

The P1X has a Dia-Seal Piston design which combines the accuracy of a diaphragm switch with the long life and high pressure capabilities of a piston switch.

The P1X is well suited for applications with the following requirements: explosion proof, long life, high cycle, NEMA 7 & 9 enclosure, ranges from .5 to 1,600 psi.

Features

- Explosion proof housing
- High reliability
- Extremely long life
- UL & CSA listed
- Oil & dust tight

Applications

- Power plants
- Water pumps
- Hydraulic power units
- Pneumatic devices
- General industrial applications
- Oil & gas applications

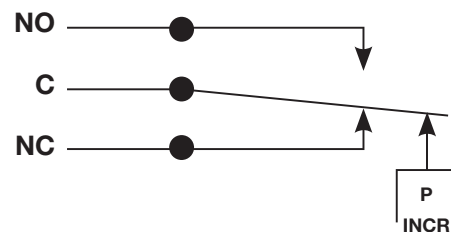


General Specifications*

Electrical Characteristics:	All models incorporate Underwriters Laboratories, Inc. and CSA Listed single pole double throw snap-action switching elements
Accuracy:	± 2% of the adjustable range
Switch:	Single pole double throw (SPDT) snap action; single circuit
Wetted Parts:	
Process Fitting:	Anodized aluminum
Diaphragm:	Buna-N
Enclosure:	Anodized aluminum
Electrical Connection:	Internal screw terminals via 1/2" NPT conduit connector
Enclosure Ratings:	NEMA 7, 9
Pressure Connection:	1/4"-18 NPT female (standard)
Approvals:	
UL:	File No. E37043; approved for hazardous locations, Class I, DIV 2 Groups C&D, Class II Groups E, F, & G; not available on 1600 psi range
CSA:	Class 3238-01, File No. 022354-0-000 (Not approved with hermetically sealed limit switch)
PED (European):	Compliant to PED 97/23/EC

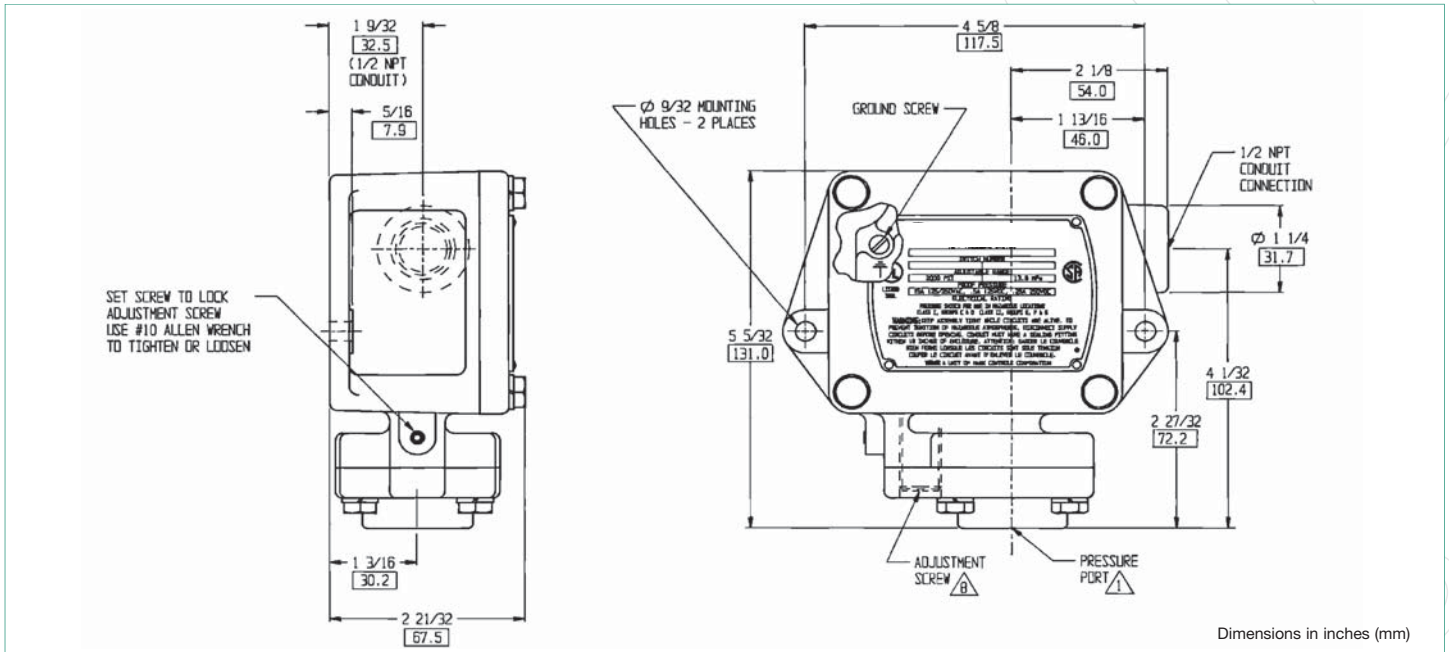
Temperature Range:	
Operating:	-20° to +165 °F (-29° to +74°C)
Storage:	-40° to +200 °F (-40° to +93°C)
Adjustment Instructions:	Loosen setscrew with a #10 allen wrench. With screwdriver, turn adjustment screw clockwise to increase and counterclockwise to decrease the actuation point. Tighten setscrew after desired setting is reached.
Options:	- Viton® diaphragm - Teflon diaphragm - NEMA 4X enclosure - Hermetically sealed limit switch - Factory preset - Cleaned for oxygen service - CSA approval
Shipping Weight:	3.75 lbs. approximate

