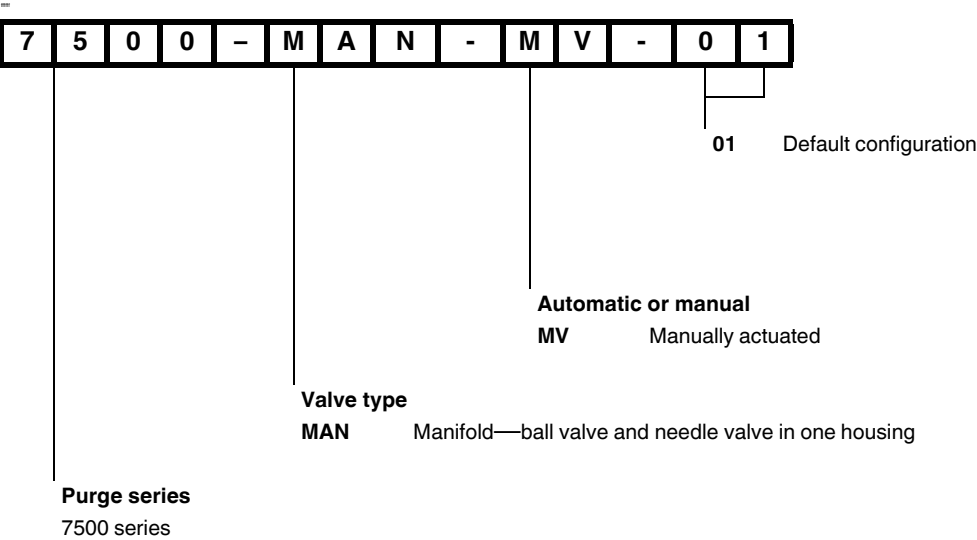
Protective gas supply		compressed air or inert gas, 5 µm filter, free from oil
Pressure requirement		10 ... 120 psig (0.7 ... 8.2 bar)
Purge flow rate		pressurization valve : Cv (flow coefficient) = 0.4 purging valve : Cv (flow coefficient) = 1.4
Connections		inlet/outlet : 1/2 inch NPTF

Ambient conditions

Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Storage temperature		-40 ... 80 °C (-40 ... 176 °F)

Mechanical specifications

Degree of protection		Type 4X / IP66
Material		Gasket material : Bisco® HT-800 medium cellular silicone
Mass		< 1.8 kg (4 lb)
Dimensions		see dimensions





Type Z & Ex pzc purge and pressurization system

BEBCO EPS®

7500-MTD-BXRW-01

- Must be used in conjunction with an EPV-7500-* vent
- External mount, rectangular box
- Universal power: AC or DC
- Touch screen display with LEDs for easy visual indication
- Easy setup with pre-set purge programs for your application
- Automatic pressure compensation with digital manifold
- Rugged, corrosion-resistant housing
- Global third-party approvals for Class I, II, Div. 2 and Zone 2/22
- Manual valve, no electrical power requirement
- Purge and pressurization valving in one device

Type Z & Ex pzc purge and pressurization system, external mount, rectangular box



Function

The 7500 series panel/external mount purge and pressurization system consists of a control unit and a 7500-MAN-MV-01 manual manifold mounted to a panel.

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. See the 7500 control unit datasheet for technical data.

The 7500-MAN-MV-01 manifold combines in one compact housing a ball valve for purging and a needle valve for pressurizing an enclosure.

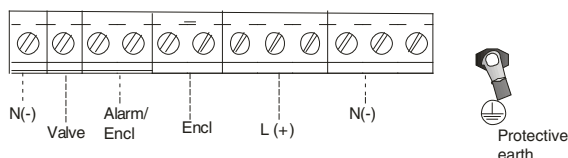
The ball valve has a handle for easy actuation. To provide security and prevent tampering, the needle valve requires a slot-head screwdriver to set the enclosure pressure. See the 7500-MAN-MV-01 manifold datasheet for technical data.

The 7500 series system has NEC, CE Code, ATEX, CCC, and IECEx third-party certifications for Class I, II/Div. 2 Type Z and Zone 2/22 Ex Ppc.

