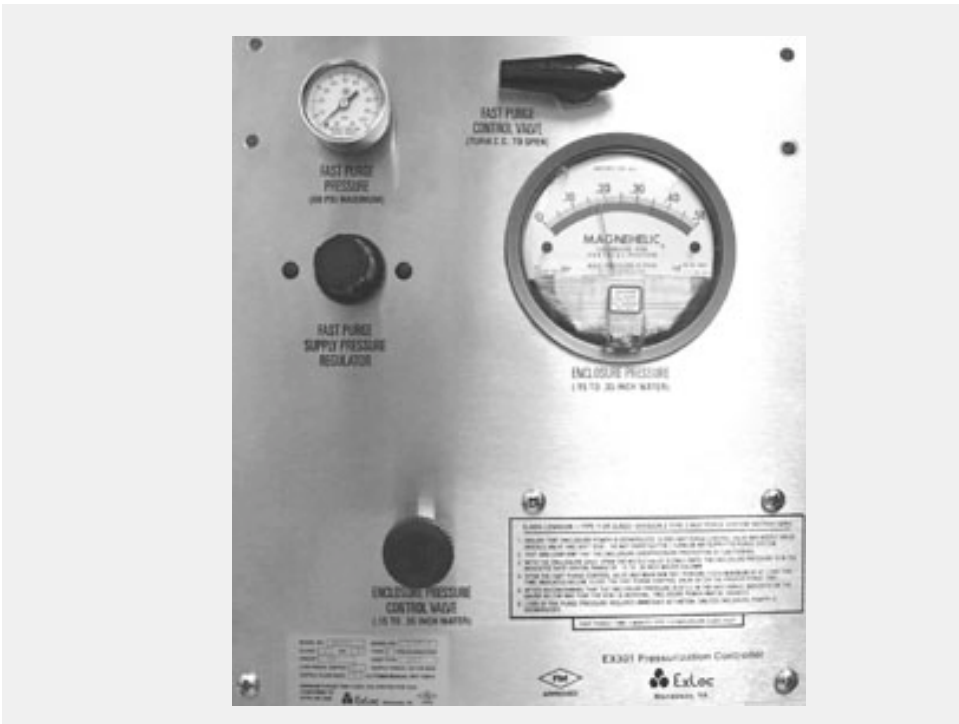




PURGING SYSTEMS TYPE Y AND Z

EX301,302,303

Z for use in Division 2 and Y for use in Division 1 hazardous areas



The EX300 pressurization system consists of a control unit and relief vent that are mounted by the user onto the enclosure required to be maintained free from flammables gases or dusts.

The control and alarm components are mounted on a stainless steel panel. This panel can be installed on the left, right, bottom or top of the enclosure via an universal bracket. Two pneumatic connections need to be made from the control panel to the enclosure. One to bring air inside the enclosure, the other to monitor pressure inside the enclosure.

A fast purge function is provided to ensure that the purge cycle required to flush gases out of the enclosure before power is applied, is kept to a minimum. This feature is activated manually during the start procedure. During this fast purge operation the elapsed time is monitored to ensure that 4 enclosure volumes of air have passed through.

Internal enclosure pressure is set with a needle valve that is rotated until the pressure indicator is showing the appropriate pressure this is usually set at 0.25" WG.

Internal pressure monitoring and indication is provided by a large scale gauge. This is an unambiguous display and the pointer should remain within the green area.

A relief vent is usually mounted on top of the enclosure and provides an air escape for the purging gas during the purge cycle. It is also used as an override safety valve in case overpressure builds inside the enclosure.

An optional pressure switch is available for powering additional alarm indication or to switch off power. This is a differential pressure switch which activates when the enclosure internal pressure falls below the minimum allowed pressure. It provides a change-over contact within an explosion proof housing and can be used with a conduit installation, an intrinsically safe system or a non-incendive circuit.

Different systems are available to provide adequate flow to different sizes of enclosures. As the enclosure to be pressurized goes up in volume, the components used to control the air have to be rated accordingly. There are therefore three controller models in the series.

- FM approved complies with NFPA496
- Front panel adjustment
- Large easy view pressure indicator.
- Fast purge function
- Stainless steel panel
- Optional : Pressure switch for alarm control

EX301 unit to handle up to 15 cubic feet enclosure.

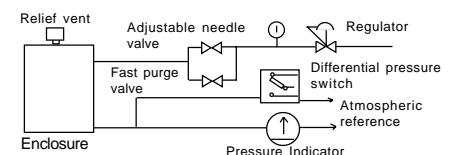
EX302 unit for enclosure up to 75 cubic feet.

EX303 unit for enclosure up to 300 cubic feet.

Which Type of Pressurization

Type Z pressurization is a protection method that reduces the area inside an enclosure from a Division 2 classified location to a non classified location.

