



# Type Z & Ex pzc purge and pressurization system

## 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.

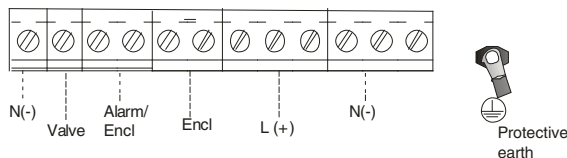
A digital manifold system such as the 5500-MAN-... can be used to make the 7500 a fully automatic system. Enclosure pressure and leakage are monitored. If a loss in enclosure pressure occurs, the solenoid valve engages to restore the defined pressure settings and/or trigger a pressure drop alarm.

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.

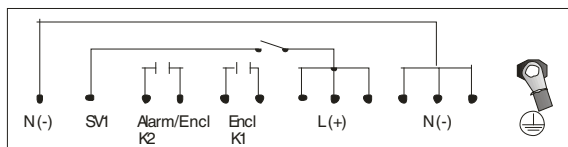
### Connection

#### Electrical Connections

Terminal Block



Terminal Block Connections



### Technical Data

#### General specifications

Equipment architecture	max. enclosure size 450 ft <sup>3</sup> (12.7 m <sup>3</sup> )
Operating mode	fully automatic (FA)
Series	7500
System	Type Z Purge ; Ex pzc Purge
Hazardous environment	gas or dust

#### Supply

Rated voltage	U <sub>r</sub>	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
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## Technical Data

Power consumption	max. 2.7 W / 7.3 VA without valve
<b>Electrical specifications</b>	
Connection	screw terminals -- see manual for specifications on wire size and torque values
<b>Output</b>	
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
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
<b>Indicators/settings</b>	
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)
<b>Pneumatic parameters</b>	
Protective gas supply	compressed air or inert gas, 5 µm filter, free from oil
Pressure requirement	supply pressure: 20 ... 120 psig (1.4 ... 8.2 bar)
Safe pressure	0.38 in wc (0.95 mbar) minimum for gas 0.80 in wc (2.0 mbar) minimum for dust pressure sensing: ± 0.125 in wc (0.31 mbar)
Enclosure pressure	0 ... 10 in wc (0 ... 24.8 mbar)
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
<b>Conformity</b>	
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
<b>Ambient conditions</b>	
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 <sup>2</sup> , all axes
Impact resistance	30 g, 11 ms, all axes
<b>Mechanical specifications</b>	
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	<b>Lens:</b> Makrolon® GP-V polycarbonate <b>Screws:</b> AISI 316 (1.4401), 304, or 18-8 stainless steel <b>Housing:</b> A380, A356, or 6061-T6 aluminum <b>Mounting gasket:</b> Bisco® HT-800 medium cellular silicone <b>Mounting tabs:</b> SAE 304 stainless steel <b>M12 plug:</b> 6061-T6 aluminum
Mass	710 g (1 lb 10 oz)

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## Technical Data

Dimensions	150 x 100 x 50 mm (5.9 x 4 x 2 in)	
<b>Data for application in connection with hazardous areas</b>		
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
<b>International approvals</b>		
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
<b>General information</b>		
Supplementary information		Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

