

## Dia-Seal Piston

## P1H Series

### Features

- ▶ Superior resolution
- ▶ High reliability
- ▶ Oil & dust tight
- ▶ Extremely versatile
- ▶ NEMA 4 & 13
- ▶ CSA approved

### Applications

- ▶ Pump & compressor monitoring
- ▶ Air proving in HVAC systems
- ▶ Irrigation systems
- ▶ Engine monitoring
- ▶ Machine tools
- ▶ General industrial applications

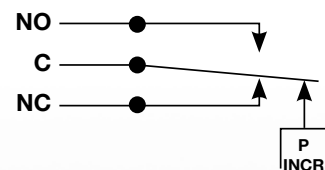


### General Specifications\*

<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 (see order key for ratings)
<b>Wetted Parts:</b>	
Process Fitting:	Anodized aluminum (standard)
Diaphragm:	Buna N
Enclosure:	Anodized aluminum
<b>Electrical Connection:</b>	Internal screw terminals via 1/2" NPT conduit connector
<b>Enclosure Ratings:</b>	NEMA 4, 13
<b>Pressure Connection:</b>	1/4" NPT female (standard)
<b>Approvals:</b>	
CSA:	Class 3231 02, File No. LR22355
PED (European):	Compliant to PED 97/23/EC
<b>Temperature Range:</b>	
Operating:	-20° to +165°F (-29° to +74 °C) Hermetic Div. 2 models: -4° to +140°F (-20° to +60 °C)
Storage:	-40° to +200°F (-40° to +93°C)

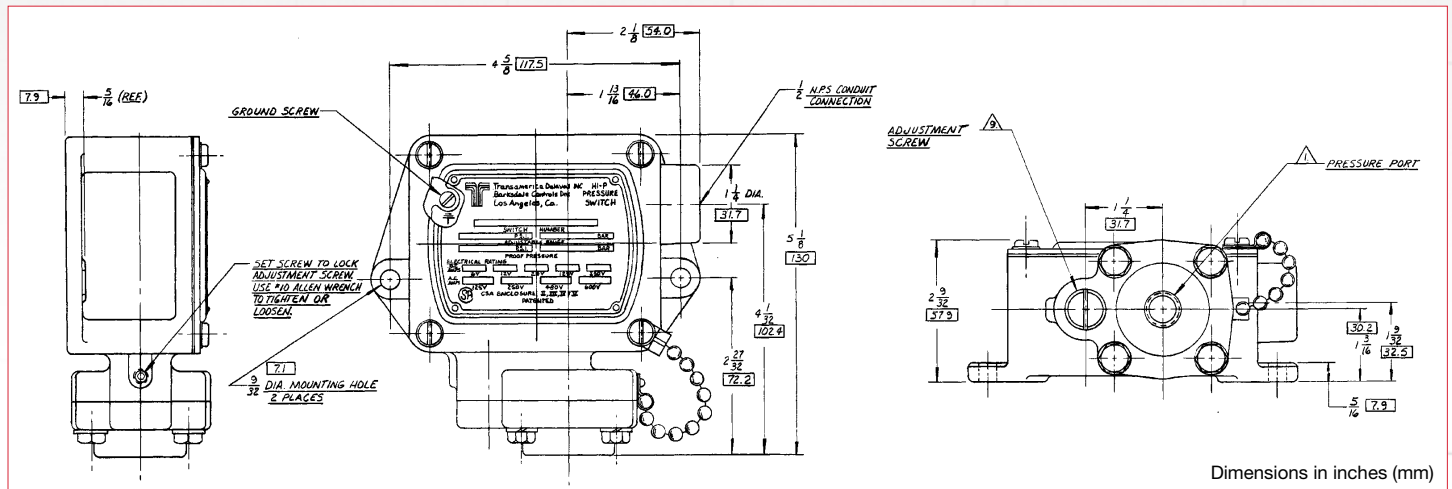
<b>Adjustment Instructions:</b>	Loosen setscrew with a #10 allen wrench. With screwdriver, turn adjustment screw clockwise to increase and counterclockwise to decrease the actuation point. Tighten setscrew after desired setting is reached.
<b>Options:</b>	- NEMA 4X - Hermetically sealed limit switch - Factory preset - CSA approval
<b>Shipping Weight:</b>	3.75 lbs. approximate

### Wiring Diagram



\* See product configurator for additional options.

## Technical Drawing



## Order Number Key / Options

Example	P1H	-B	340	SS	-V	-P2
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### Prefix

**H** Hermetically sealed limit switch option  
- Class I, Division II (requires HH limit switch)

### Enclosure

**P1H** NEMA 4 & NEMA 13 enclosure

### Limited Switch<sup>1</sup>

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

### 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 (1.9)	1.5 (.1)	30 (2)	.4 - 2 (.03 - .13)	2000 (133)
85	3 (.2)	78 (5.2)	4.5 (.3)	85 (5.7)	.8 - 7 (.05 - .5)	2000 (133)
340	6 (.4)	318 (21)	10 (.6)	340 (23)	2 - 22 (.13 - 1.5)	2000 (133)
600	25 (1.7)	583 (39)	27 (1.8)	600 (40)	2 - 17 (.13 - 1.1)	2000 (133)
1600	400 (27)	1520 (101)	480 (32)	1600 (107)	20 - 80 (1.3 - 5.3)	2000 (133)

### NOTES:

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

### Options

<b>Blank</b>	1/4" NPT (standard)
<b>-P2</b>	1/2" NPT pressure fitting (only available in stainless steel)
<b>-FX</b>	NEMA 4X enclosure
<b>-Z1</b>	Cleaned for oxygen service*
<b>-Sxxx</b>	Factory preset (consult factory)

\* Not available on hermetic Div 2 models

### Diaphragm/O-Ring

<b>Blank</b>	Buna-N diaphragm
<b>-T</b>	Teflon diaphragm
<b>-V</b>	Viton® diaphragm

### Pressure Fitting

<b>Blank</b>	Anodized aluminum, 1/4" NPT
<b>SS</b>	Stainless steel, 1/4" NPT