Wiring Diagram



* See product configurator for additional options.

Technical Drawing



Product Configurator

Example	P1X	-H	85	SS		
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H Hermetically sealed limit switch option
- Class I, Division II (requires HH limit switch)

Enclosure
P1X NEMA 7 & NEMA 9 enclosure

Limit Switch¹

-B	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC (standard for 30, 85, and 340 ranges)
-F	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.4 amps @ 125 VDC; 0.2 amps @ 250 VDC
-H	10 amps @ 125/250 VAC; 3 amps @ 480 VAC (standard for 600 range)
-J	10 amps @ 125/250 VAC; 3 amps @ 480 VAC with elastomer boot (standard for 1600 range)
-K	10 amps @ 125/250/480 Vac; 2 amps @ 600 VAC; 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC
-M	10 amps @ 125/250 VAC; 3 amps @ 480 VAC; 0.5 amps @ 125 VDC; 0.25 amps @ 250 VDC
-GH	1 amp @ 125 VAC gold contacts
-HH	Hermetically sealed; 5 amps @ 125/250 VAC

- Options**
- P2 1/2" NPT pressure fitting (available only with stainless steel models)
 - FX NEMA 4X enclosure
 - Sxxx Factory preset (consult factory)

- Diaphragm/O-Ring**
- Blank Buna-N diaphragm
 - T Teflon
 - V Viton® diaphragm (not available for 1600 Range)

- Pressure Fitting**
- Blank Anodized aluminum, 1/4" NPT female
 - SS Stainless steel, 1/4" NPT female

Pressure Range

	Adjustable Range				Approx. Deadband ² (Actuation Value)	Proof Pressure
	Decreasing - psi (bar)		Increasing - psi (bar)			
	Min	Max	Min	Max		
30	.5 (.03)	28.5 (1.9)	1 (.1)	30 (2)	.1 - 1.5 (.07 - .1)	2000 (133)
85	3 (.2)	81.5 (5.4)	4 (.3)	85 (5.7)	.25 - 3.5 (.02 - .23)	2000 (133)
340	6 (.4)	331.5 (22)	7 (.5)	340 (23)	1 - 8.5 (.07 - .6)	2000 (133)
600	25 (1.7)	581 (39)	27 (1.8)	600 (40)	2 - 19 (.13 - 1.3)	2000 (133)
1600	400 (27)	1520 (101)	480 (32)	1600 (107)	20 - 80 (1.3 - 5.3)	2000 (133)

¹ Consult sales drawing for specific deadband values
² Deadband values indicated when used with the "standard" limit switch