



# Type Z purge and pressurization system

## 1012

- NFPA 70, NFPA 496, ISA 12.4 standards
- Optional alarm output indicates air lock failure
- Type Z system certified for Class I, Division 2 to nonhazardous
- Enclosure volume up to 15 ft<sup>3</sup>

### 1012 Series



### Function

The model 1012 is a Rapid Exchange® purging system that operates on a supply of compressed instrument air or inert gas. The system regulates and monitors pressure within sealed (protected) enclosure(s), in order to remove and prevent flammable gas or vapor accumulations. The system accomplishes four air exchanges and maintains a "safe" (0.25") pressure. A Pepperl+Fuchs Model EPV-2 Enclosure Protection Vent is required for proper operation. This process reduces the hazardous (classified) area rating within the enclosure(s), in accordance with the NEC - NFPA 70, Article 500, NFPA 496 and ISA 12.4.

### Technical Data

General specifications	
Series	1012
Hazardous environment	gas
Pneumatic parameters	
Protective gas supply	instrument grade air or inert gas
Pressure requirement	80 - 120 psi
Safe pressure	Setpoint: 0.25" (6.35 mm) Flow rate: 0.1 - 3.5 SCFH (2.8 - 99 l/hr)
Operating conditions	
Process conditions	
Capacity and filtration	1.5 oz @ 20 μ
Exchange pressure	3" - 5"
Exchange flow rate	4 SCFM / 240 SCFH (With regulator set to 60 psi min. during exchange)
Exchange time	1 min / ft <sup>3</sup>
Ambient conditions	
Ambient temperature	-29 ... 49 °C (-20.2 ... 120.2 °F)
Mechanical specifications	
Connection type	System supply port: 1/4" FTP Enclosure supply fitting: 1/4" tube fitting Enclosure reference fitting: 1/4" tube fitting
Material	Filter regulator body: zinc w/enamel finish Regulator handle & bowl: polycarbonate Enclosure pressure gauge: alum. w/enamel finish Rapid Exchange® gauge: poly case and brass tube Tube fittings & valves: 316 ss forged body Tubing: 316 ss 1/4" .035 welded System nameplate: silk screened Lexan® & ss Fastener hardware: alum. & stainless steel Mounting plate: 316 14 ga #3 brush ss Enclosure warning nameplate: silk screened ss
Mass	4.5 kg (10 lb)

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

**Technical Data**

International approvals		
UL approval		
cULus	Class I, Division 2, Groups A, B, C, D	

