

Model YZ103

Product Description

D & M Instruments' Model YZ103 is a Type Y or Z purge unit designed to protect electrical equipment in Class I hazardous locations. When connected to a supply of protective gas, the Model YZ103 will supply, regulate and monitor the protective gas supply to a protected electrical enclosure. Type Z applications will reduce the hazardous location rating inside the enclosure from Division 2/ Zone 2 to non hazardous. This permits general purpose equipment to operate in Division 2/ Zone 2 areas. Type Y applications will reduce the hazardous location rating inside the enclosure from Division 1/ Zone 1 to Division 2/ Zone 2. This permits Division 2/ Zone 2 equipment to operate in Division 1/ Zone 1 areas.

A **DMI Model PV-3** spark arresting Purge Vent **MUST** be installed on the protected enclosure for safe and proper purge unit operation.

This unit is designed to meet or exceed NEC - NFPA 70, NFPA 496, EN 50016 and IEC 60079-02 requirements.

Type Y & Z Purge Unit



**YZ103-CI-W or B-V
With Pressure Switch**



**YZ103-CI-L-U
Less Pressure Switch
Shown w/
MF-12 Universal
Mounting Flange**



**YZ103-CI-W or B-H
With Pressure Switch**

Unit Specifications

Recommended Max. Enclosure Volume:	* 200 cu ft
Purge Time:	4 Volumes @ 1 minute per 3.0 cf 5 Volumes @ 1 minute per 2.4 cf
Protective Gas Supply:	Clean Air or Inert Gas
Gas Supply Pressure:	80 - 125 psi max.
Unit Supply Connection:	3/8" tube fitting
Enclosure Supply:	3/8" tube fitting
Enclosure Reference:	1/4" tube fitting
Safe Enclosure Pressure:	0.5" w.c. / 55Kb
Safe Press. Flowrate:	** 0.1 - 3.5 scfh per cf
Purge Enclosure Pressure:	** 5" w.c.
Purge Press. Flowrate:	10 scfm @ 60 psi.

* Contact Factory for applications with larger enclosure volumes
** Enclosure Integrity determines actual Flowrate & Pressure

Material Specifications

Unit Mounting Plate:	316 SS Brushed
Regulator body:	Enamel Finished Zinc
Filter & Handle:	Polycarbonate
Enclosure Press. Gauge:	Enameled Alum.
Injection Press. Gauge:	Polycarbonate/Brass
Tubing:	316 Stainless Steel
Tube Fittings:	316 Stainless Steel
Valves:	316 Stainless Steel
Valve Handles:	Polycarbonate
Start up Labels:	Silkscreened Lexan
Enclosure Warning Label:	316 Stainless Steel

D&M Instruments, Inc.

Copyright © 2004 D&M Instruments, Inc.
Document Control # YZ103SDS-R1.0

Ph. 281-557-1002
Fax: 281-557-0703
League City, Texas USA
www.dminstruments.com
sales@dminstruments.com



**YZ103-CI-W or B-V
With Pressure Switch
Rear View**

Filtered
Regulator
**Unit Supply
Connection**
**Enclosure
Supply
Connection**
Enclosure
Pressure
Control Valve



**YZ103-CI-L-U
Less Pressure Switch
Rear View**

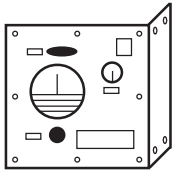
Purge Control
Valve
**Enclosure
Pressure
Reference
Connection**
Enclosure
Pressure
Gauge
Venturi Orifice
Atmospheric
Reference

Model YZ103

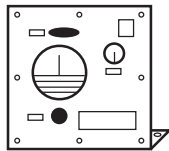


**YZ103-CI-W or B-H
With Pressure Switch
Rear View**

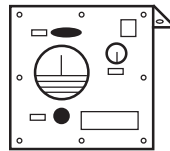
Typical Mounting Configurations



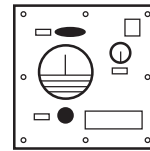
Left Mount



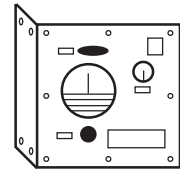
Top Mount



Bottom Mount

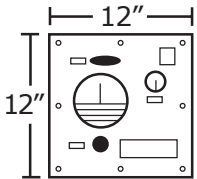


Frame Mount

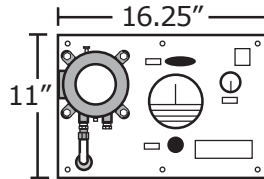


Right Mount

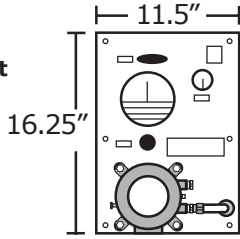
Purge Unit Dimensions



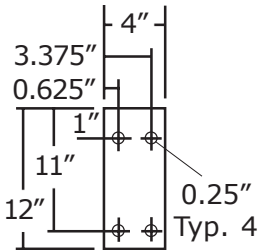
**YZ103-L-U
Universal Mount**



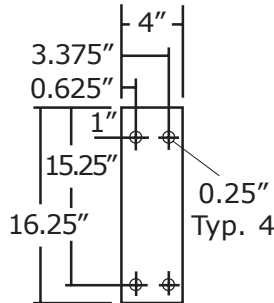
**YZ103-W or B-H
Horizontal Mount**



**YZ103-W or B-V
Vertical Mount**



**12" Mounting
Flange**



**16" Mounting
Flange**

Model Number Matrix

Model # YZ-103-CI-L-U

Division/Zone Reduction
Y- Div.1/Zone1 to Div. 2/Zone 2
Z- Div.2/Zone2 to Non-Hazardous
Unit Series
103- Purge Unit
Area Classification
CI- Class I Areas
Pressure Switch Option
L- Provided Less Switch
W- Provided With CI, Gr. C&D EXP Switch
B- Provided With CI, Gr. B EXP Switch
Mounting Options
U- Universal Mounting *
V- Vertical Mounting
H- Horizontal Mounting
 * - Not Available with pressure switch options

Purge Unit Accessories

- PV-3-T: Top Mount Spark Arresting Purge Vent
- PV-3-S: Side Mount Spark Arresting Purge Vent
- BCK-103: Model YZ103 Bulkhead Connection Kit
- PSK-GP: General Purpose Pressure Switch Kit
- PSK-ED: Group C&D EXP Pressure Switch Kit
- PSK-EB: Group B EXP Pressure Switch Kit
- EWL-1: SS Enclosure Warning Label
- YZ103 IOM: Installation & Operating Manual

Local Sales Representative



Ph. 281-557-1002
 Fax: 281-557-0703
 League City, Texas USA
 www.dminstruments.com
 sales@dminstruments.com

Specifications Subject to Change without Notice
 Warranty & Liability Statements available upon request

D&M Instruments, Inc.