



Pressure Switches for Fire Protective Signaling

with Hermetically Sealed Electrical Switching Elements

General Instructions

These instructions cover installation, process connection, electrical connection and calibration of the SOR® Pressure Switches for Fire Protective Signaling.

The Static-O-Ring Type Pressure Switch is suitable for a wide variety of process applications.

NOTE: *If you suspect that a product is defective, contact the factory or the SOR Representative in your area for a return authorization number (RMA).*



Installation

This product should only be installed by trained and competent personnel.

The pressure switch may be line mounted to either rigid process piping or electrical conduit. The body of the pressure switch should be clamped in the area between the set point adjustment protrusion and the pressure port to a suitable member on applications when rigid process piping or electrical conduit is not available.

Process Connection

Use two wrenches when connecting process pipe: an 1-1/8 inch open-end wrench to hold the hex port while connecting the process pipe; the other wrench to tighten the process pipe or tube fitting.



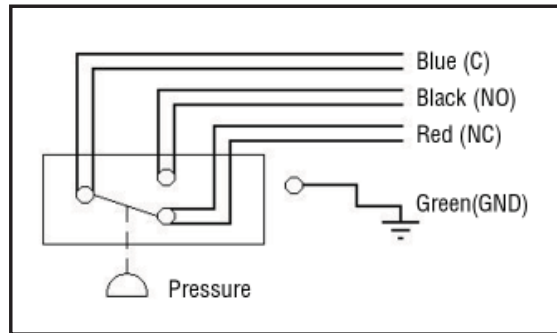
When rigid process piping is used, it is important that no bending or torsional forces be imposed on the pressure switch.

*Design and specifications are subject to change without notice.
For latest revision, go to www.sorinc.com*

Electrical Connection

Ensure that wiring conforms to all applicable local and national electrical codes and install unit(s) according to relevant national and local safety codes.

Use an 1-1/8 inch open-end wrench to hold the hex on the electrical connection while conduit or conduit fitting is being tightened.



Do not use a pipe wrench or strap wrench on the round body nor an open-end wrench on the hex pressure port while tightening the conduit connection, because the hermetically sealed switching element capsule has been precisely positioned and locked during manufacture. Excessive force could overcome the lock and cause movement which will adversely affect operation or render the pressure switch inoperative. Should movement occur, factory calibration must be performed in order to restore normal operation.

Electrical leads are in duplicate for wiring supervision and are marked NC (Normally Closed), NO (Normally Open) and C (Common).

Calibration

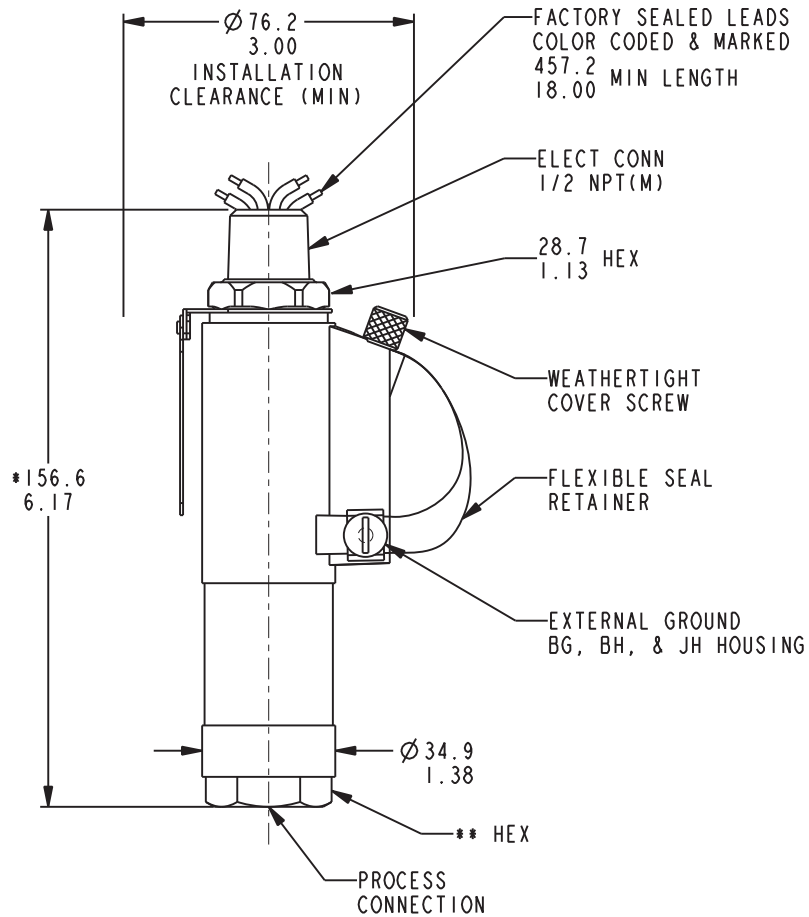
The Pressure Switches are field adjustable across the entire cataloged range for a particular piston/spring combination. Field adjustable models have a set point adjustment under the removable weathertight cap.

It is not necessary to disconnect the electrical power, since the electrical switching element is inside the hermetically sealed, explosion-proof capsule, thereby maintaining explosion-proof integrity.

- 1 Remove the knurled weathertight cap.
- 2 Use an 1/8 inch hex (Allen type) wrench to turn the adjusting screw to achieve the desired set point. Turn the adjusting screw clockwise (in) to increase set point; turn the adjusting screw counterclockwise (out) to decrease set point. Use an external pressure measuring device to accurately calibrate set points.
- 3 After the set point has been calibrated, replace the weathertight sealing cap tightly to ensure the weathertight integrity of the device.

SOR discourages field modifications, change-out of wetted parts or repair. It is recommended that products be returned to SOR for inspection and necessary repair work. Any field work should be performed by a qualified instrument technician with formal SOR procedures.

Dimensions



Linear = mm/inches

Drawing 0090119

*Dimensions are for reference only.
Contact the factory for certified drawings
for a particular model number.*

PROCESS CONN SIZE	* LENGTH 1, 5, 6, 9	* LENGTH 2, 3	* LENGTH 56	** HEX 1, 5, 6, 9, 56	** HEX 2, 3
1/4 NPT(F)	SHOWN	ADD 14.0 0.55	ADD 18.3 0.72	28.7 1.13	28.7 1.13
1/2 NPT(F)	ADD 13.2 0.52	ADD 24.1 0.95			38.1 1.50
9/16 SAE	SHOWN	ADD 14.0 0.55	N/A		28.7 1.13
3/4 NPT(M)	ADD 23.1 0.91	N/A		N/A	

Ordering Information

Part Number	Adjustable Range psi	Overrange psi	Proof psi	Electrical Rating	
				AC Rating	DC Rating
9013-297	500 - 4000	5000	6000	250V (11A)	125V (0.5A), 30V (5A)
9013-298				125V (1A)	30V (1A)
9013-299	200 - 1750	2500		250V (11A)	125V (0.5A), 30V (5A)
9013-300				125V (1A)	30V (1A)
9013-301	100 - 500	2500		250V (11A)	125V (0.5A), 30V (5A)
9013-302				125V (1A)	30V (1A)
9013-303	25 - 240	1500		250V (11A)	125V (0.5A), 30V (5A)
9013-304				125V (1A)	30V (1A)



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