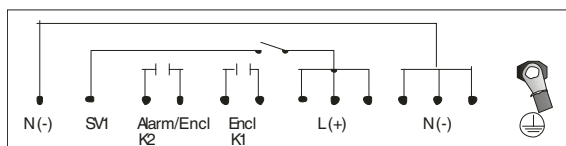
Connection

Electrical Connections

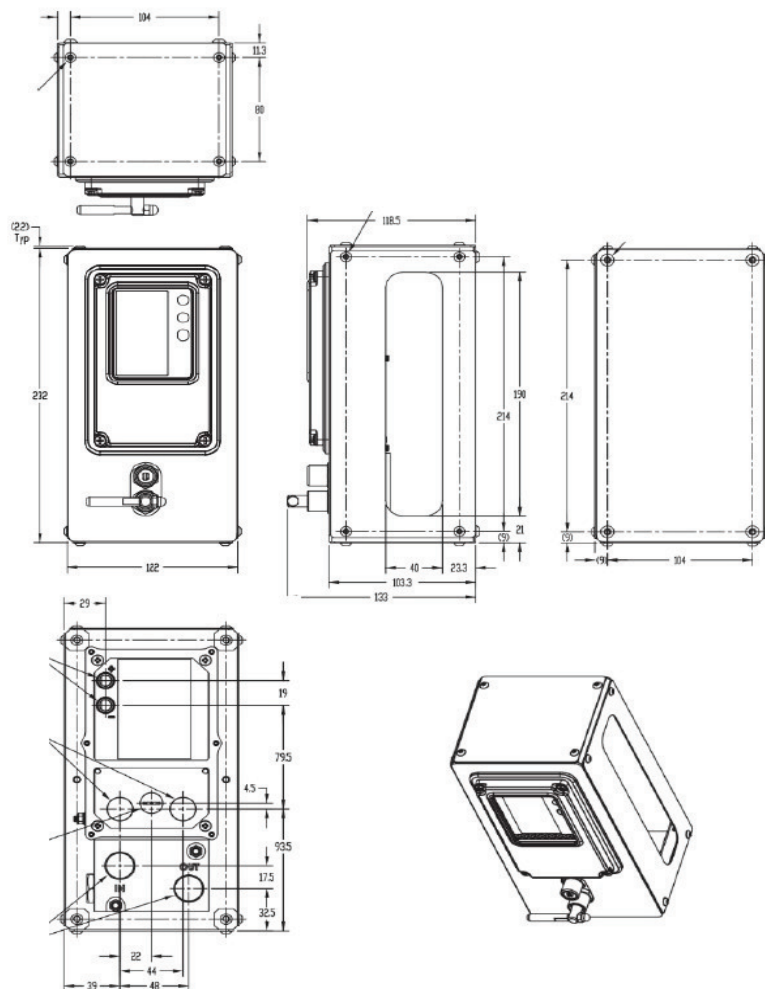
Terminal Block



Terminal Block Connections



Dimensions



Technical Data

General specifications

Equipment architecture	max. enclosure size 12.7 m ³ (450 ft ³) For complete technical data, see the 7500 Control Unit and 7500-MAN-MV-01 datasheets
Operating mode	fully automatic (FA)
Series	7500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

Supply

Rated voltage	U _r	20 ... 30 V DC at 0.1 A 90 ... 250 V AC , 50 ... 60 Hz at 0.04 A without solenoid valve Supply voltage can be line-to-line or line-to-neutral, single phase OVC II
Power consumption		max. 2.7 W / 7.3 VA without valve

Electrical specifications

Connection	screw terminals -- see manual for specifications on wire size and torque values
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Output

Output I		
Connection	K1, terminals, 1 x NO	
Output type	enclosure power contacts	
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A	
Output II		
Connection	K2, terminals, 1 x NO	