Type Y pressurization is a protection method that reduces the area inside an enclosure from a Division 1 classified location to a Division 2 classified location.



SPECIFICATION

EX301 Pressurization Controller

Suitable for enclosures up to 15 cubic foot	
Pneumatic air outlet connection to enclosure	1/4" tube fitting use 1/4" OD tubing with 0.035" wall
Internal pressure reference line	1/4" tube fitting
Air inlet	1/4" NPT
Input pressure max	200 PSI
Input flow capability	20 SCFM
Fast purge flow rate	6 SCFM at 60 PSI
Pressure maintenance flow rate	Dependent on enclosure leakage Set between 0.5 to 30 SCFH

EX302 Pressurization Controller

Suitable for enclosures up to 75 cubic foot	
Pneumatic outlet connections to enclosure	3/8" tube fitting use 3/8" OD tubing with 0.035" wall
Internal pressure reference line	1/4" tube fitting
Air inlet	3/8" NPT
Input pressure max	200 PSI
Input flow capability	30 SCFM
Fast purge flow rate	16 SCFM at 60 PSI
Pressure maintenance flow rate	Dependent on enclosure leakage Set between 0.5 to 40 SCFH

EX303 Pressurization Controller

Suitable for enclosures up to 300 cubic foot	
Pneumatic outlet connections to enclosure	1/2" tube fitting use 1/2" OD tubing with 0.035" wall
Internal pressure reference line	1/4" tube fitting
Air inlet	3/8" NPT
Input pressure max	200 PSI
Input flow capability	80 SCFM
Fast purge flow rate	40 SCFM at 60 PSI
Pressure maintenance flow rate	Dependent on enclosure leakage Set between 0.5 to 40 SCFH

Relief Vent

Fast purge/relief vents are selected to sustained the high flow rate of the fast purge cycle of each system.

EXV1

Flow rate	up to 10 SCFM suitable for EX301
Mounting hole diameter	1 1/16"

EXV2

Flow rate	up to 30 SCFM suitable for EX302 and EX303
Mounting hole diameter	1 5/16"

Hazardous Location

Type Z	Class I, Division 2, Groups A,B,C,D Class II Division 2, Groups F,G
Type Y	Class I, Division 1, Groups A,B,C,D Class II Division 1, Groups F,G
Approval	FM

Environmental

Operating temperature	-10 to 50 °C (-30 to 50 °C special option)
Storage temperature	-40 to 70 °C
Relative humidity	5 to 95% non condensing

Mechanical

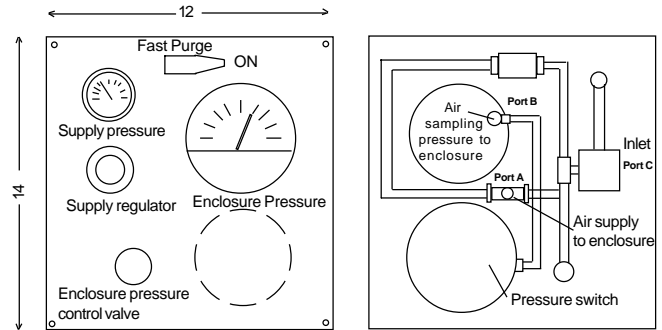
Fittings & tubing	SS
Panel & mounting bracket	14 Ga SS #3 finish
Weight	5 lb (2.2Kg)

Accessories

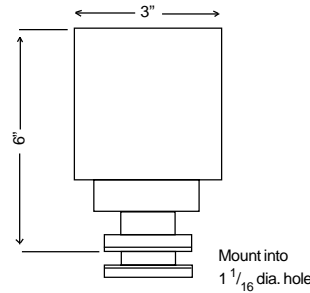
EXdS1	Differential pressure switch
Contact ratings	200W at 250 V ac resistive 100W at 125V ac resistive

DIMENSIONS

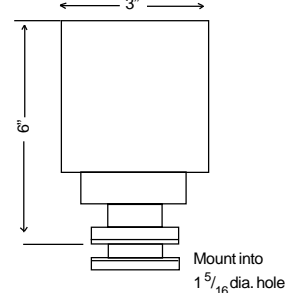
EX301 , EX302, EX303



EXV1

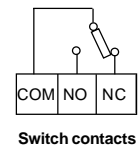
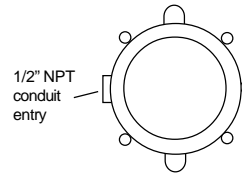


EXV2



TERMINAL CONNECTIONS

EXdS1



HOW TO ORDER

	Please specify
Model No Controller	EX301 or EX302 or EX303
Relief Vent	EXV1 or EXV2
Accessories	Specify if required
Explosion proof differential pressure switch	EXdS1 GPCD or EXdBS GP ABCD