**Assembly**



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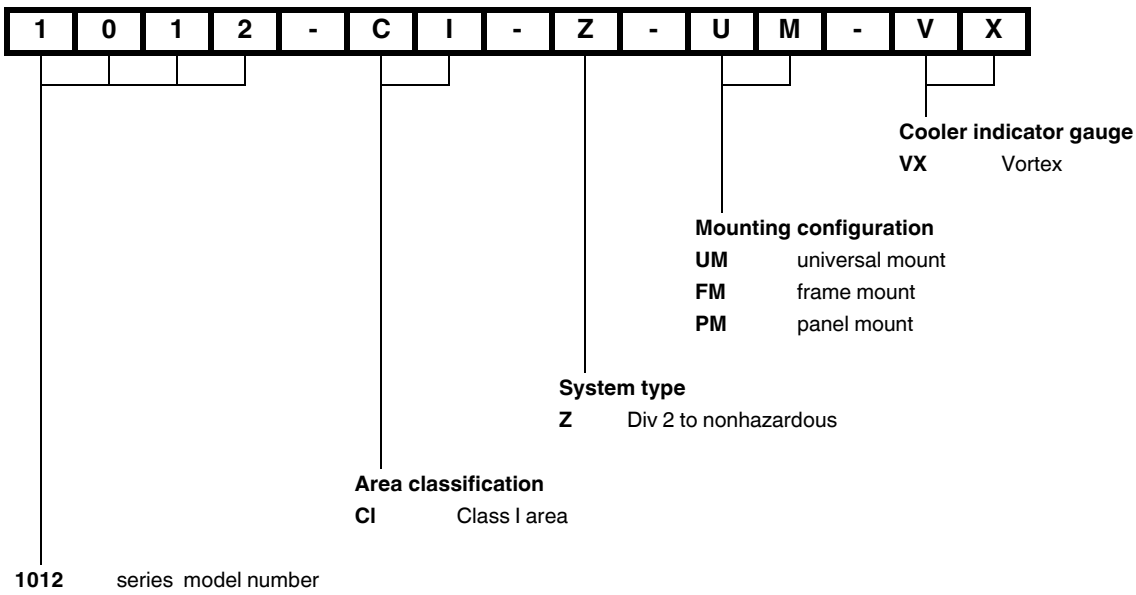
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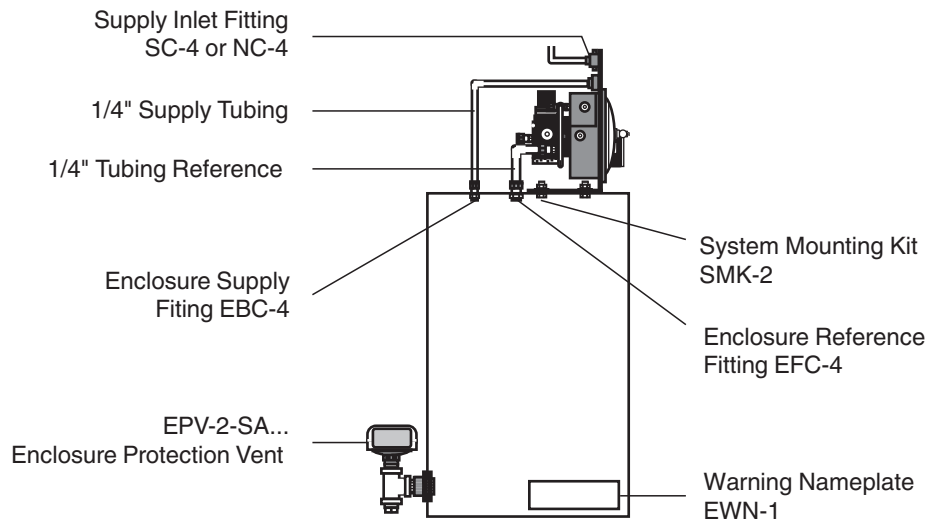
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**Type Code**



**Additional Information**

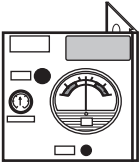
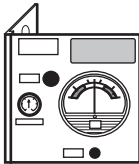
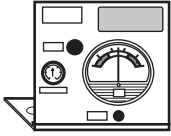
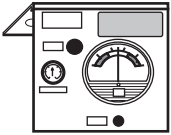
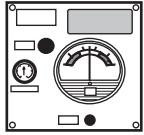
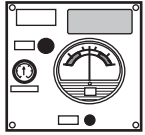
**Assembly**



**Dimensions**

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Overall system dimensions			
Configuration	UM - left hand	UM - right hand	UM - top mount
Height	12	12	12.25
Width	12.25	12.25	12
Depth	5	5	5
			
Configuration	UM - bottom mount	FM - frame mount	PM - panel mount
Height	12.25	12	12
Width	12	12	12
Depth	5	5	5
<p>Dimensions in inches. Mounting dimensions available upon request.                      FM &amp; PM panel cutout dimensions: 11.625 h x 11.625 w.</p> <p>Height &amp; Width dimensions reflect mounting plate measurements.                      Depth dimension reflects overall measurement of system, including components.</p>			

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**System Accessories**

Connection fittings	
Part	Description
NC-4	1/4" ninety connector
SC-4	1/4" straight connector
EFC-4	1/4" flush connector
EBC-4	1/4" bulkhead connector
EPC-12	3/4" pipe connector
Additional items	
Part	Description
SMK-1	Surface Mounting Kit (-LH-, -RH-, -TM-, -BM-, models)
SMK-4	Surface Mounting Kit (-FM-, -PM- models)
EPSK-1	Explosion Proof Switch Kit (Class I areas)
EPSK-1A	Explosion Proof Switch Kit (Class I areas)
GPSK-1	General-purpose Switch Kit (Class I areas)
RAH	Remote Alarm Horn
RAB-2	Div. 2 Remote Alarm Beacon
Warning nameplates	
Part	Description
EWN-1	Class I enclosure warning
ETW	Enclosure temperature warning
Installation & Operation Manual	
Part	Description
DOCT-1361	Installation and Operation Manual