Technical Data

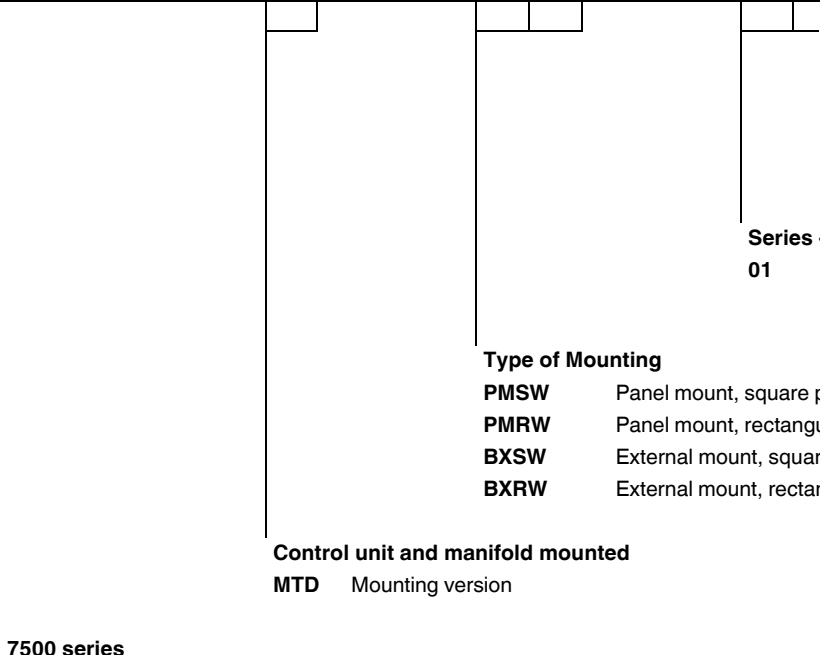
Output type	alarm and control contacts
Contact loading	5 A at 250 V AC , 5 A at 30 V DC, relays must be externally fused inrush current: 50 A
Output III	
Connection	SV1, terminals, L1 powered contact
Output type	solenoid manifold, contact
Contact loading	0.5 A at 250 V AC , 0.5 A
Indicators/settings	
LED indication	K1: Green - Contact K1 is energized (enclosure contacts) K2: Amber - Contact K2 is energized (alarm/control contacts) P/SV: Blue - Safe pressure P1 (minimum enclosure pressure) P/SV: Amber - Solenoid manifold is energized (purging/pressure compensation)
Pneumatic parameters	
Protective gas supply	compressed air or inert gas, 40 µm filter, free from oil
Pressure requirement	supply pressure: 1.4 ... 8.2 bar (20 ... 120 psig)
Safe pressure	P1 for gas: 0.12 inch w.c. (0.30 mbar) P1 for dust: 0.52 inch w.c. (1.29 mbar) P2: 0.8 inch w.c. (1.99 mbar) P3: 2.5 inch w.c. (6.22 mbar) P4: 4.5 inch w.c. (11.2 mbar) pressure sensing: ± 0.125 in wc (0.31 mbar)
Enclosure pressure	0 ... 12.9 mbar (0 ... 5 in wc)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
Conformity	
Electromagnetic compatibility	EN 61326-3-2:2008, EN 61000-6-2:2005
Emitted interference	FCC CFR 47, part 15, subpart B: 2017 , ICES-003, Issue 6:2016, Class A ITE
Ambient conditions	
Ambient temperature	-40 ... 50 °C (-40 ... 122 °F) at T6 -40 ... 65 °C (-40 ... 149 °F) at T5 -40 ... 70 °C (-40 ... 158 °F) at T4
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 90 %, non-condensing
Altitude	max. 2000 m
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Connection type	electrical: 2 x 1/2 inch NPTF (open from factory) 1 x M12 opening (plugged from factory) pneumatic: high-pressure port - 1/8 in NPTF, low-pressure port - 1/8 in NPTF
Degree of protection	Mounting to enclosure Type 4X / IP66
Material	Lens: Makrolon® GP-V polycarbonate Screws: AISI 316 (1.4401), 304, or 18-8 stainless steel Housing: A380, A356, or 6061-T6 aluminum Mounting gasket: Bisco® HT-800 medium cellular silicone Mounting tabs: SAE 304 stainless steel M12 plug: 6061-T6 aluminum
Mass	2.5 kg (5 lb 10 oz)
Data for application in connection with hazardous areas	
Certificate	
Marking	Ⓔ II 3 G Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ⓔ II 3 D Ex mc tc [pzc Dc] IIIC T60 °C ... T80 °C Dc
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
International approvals	

Technical Data

UL approval		
cULus		Class I, Division 2, Groups A, B, C, D T6 ... T4 Class II, Division 2, Groups F, G T6 ... T4
IECEx approval		Ex ec mc nC [pzc Gc] IIC T6...T4 Gc Ex mc tc [pzc Dc] IIC T60 °C ... T80 °C Dc
General information		

