

REFERENCE

CERTIFICATE

ISO 9001 : 2008
 ISO 14001 : 2004
 BS OHSAS 18001 : 2007

1 WARNING

1a For efficient working of your PRESSURE SWITCH, please read all instructions carefully before attempting to installation and Operation.

1b Do not exceed maximum operating pressure given on the pressure switch label / Dial. Check fluid compatibility with wetted parts before use.

1c Do not connect "High" and "Low" ports to wrong pipe ends. Do not subject the Pressure Switch to excessive vibration. As the pressure switches works on diaphragm / Metal Bellow / Piston with Micro switch through Spring and connecting rod / lever principal,. Do not try to open any part of the pressure switch for any reason, because if not reassembled properly, calibration and operation will be affected.

1d Do not open the cover in live voltage all necessary care must be taken by the user disconnect the electrical connections and close and drain the valve before attend the pressure switch work. To avoid switch fault the Supply voltage should not exceed switch rating. For higher voltages, use of relay circuit is recommended.

2 GENERAL INFORMATION

2a Variations in pressure between high and low ports are sensed by a piston or diaphragm sensor which moves in proportion to the pressure difference. Normal operation is between 20% to 80% of the selected scale.

2b All circuits must be equipped with a safety system protecting them against excess pressure. All the pulsating circuits must be fitted with pulsation dampeners. When mechanical vibrations are present, these should be reduced as much as possible by installing the pressure switches on anti-vibration mounts, for the switch to be correctly calibrated, the operating static pressure must be known(Normally provided 1.5 times of Full scale)

2c The Differential pressure , acting on the sensing diaphragm element , determines its elastic deformation which is used to actuate one or two electric micro switches regulated at set point valves. The micro switches are of the snap acting type with automatic reset. When pressure moves away from the set valves, returning towards the normal values, the switch is reset. The dead band (Difference between the set point value and the reset valve) can be set or adjustable.

3 Set Point Regulation

Each micro switch is independent and can be regulated by means of a screw (or adjustment) in such a way that it is released when the pressure reaches (increase or decreasing) the desired value (set point) .the instrument is usually supplied with the switches set at the setting range value nearest to zero /customer specified set point. The instruments are supplied with an adhesive rating plate showing the set point calibration value. With factory calibration the values are not indicated on the ratings as these are temporary and will be modified with the definite values. Prior to installation the instrument must be calibrated and the definitive calibration values written on the adhesive rating plate using a suitable indelible ink pen.

4 INSTALLATION

Depressurize the system and connect the high and low pressure lines of your system to the "High" and "Low" ports of the pressure switch, respectively. Apply "High" and "Low" pressures simultaneously, to avoid damage to the internal parts. If pressure exceeds the rated maximum pressure, "O" ring & Diaphragm used inside the pressure chamber of instrument will be damaged / rupture.

5 EXPLOSION PROOF SWITCH

Switches and electrical connections are mounted in an explosion proof enclosure.

SWITCH SETTING

6

The switches are normally factory set to save time at customer end. However, they are field adjustable.

SWITCH ADJUSTMENT

7

The following procedure can be done by putting the pressure switch on a test bench or while in service. Unscrew the cover of the electrical enclosure. Knurled head set screws are provided at Top for set point adjustment. Rotate the screw clockwise (right) to decrease the set point and counter-clockwise (left) to increase the set point. One or two trials may be necessary to attain the exact set point.

MAINTENANCE

8

All the pressure switches should be checked regularly for wear and tear, accuracy, and proper functioning by comparing them to a precision test gauge. Replace all broken or damaged parts immediately.