

# PURGE CONTROLS

## DIVISION 2

### SERIES 9017

#### Standard Features and Benefits

- FM Approved Class I & II, Division 2 Group B-G
- Pre-Assembled for Easy Installation
- Short Purge Time (Less Than 2 Minutes per Cubic Foot)
- Low Internal Pressure
- Built-In Vent Valve with Spark Arrestor
- Built-In Flow Meter and Pressure Gauge for Easy Set-Up and Operation
- Suitable for Enclosure from 1 Cubic Foot to 50 Cubic Feet in Size
- No Additional Parts or Accessories Required



#### Options

- Pressure Switch with Alarm Contacts and LED Indicator Alerts User and Triggers Watchdog System if Air Pressure is Lost
- Over-Pressure Relief Valve Prevents Enclosure Distortion and Hazards Caused by Accidental Enclosure Over Pressurization
- Pac-Seal Kit
- Air Connection Kit



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# Specifications

## MATERIAL

**Enclosure** 304 Stainless Steel  
#4 Finish

**Design** NEMA 4 or 4X  
Flush Mount or  
Extended Mount with  
Interface Box

## PHYSICAL

### Dimensions

**Purge Control** 6.75" Height (H)  
11.5" Width (W)  
2.75" Depth (D)  
9 lbs.

**Interface Box** 7.25" Height (H)  
12.25" Width (W)  
3.5" Depth (D)  
5 lbs.

### Relative Humidity

**Operating** 10-95% Non-Condensing  
**Storage** 10-95% Non-Condensing

**Operating Temperature** 32-122°F

**Storage Temperature** 32-158°F

## PRESSURE & AIR

**Supply** 150 SCFH Purging  
35 SCFH Operating

**Operating Internal Pressure** 1" Water Column

## THEORY OF PURGE SYSTEM OPERATION AND USAGE

The concept of preventing the ignition of flammable elements in a hazardous area using a purge system per NFPA 496 is actually very simple, though its implementation is somewhat more complex.

The basic idea in purging electronic equipment is to keep electronics that have the potential of producing sparks or high temperatures separate from the explosive elements. This is accomplished by placing the electronics in an enclosure that is sealed against the entry of the outside atmosphere.

To ensure that none of the external atmosphere is within the enclosure, the purge system starts by replacing the internal atmosphere with four volumes of inert gas, supplied via a compressed air or compressed nitrogen line. Only after this purge has occurred are electrical supplies and signals connected to the inside of the enclosure.

Because no enclosure can be perfectly sealed, after the purge is complete the purge system must ensure that no exchange of gases can occur. This is accomplished by maintaining a slight positive pressure within the enclosure. If this positive pressure falls below a preset level, the electrical supplies and signals are disconnected from the inside of the enclosure.

In Division 2 areas, where explosive elements are only present under abnormal conditions, the connecting and disconnecting of the electrical supply and signals is controlled by the operator. The purge system must provide an indication to the operator in the event of the loss of pressurization. This can be accomplished via an included indicator or a system connected to alarm contacts. The purge process itself is also manual.

In Division 1 areas, where explosive elements can reasonably be expected to be present under normal conditions, the entire process must be automatically controlled by the purge system. The purge system controls the purge and automatically disconnects the electrical supply and signals upon loss of internal pressure. Alarm contacts are also provided to alert the user.

## ORDERING INFO

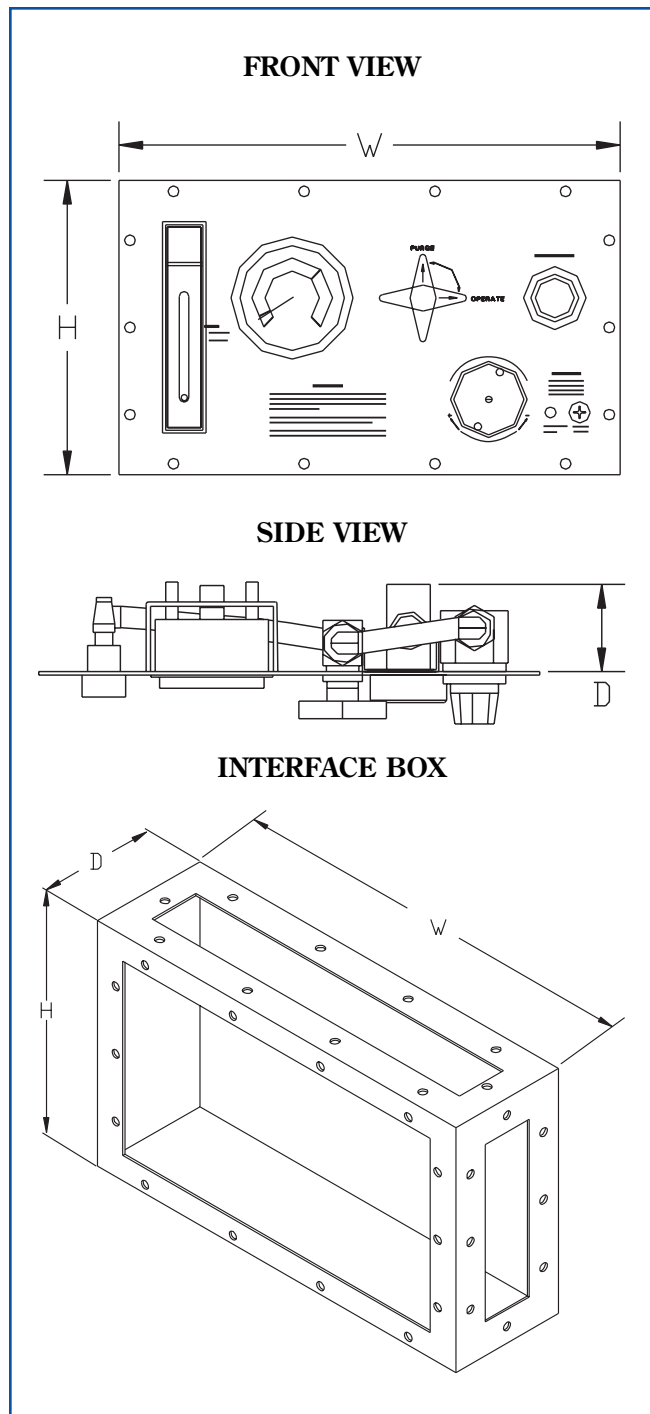
9017...FM Approved Division 2 Purge Control

## AVAILABLE OPTIONS

915...Pressure Switch with Alarm Contact & LED

916...Pressure Relief Valve (4" Water Column)

917...Pressure Relief Valve (½ PSI)



## Comparison Chart

Daisy Data Competition		
FM Approved?	Yes	Yes
Exhaust Valve Included?	Yes	No
Additional Parts Required?	No	Yes
Assembly Required?	No	Yes

\*Specifications are subject to change without notice.