Type Code

7	5	0	0	-	M	T	D	-	P	M	S	W	-	0	1
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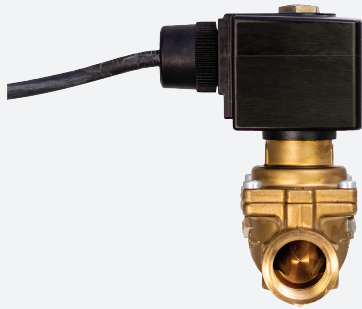


Series - option
01 standard housing type

Type of Mounting
PMSW Panel mount, square panel
PMRW Panel mount, rectangular panel
BXSW External mount, square box
BXRW External mount, rectangular box

Control unit and manifold mounted
MTD Mounting version

7500 series



Ex pz digital valve

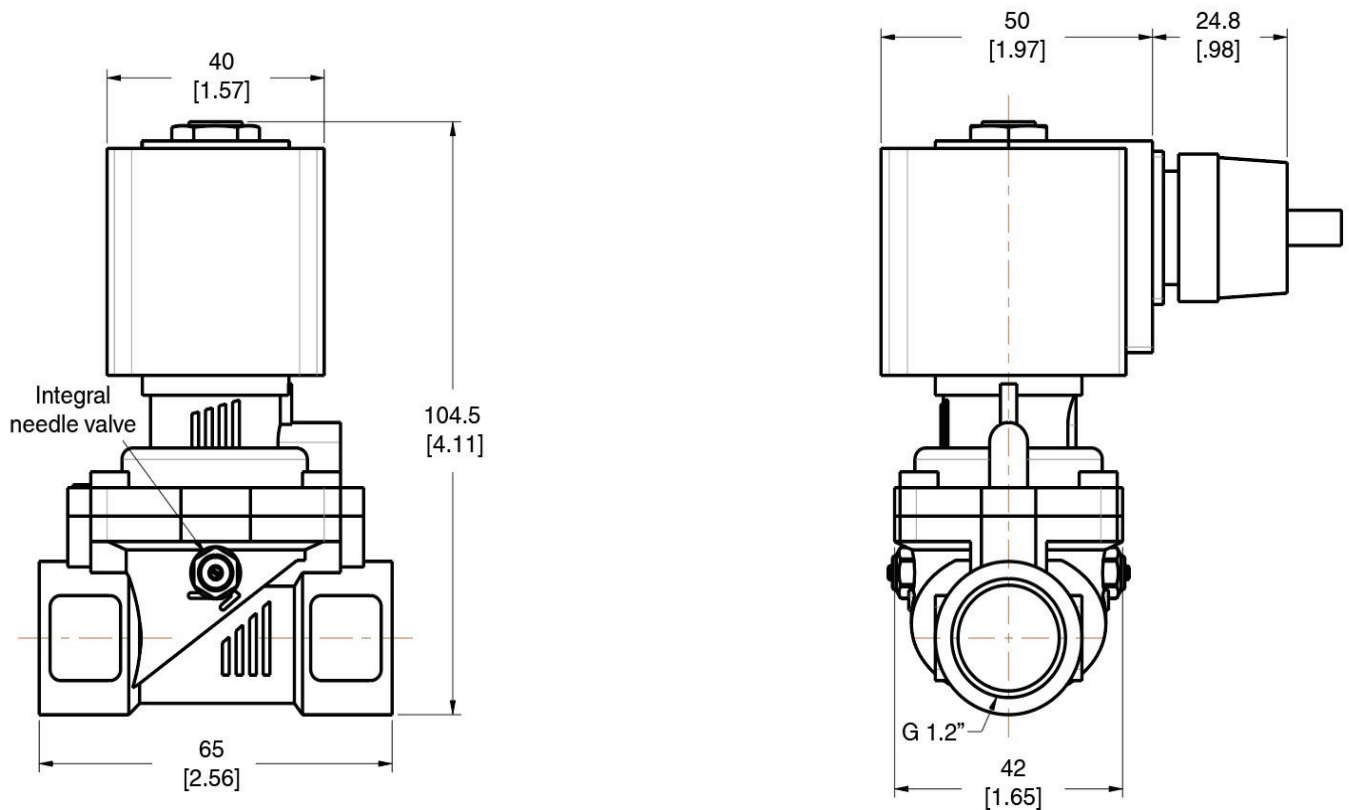
7500-MAN-BK-**-**

- Optional digital valve
- Compensates for pressure fluctuations
- 230 VAC, 115 VAC, or 24 VDC
- Contacts are powered by the 7500 control unit