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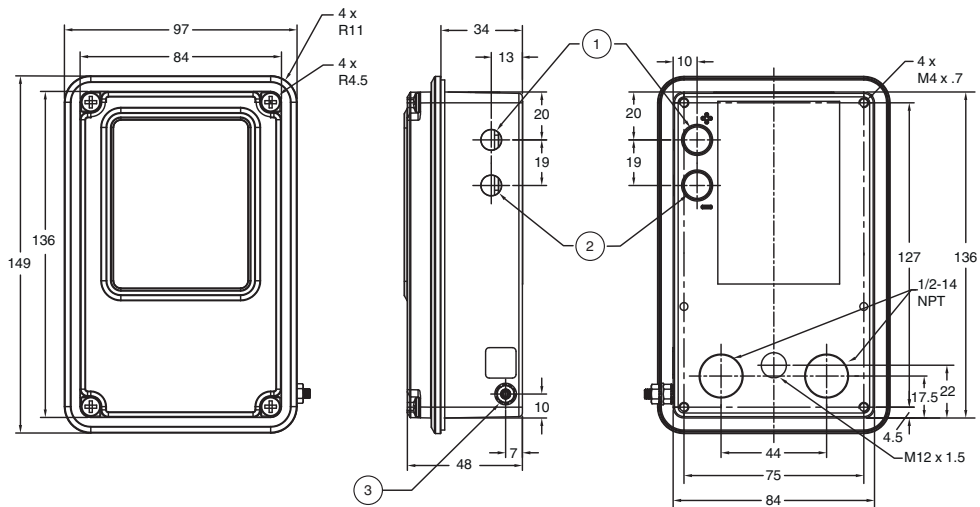
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**Additional Information**

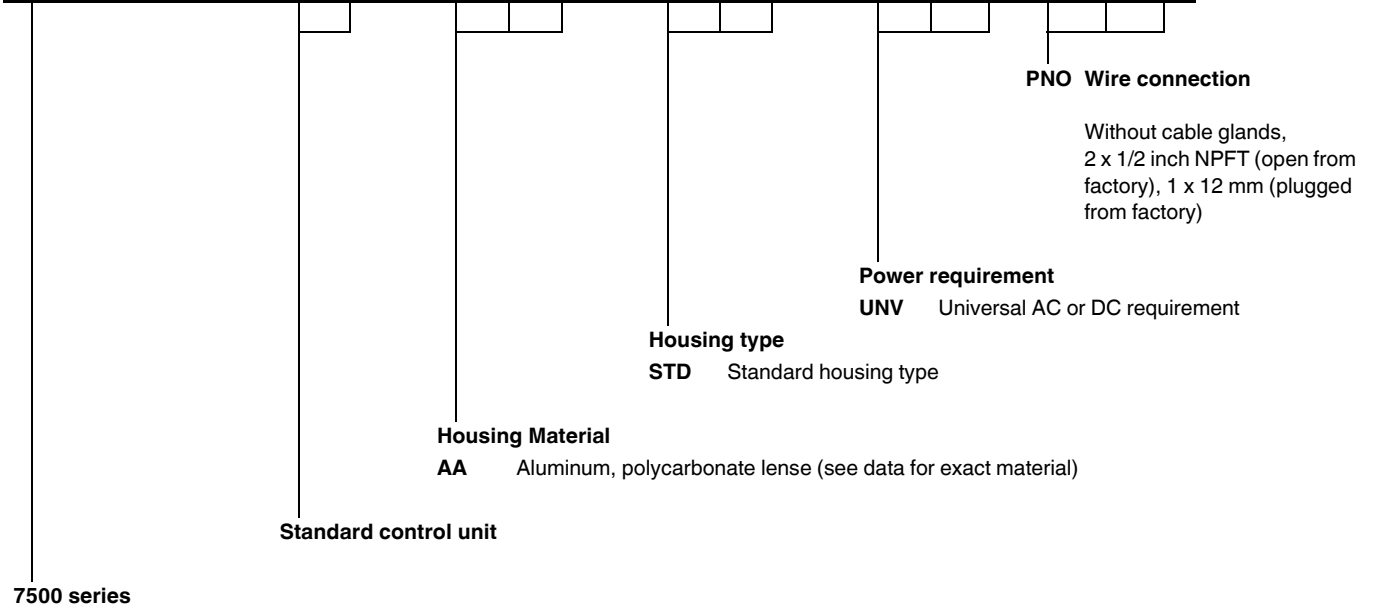
**Dimensions**



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)

**Type Code**

**7 5 0 0 - 0 1 - A A - S T D - U N V - P N O**



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