

## Explosion Proof Dia-Seal Piston

**P1X Series**

### 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 applicaitons
- ▶ Oil & gas applications

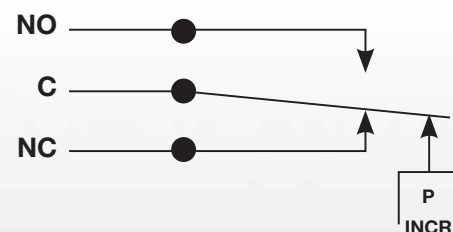


### General Specifications\*

<b>Electrical Characteristics:</b>	All models incorporate Underwriters Laboratories, Inc. and CSA Listed single pole double throw snap-action switching elements
<b>Accuracy:</b>	± 2% of the adjustable range
<b>Switch:</b>	Single pole double throw (SPDT) snap action; single circuit
<b>Wetted Parts:</b>	
Process Fitting:	Anodized aluminum
Diaphragm:	Buna-N
Enclosure:	Anodized aluminum
<b>Electrical Connection:</b>	Internal screw terminals via 1/2" NPT conduit connector
<b>Enclosure Ratings:</b>	NEMA 7, 9
<b>Pressure Connection:</b>	1/4"-18 NPT female (standard)
<b>Approvals:</b>	
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

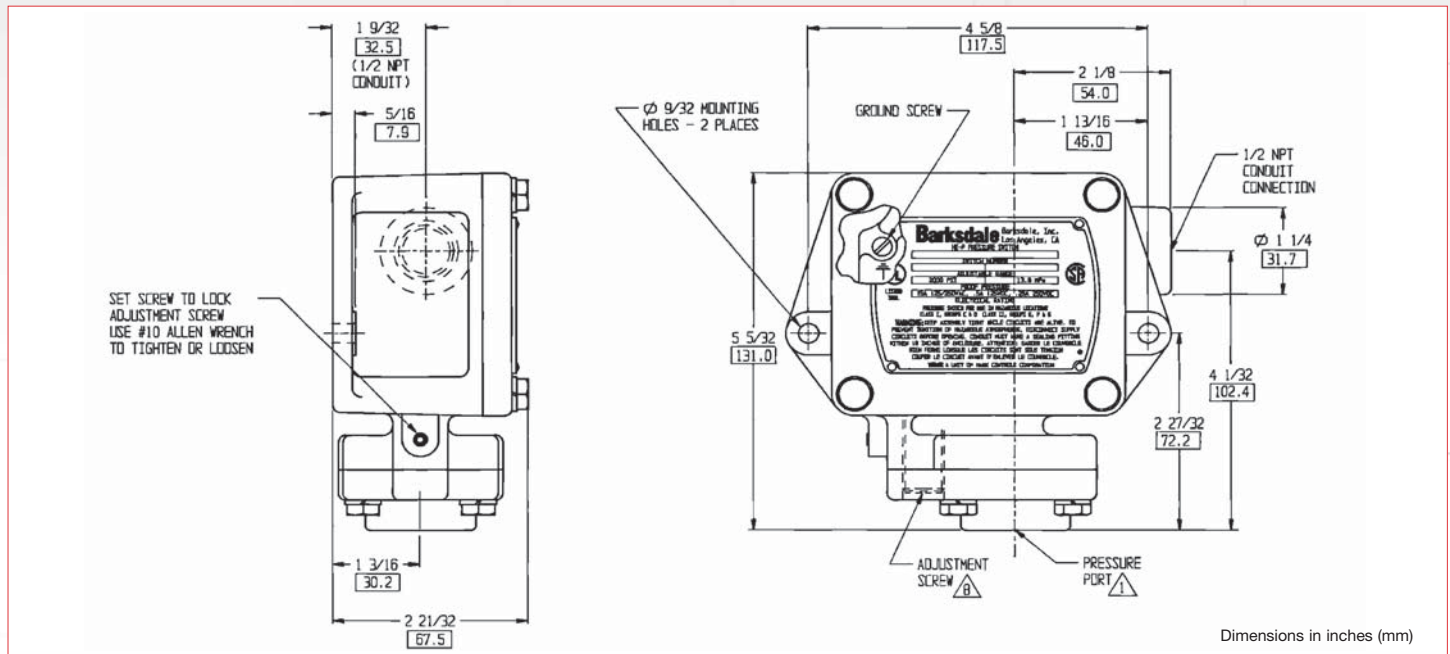
<b>Temperature Range:</b>	
Operating:	-20° to +165 °F (-29° to +74°C)
Storage:	-40° to +200 °F (-40° to +93°C)
<b>Adjustment Instructions:</b>	Loosen setscrew with a #10 allen wrench. With screwdriver, turn adjustment screw clockwise to increase and counterclockwise to decrease the actuation point. Tighten setscrew after desired setting is reached.
<b>Options:</b>	- Viton® diaphragm - Teflon diaphragm - NEMA 4X enclosure - Hermetically sealed limit switch - Factory preset - Cleaned for oxygen service - CSA approval
<b>Shipping Weight:</b>	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 Switch<sup>1</sup>**

-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 <sup>2</sup> (Actuation Value)	Proof Pressure
	Decreasing - psi (bar)		Increasing - psi (bar)			
	Min	Max	Min	Max	psi-(bar)	psi (bar)
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)

<sup>1</sup> Consult sales drawing for specific deadband values

<sup>2</sup> Deadband values indicated when used with the "standard" limit switch