The 7500 series Type Z/Ex pz purge and pressurization system allows general purpose equipment to be mounted in enclosures and operate safely in Division 2, Zone 2, or Zone 22 hazardous areas. The 7500 digital valve is used to pressurize the enclosure by adjusting an internal needle valve for pressure; purging of the enclosure is accomplished via a two-way valve. The 7500 control unit is set up to work with and power up the 7500 digital valve. The digital valve is Ex rated for hazardous areas. The 7500-MAN-BK-**-** digital valve works with the 7500 control unit and is ATEX and CCC certified for use in Zone 2 or Zone 22 applications.

Dimensions



Technical Data

General specifications

Series	7500
Hazardous environment	gas or dust
Supply	

Technical Data

Rated voltage	U _r	230 VAC ±10% 115 VAC ± 10% 24 VDC ±10%
Power consumption		230 VAC @ 1.8 W 115 VAC @ 9 W 24 VDC @ 9 W
Pneumatic parameters		
Protective gas supply		instrument grade air or inert gas
Pressure requirement		T6 version: 0.2 bar (2.9 psi) to 4.0 bar (58 psi) T4 version: 0.2 bar (2.9 psi) to 16 bar (232 psi)
Purge flow rate		K _v value water 3.8 m³/h
Connections		G1/2 (13 mm)
Ambient conditions		
Ambient temperature		-40 ... 55 °C (-40 ... 131 °F)
Storage temperature		-40 ... 80 °C (-40 ... 176 °F)
Mechanical specifications		
Connection type		Inlet/outlet size: G 1/2 (13 mm) Jet size: 3.0 mm and 4.5 mm size (included)
Degree of protection		IP65
Material		Body: brass Valve (internal): brass Seal: NBR
Data for application in connection with hazardous areas		
EU-type examination certificate		
Marking		⊕ II 2 G Ex mb IIC T4/T6 Gb ⊕ II 2 D Ex mb IIIC T130 °C / T80 °C Db Protection by encapsulation EPS 18 ATEX 1232 X
Certificate		CCC approvals
Marking		Ex mb IIC T4/T5/T6 Gb Ex mbD 21 T80°C/T95°C/T130°C
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018, EN IEC 60079-7:2015/A1:2018, EN 60079-18:2015/A1:2017, EN 60079-31:2014
International approvals		
IECEx approval		IECEx EPS 18.0110X Ex mb IIC T4/T6 Gb Ex mb IIIC T130 °C/T80 °C Db

Structure of the type code

7500	-	MAN	-	BK	-	(1)	-	(2)
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7500	Device type
7500	7500 Series Purge System

MAN	Manifold
MAN	

BK	Housing
BK	Standard

(1)	Voltage
230VAC	230 V AC supply required
115VAC	115 V AC supply required
24VDC	24 V DC supply required

(2)	Temperature rating
T4	Available with 115 V AC and 24 V DC options
T6	Available with 230 VAC option



7500-01 Control Unit Mounting Brackets

7500-ACC-BKT-*

- Angle bracket for mounting the 7500-01 control unit with or without 5500-MAN manifold to the enclosure
- Includes mounting bolts, nuts, and sealing washer for Type 4X degree of protection
- 316 stainless steel
- One bracket for top, bottom, side mounting option

The 7500-ACC-BKT bracket provides easy installation of the 7500-01 control unit to an enclosure, with or without 5500-MAN manifold (not included).

