

## Product Description

Model YZ104 is a Type Y or Z pressurization unit designed to protect electrical equipment in Class I Hazardous Areas. When connected to a supply of protective gas and utilized in conjunction with a Model PV-4 Spark Arresting Purge Vent, the Model YZ104 will supply, regulate and monitor the protective gas supply to a protected electrical enclosure and accomplish purging of the protected enclosure in an expedited manner. Type Z applications reduce the hazardous area rating inside the enclosure from Division 2 / Zone 2 to Unclassified. This allows general purpose equipment to operate in Division 2 / Zone 2 areas. Type Y applications reduce the hazardous area rating inside the enclosure from Division 1 / Zone 1 to Division 2 / Zone 2. This allows Division 2 / Zone 2 equipment to operate in Division 1 / Zone 1 Hazardous Areas.

## Unit Operation

**Prior to Start-Up:** Ensure Protected Enclosure Power is OFF, Protective Gas Supply is ON, Filter Regulator is set to 60 PSI, and alarm system is activated (if utilized). Test Purge Vent for proper operation. **Start-Up:** Close and seal Protected Enclosure. Open Enclosure Pressure Control Valve until a "Safe" reading is shown on the Enclosure Pressure Gauge. Open Purge Control Valve and allow unit to purge protected enclosure for the required time marked on Unit Start Up Instructions or for 5 minutes, minimum and then close Purge Control Valve. Confirm protected enclosure "Safe" pressure is stable. Energize protected enclosure equipment. Loss of "Safe" pressure requires immediate attention. De-energized power if "Safe" pressure cannot be restored within a reasonable amount of time.

## Product Specifications

Maximum Enclosure Volume:	250 cubic feet
Universal Unit Weight:	14.0 lbs.
Vertical & Horizontal Unit Weights:	17.5 & 18.0 lbs.
Operating Temp. Range:	-20° F - 120° F
Protective Gas Supply:	* Air or Inert Gas
Unit Supply Pressure:	80 - 125 psi maximum
Unit Supply Connection:	1/2" tube fitting
Enclosure Supply:	1/2" tube fitting
Enclosure Reference:	1/4" tube fitting
Safe Enclosure Pressure:	0.25" w.c.
Safe Pressure Flow Rate:	** 0.1 - 3.5 SCFH per cubic foot
Purging Enclosure Pressure:	** 5" - 8" w.c.
Purging Flow Rate:	30 SCFM / 1800 SCFH @ 60 psi
4 Volume Purge Time:	1 minute per 7.5 cubic foot
5 Volume Purge Time:	1 minute per 6.0 cubic foot
Switch Set Point on Decrease:	0.15" w.c. ± 0.02"
Pressure Switch Conduit Port:	1/2" FPT
Pressure Switch Contact Ratings:	See EPSK Bulletin

- \* Air must contain no more than trace amounts of flammable vapors.
- \*\* Enclosure integrity determines safe pressure flow rate and purging enclosure pressure.

## Required Accessory

**A Model PV-4 Spark Arresting Vent is required for proper operation of the purging cycle and to protect the enclosure from excessive pressure of the protective gas supply in accordance with the requirements of NFPA 496, EN 50016 and IEC 60079-02.**

Best Purging Systems Corporation therefore requires the purchase of a Model PV-4 Spark Arresting Purge Vent with this unit for installation on the protected enclosure or the last enclosure of an enclosure array.



# Model YZ104 Type Y & Z Purging & Pressurization Unit

**Class I Applications  
Up To 250 Cubic Feet**

Technical Bulletin YZ104 TB-R0

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**Universal Mount Unit  
less Pressure Switch for  
any side or panel mounting**



**Vertical Mount Unit  
with Pressure Switch for  
left or right side mounting**



**Horizontal Mount Unit  
with Pressure Switch for  
top or bottom side mounting**

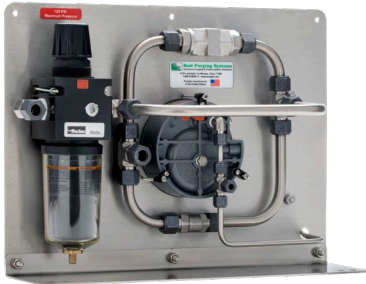


**Best Purging Systems**  
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## Rear Views



**Horizontal Mount Unit with Pressure Switch**

Filter Regulator  
Unit Supply Connection  
Enclosure Supply Connection  
Atmospheric Reference  
Enclosure Pressure Control Valve



