

# **PGS-14-EW** Pressure Gauge with Adjustable Switch

The PGS-14-EW pressure gauge with adjustable switch is ideal for installations requiring both visual indication of real-time pressure as well as alarm status indication via contact switches.

## **Features**

- Adjustable alarm settings—visually indicated by red needles on the gauge face and set with a convenient adjustment tool included with and storable on the gauge itself.
- Tantalum diaphragm protection
- Convenient side access switch connections

# **Specifications**

#### Gauge

0-290 PSI (20 bar) 4" (100 mm) dial Stainless Steel housing

#### **Diaphragm Protection**

Upper body: 316 SS Lower body: Hastelloy C-276 Diaphragm: Tantalum Liquid fill: Halocarbon

#### Temperature

-20° to 60°C (-4° to 140°F)

#### Connection

1/4" FPT lower process connection

#### Switch

Maximum voltage: 250 VAC Maximum power: 30 W / 50 VA Minimum current: 20 mA

## **Alarm Switch Wiring**

The alarm switch connections are made at the terminal block located inside the small black case on the right of the gauge. The alarm switch is wired as such:

Low Alarm = Terminal #1 High Alarm = Terminal #2 Common = Terminal #4





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## **General Service & Maintenance Instructions**

- 1. Prior to installation, confirm that the application is suitable for the switch and that the red alarm needle indicators are adjusted to the desired settings.
- 2. The PGS-14-EW should not be used in application where there may be excessive vibration.
- 3. The PGS-14-EW should be installed vertically.
- 4. All wiring should be carefully installed and tested after installation.
- 5. Follow all relevant safety precautions when making any pressure or electrical connections.

# **Switch Settings & Wiring Instructions**

- 1. The PGS-14-EW has two adjustable switch contact switches, one for low pressure alarm and one for high pressure alarm. The alarm points of these switch contact switches can be manually adjusted using the adjustment tool from the front of the pressure gauge.
- 2. There are six wire terminals on the terminal block. These are located on the side of the gauge. These terminals are numbered 1 through 6.
  - a. Low Alarm—Terminals 1 & 4 (see pg.1)
    - i. When the pressure reading is equal to or lower than the low alarm setting, the switch will be in the closed state.
    - ii. When the pressure reading is higher than the low alarm setting, the switch will be in the open state.
  - b. High Alarm—Terminals 2 & 4 (see pg.1)
    - i. When the pressure reading is lower than the high alarm setting, the switch will be in the open state.
    - ii. When the pressure reading is equal to or higher than the high alarm setting, the switch will be in the closed state.
- 3. The recommended settings for the low and high alarms for chlorine gas service are:
  - a. Low Alarm—The suggested setting is 14.5 PSI (1 bar). The low alarm setting is used to indicate when the chlorine container(s) are nearly empty. Depending on operational considerations, this alarm point may need adjusted.
  - b. High Alarm—The suggested setting is 145 PSI (10 bar). At 40°C (104°F) the vapor pressure of chlorine liquid is approximately 145 PSI (10 bar). Systems are generally designed to prevent pressure from exceeding 145 PSI (10 bar).

