

# Main Line Pressure Switch Assembly

## Submittal Data Sheet

#### Features

- Removable copper diaphragm capsule
- Instrument quality snap-action switch
- Normally open or normally closed contacts
- NEMA 4 water-tight housing with mounting brackets (high pressure switches are NEMA 3-rated)
- Pressure gauge with 2.5" dial
- DISS gas specific nut, nipple, and demand check
- Cleaned for use in oxygen per CGA G-4.1

#### **Specification**

Pressure Gauge Assembly for the medical gas alarm system shall incorporate a U.L. Listed single pole double throw snapaction micro switch. The pressure switch shall be prewired with six color-coded leads. Normally open or normally closed circuitry shall be field-selected to be compatible with the medical gas alarm system design. Electrical rating shall be 10 amperes at 120 VAC.

Each pressure switch assembly shall have two alarm set points for high and low line pressure alarms. Low-pressure gases are set to trigger alarms at 40 psig for low line pressure and 60 psig for high line pressure. High-pressure gases are set at 140 psig for low line pressure and 180 psig for high line pressure. These pressure set points are adjustable from 0.5 to 80 psig (up to 300 psig for nitrogen and instrument air). The vacuum switch has one alarm set point with a range of 0.8 to 29" Hg, and is factory-calibrated to alarm at 12" Hg.



The pressure set points may be adjusted via the dials on the bottom of the switch. For pressure, turn self-locking adjustment screw counterclockwise to increase pressure setting. For vacuum, turn self-locking adjustment screw clockwise to increase vacuum setting.

The switch enclosure shall be a NEMA 4 watertight housing with a mounting bracket, featuring a 1/4" FNPT bottom inlet for the gas service line connection and a 3/4" FNPT top inlet for the conduit. The high-pressure switch assemblies for instrument air and nitrogen shall be housed in a NEMA 3 weather-resistant enclosure with a mounting bracket.

A 2.5 gauge shall be incorporated before the pressure switch.

The Pressure Switch Assembly will then be mounted directly to a gas specific DISS demand check (provided by Powerex) directly onto the pipeline. The demand check shall have a 1/4" Male NPT connection.

#### **Ordering Information**

Part #	Gas Service and Pressure Switch Used
PX-PSB-N2O	Main line pressure switch for N2O; includes 0-100 PSIG pressure gauge and gas specific demand check
PX-PSB-CO2	Main line pressure switch for CO2; includes 0-100 PSIG pressure gauge and gas specific demand check
PX-PSB-N2	Main line pressure switch for Nitrogen; includes 0-300 PSIG pressure gauge and gas specific demand check
PX-PSB-MA	Main line pressure switch for Medical Air; includes 0-100 PSIG pressure gauge and gas specific demand check
PX-PSB-MV	Main line pressure switch for Vacuum; includes 0-30" Hg vacuum gauge and gas specific demand check
PX-PSB-O2	Main line pressure switch for Oxygen; includes 0-100 PSIG pressure gauge and gas specific demand check
PX-PSB-INST	Main line pressure switch for Instrument Air; includes 0-300 PSIG pressure gauge and gas specific demand check
PX-PSB-WAGD	Main line pressure switch for WAGD; includes 0-30" Hg vacuum gauge and gas specific demand check

### Wiring Diagrams





Nitrogen/Instrument Air