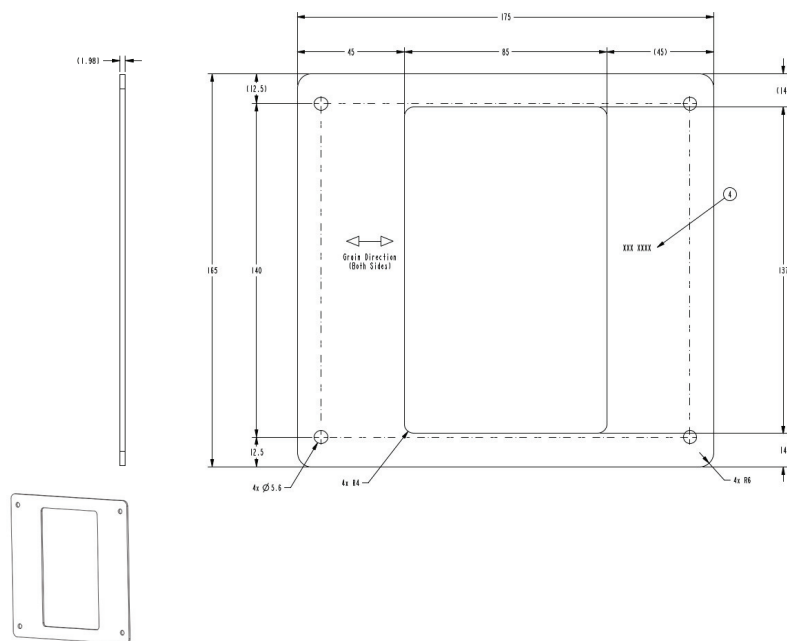


Function

The 7500-ACC-BKT-... is designed to mount the 7500-01 control unit (with or without an optional 5500-MAN manifold) to the side, top, or bottom of an enclosure, making the control unit visible when viewed directly from the front. The bracket comes with mounting bolts, nuts, and Type 4X/IP66 washers for easy installation. The bracket can be ordered as a standalone mounting device for the 7500-01 control unit or as a mounting solution for the 7500-01 control unit with the 5500-MAN-CD01, 5500-MAN-EX01, or 5500-MAN-CDUL-01 manifold installed. Control unit and manifold are not included.