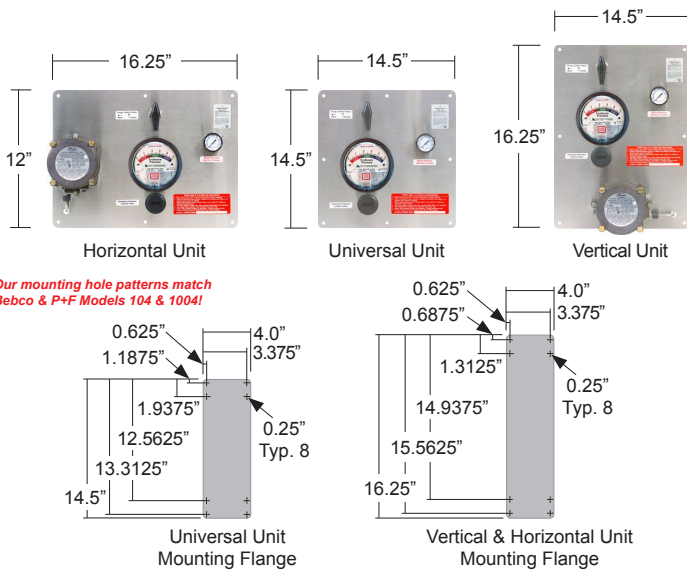
**Universal Mount Unit less Pressure Switch**

Purge Control Valve  
Enclosure Pressure Reference Connection  
Enclosure Pressure Gauge



**Vertical Mount Unit with Pressure Switch**

## Unit & Mounting Flange Dimensions



## Model Number Matrix

**Typical Model Number:**

**YZ 104-CI-L-U-\***

<b>Unit Type</b>	Y - Division 1 / Zone 1 to Division 2 / Zone 2	Z - Division 2 / Zone 2 to Unclassified
<b>Unit Series</b>	104 - Purging & Pressurization Unit	
<b>Area Classification</b>	CI - Class I	
<b>Pressure Switch Option</b>	L - Less Switch	W - Class I, Group C & D Switch
	B - Class I, Group A, B, C & D Switch	
<b>Mounting Configuration</b>	U - Universal	V - Vertical    H - Horizontal
<b>Group B Switch Voltage (omit if not applicable)</b>	24 - 24 VDC	120 - 120 VAC    240 - 240 VAC

*Please contact a Sales Associate for specifications and factory integration of Model PMGK Panel Mount Gasket Kits for Universal Mounting Configurations*

## Material Specifications

Mounting Plate, Flange & Atmospheric Reference: 304 Stainless Steel  
Valve & Fitting Bodies, Ferrules & Unit Fasteners: 316 Stainless Steel  
Tube Fitting Compression Nut Coating: Molybdenum Disulfide  
Enclosure Pressure Gauge Lens: Acrylic w/ Neoprene O-Ring  
Enclosure Pressure Gauge Body: Cast Aluminum w/ Epoxy Finish  
Fastener Kit Sealing Screws: 316 Stainless Steel w/ Neoprene O-Ring  
Fastener Kit Sealing Washers: 18-8 Stainless Steel w/ Neoprene Washer  
Fastener Kit Locking Nuts: 316 Stainless Steel w/ Nylon Insert

Atmospheric Reference: 316 Stainless Steel Body & 304 SS Element  
Indelible Unit Nameplates: 3M Lexan™ w/ 3M VSB™ Adhesive  
Supply Regulator Head & Bowl: Acetal Polymer Plastic  
Supply Regulator Body: Zinc w/ Buna N Elastomers  
Supply Pressure Gauge: Painted Steel Case, Plastic Lens, Brass Body  
Pressure Switch Body: Cast Aluminum w/ Epoxy Finish  
Pressure Switch Bolts & Contacts: Zinc Plated Steel & Mica Silver  
Enclosure Pressure Gauge & Switch Diaphragms: Fluorosilicone

## Unit & Protected Enclosure Accessory Hyperlinks



**Model PV Spark Arresting Pressure Vents**  
Prevents excessive enclosure pressure upon unit regulator failure



**Model BCK Unit & Bulkhead Connection Kits**  
Connects the unit and multiple protected enclosures of an array



**Model RAB & RAH Remote Alarm Beacons & Horns**  
Signals loss of protected enclosure safe pressure



**Model EPSK Enclosure Pressure Switch Kits**  
Complements universal mount units to activate audible or visual alarms



**Model EPWN & ETWN Pressure & Temperature Warning Nameplates**  
Provides NFPA required markings for protected enclosure doors and covers



**Model PMGK Panel Mount Gasket Kits**  
Converts universal mount units for panel mounting in protected enclosures

**One (1) Model EPWN Enclosure Warning Nameplate & One (1) Unit Flange or Panel Mount Fastener Kit furnished with all Units. All specifications subject to change without notice. Warranty & Liability policies available upon request.**