Swagelok Alarm Contact Switch Assembly

Service Instructions

Introduction

The Alarm Contact Switch is an option available for the Swagelok® Ultrahigh-Purity and Clean Dry Air Pressure Gauges with a 50 mm (2 in.) dial size. The factory-assembled switch has one adjustable set point which can be used for high- or low-pressure indication.

This instruction provides the necessary information for setting the alarm point of the switch and for electrical installation of the switch.



A Safety Instructions

The appropriate safety regulations must be observed when installing, putting into operation, and using these instruments. Instruments should only be installed by qualified personnel.

Setting the Alarm Trip Point

- 1. Loosen the window assembly on the case of the pressure gauge by turning it counterclockwise.
- 2. Turn the center portion of the window so that the green set-point line on the window corresponds to the pressure at which the alarm should activate.
- 3. Press and hold the center portion of the window down, then fully tighten the window assembly on the case (about another 1/2 turn).

Electrical Installation

The switch electronics are integrated into the slot sensor. The contact is open if the flag is outside of the slot. The contact closes when the flag moves into the slot sensor, sending a signal to a PLC or other controller.



Specifications

| Operating Voltage | 10 to 30 V(dc) |
|----------------------------------|---|
| Residual Ripple | 10 % |
| No-Load Current | 10 mA |
| Maximum Switching Current | 100 mA |
| Leakage Current | 10 µA |
| Voltage Drop at I _{MAX} | 0.7 V |
| Switching Frequency | 1000 Hz |
| Ambient Temperature | –25 to 70°C (–13 to 158°F) |
| Output Function | Normally open (closed and red LED ON when pressure less than set point) |
| Output Type | NPN |
| Switch Point | Approx 55 % of insert depth |
| Protection Class (DIN 40050) | IP 67 |
| Cable Length | 1 m (3.2 ft) |

For product technical data, see the *Swagelok®* Pressure Gauges, Ultrahigh-Purity and Clean Dry Air catalog.

Caution: Do not mix or interchange parts with those of other manufacturers.

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