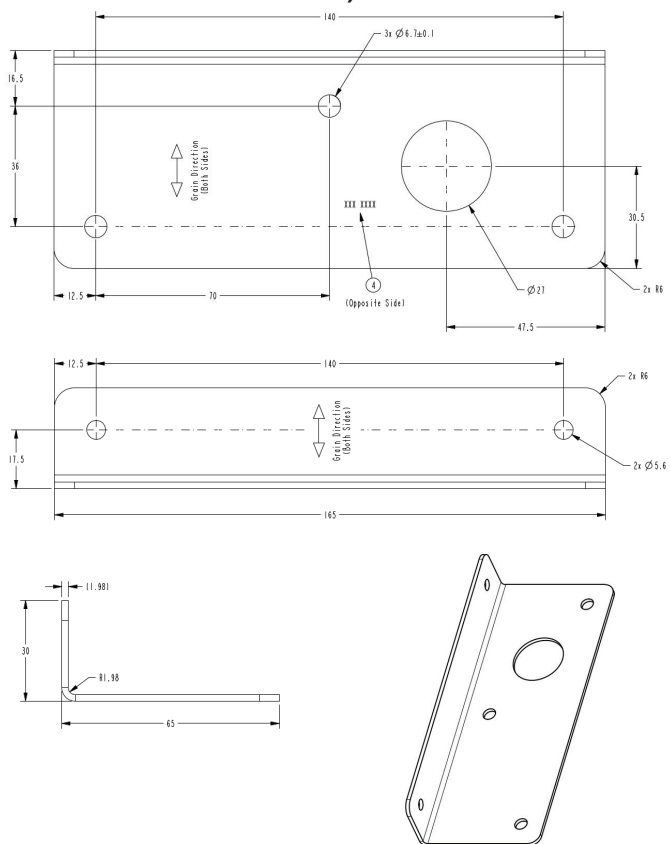
Dimensions

7500-ACC Panel without Manifold Mount



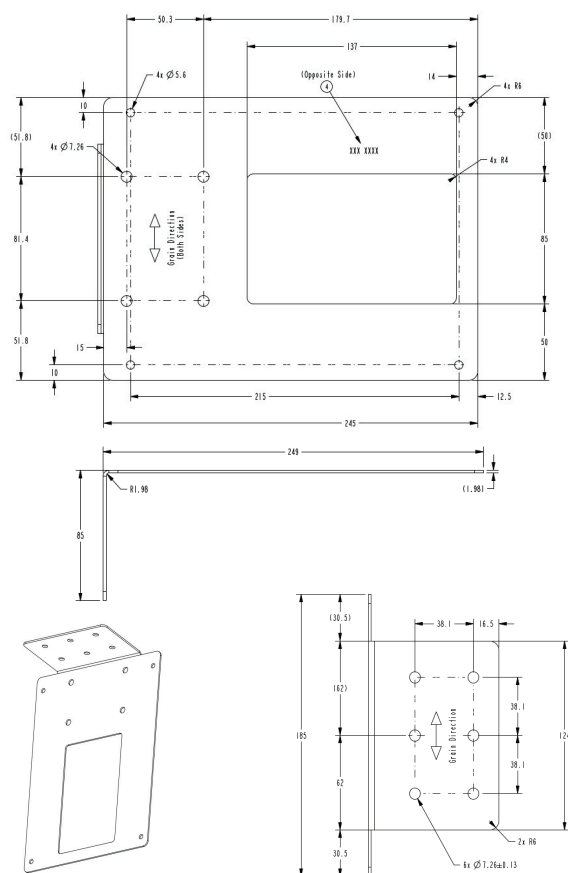
Dimensions

7500-ACC Mounting Bracket (For use without manifold mount)



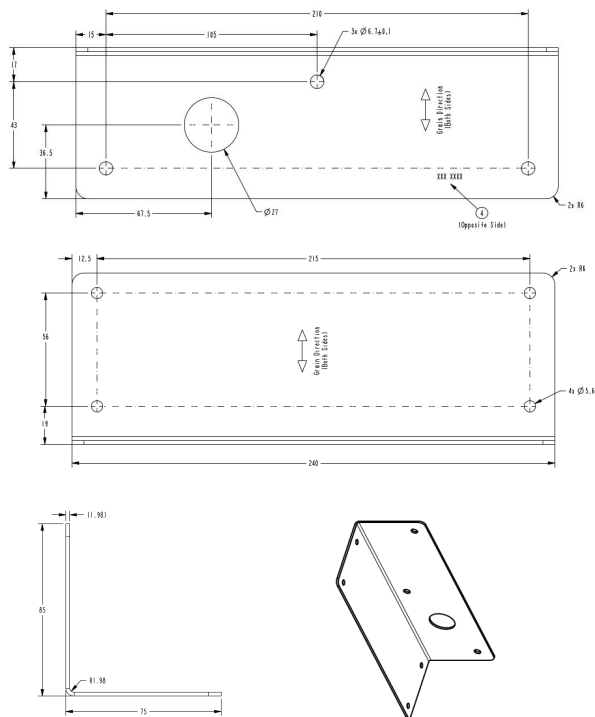
Dimensions

7500-ACC Panel with Manifold Mount



Dimensions

5500-ACC Mounting Bracket
(For use with and without manifold mount)



Technical Data

General specifications		
Operating mode		For mounting 7500 control unit to enclosure or back panel
Series		7500
System		Type Z Purge ; Ex pzc Purge
Hazardous environment		gas or dust
Mechanical specifications		
Degree of protection		Mounting type 4X / IP66 (Seeloc washers)
Material		Bracket: 316 stainless steel Panel: 316 stainless steel Hardware, panel-to-enclosure (Bag 1) Bolts (3): 304 stainless steel Washers (3): Seeloc by APM Hexseal (P/N 75082 Buna-N) Nut: 304 stainless steel Hardware, bracket-to-panel (Bag 2) Bolts (2): 304 stainless steel Washers (2): Hard fiber Nuts (2): 304 stainless steel
Mass		7500-ACC-BKT-NM 0.6 kg 7500-ACC-BKT-YM 1.3 kg
Dimensions		For bracket dimensions , see dimension drawing. Hardware, panel-to-enclosure (Bag 1) Bolts (3): ¼ x 20 x ¾" Washers (3): 1" (OD); 9.53mm (hole diameter) Nut: ¼" Hardware, bracket-to-panel (Bag 2) Bolts (2): 5mm x 12mm button socket Washers (2): No 8 Nut (2): 5mm nyloc nut
General information		

Type Code

Structure of the type code

(1)	-	(2)	-	(3)	-	(4)
1	Purge Series					
7500	7500 Series					
2	Device type					
ACC	Accessory					
3	Accessory type					
BKT	Bracket only					
4	Bracket type					
NM	No manifold mounting option					
YM	Yes manifold mounting option					

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
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Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
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