



PURGING SYSTEMS TYPE Z

for use in Division 2 hazardous areas

EX300



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

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 LHS or RHS of the enclosure via a mounting 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 purge cycle is required to ensure that any flammable gases are flushed out the enclosure prior to power being applied. This feature is initiated by fully opening the valve and monitoring the elapsed time to ensure that 4 volumes of air have passed through the enclosure. The purge cycle time for the EX300 is 3 1/2 minutes per cubic foot of enclosure volume.

Internal enclosure pressure is set with the same valve. Once the purge cycle is complete, the valve is rotated until the pressure gauge indicates 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.

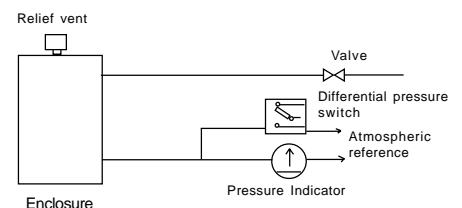
An optional pressure switch is available for powering additional alarm indication or to switch off power. This is a differential pressure switch which activates when the enclosure internal pressure falls below the minimum allowed pressure. It provides a change-over contact within an explosion proof housing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

Other pressurization systems are available to provide fast purge function to larger size enclosures. See data sheet for EX301, 302, 303 models.

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

EX300 Pressurization Controller

Suitable for enclosures up to 2 cubic feet	
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	10 SCFM
Pressure maintenance flow rate	Dependent on enclosure leakage Set between 0.5 to 15 SCFH

Relief Vent

Relief vent is recommended to allow safe air exhaust against accidental overpressure.

EXV1

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

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

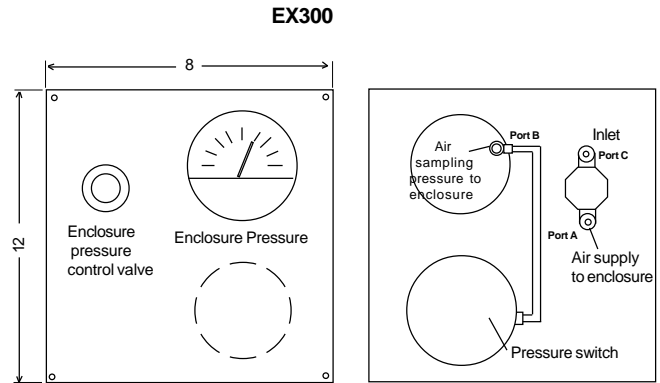
Mechanical

Fittings & tubing	SS
Panel & mounting bracket	14 Ga SS #3 finish
Weight	4 lb (2.2Kg)

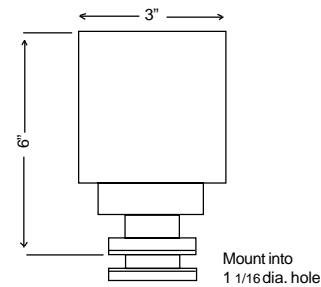
Accessories

EXdS1	Differential pressure switch
Contact ratings	200W at 250 V ac resistive 100W at 125V ac resistive
Hazardous area rating	Class I, Div.1. Grp C & D (standard) Class I, Div.1, Grp A,B, C, D (option)

DIMENSIONS

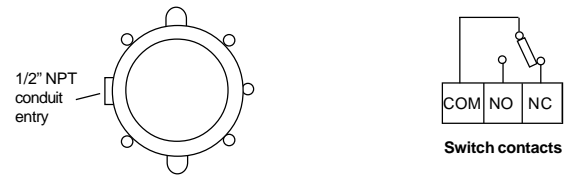


EXV1



TERMINAL CONNECTIONS

EXdS1



HOW TO ORDER

Please specify

Model No	
Controller	EX300
Relief Vent	EXV1

Accessories

Specify if required

Explosion proof differential pressure switch	EXdS1 GP CD or EXdBS GP ABCD
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