

P1X Pressure Switch

Explosion Proof

P1X Series

- ❖ Explosion Proof Housing
- ❖ High Reliability
- ❖ Extremely Long Life
- ❖ UL & CSA Listed
- ❖ Oil & Dust Tight



Barksdale's P1X Series Explosion Proof Pressure Switches offer extremely long life and the accuracy you need for your pressure control applications in hazardous locations. Designed with Dia-Seal piston technology, the **P1X** assures millions of maintenance free, leakage free cycles. A rugged NEMA 7, & 9 enclosure makes this switch an ideal choice for indoor installations. Setpoints are easily adjusted via a tamper-proof external adjustment screw, and the switch can be safely adjusted within the hazardous location. Designed to control pressures up to 1,600 psi, the **P1X Series Pressure Switches** are an outstanding choice for your demanding hazardous area applications.



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P1X Pressure Switch

With Barksdale - Pressure's No Problem

As a recognized leader in the manufacture of pressure product solutions, we meet the demanding requirements of our customers. From 29" Hg to 18,000 psi, Barksdale has pressure switches for a variety of applications - from transformers to natural gas compressors to beverage dispensers - and more!

Barksdale's P1X Series Pressure Switch provides an ideal solution for your hazardous location switching needs. Housed in a compact, die-cast aluminum enclosure, the **P1X Series** can monitor, control, and switch pressures to 1,600 psi. Setpoint adjustment is easily accomplished via an integrated external adjustment screw - no special tools are required. The **P1X Series** is economically priced, and offers proven Dia-Seal piston switch technology for extremely long life.

P1X Series Applications

With its economical design and repeatability of 2% of full scale, the **P1X Series Pressure Switches** provide an accurate and reliable solution for pressures up to 1,600 psi, making them ideal for use in:

- Power Plants
- Water Pumps
- Hydraulic Power Units
- Pneumatic Devices
- General Industrial Applications



Need Something Special?

If you have special product requirements, we can help. Barksdale specializes in custom design solutions to meet your needs. Our reputation is built on creating custom products for customers committed to getting exactly what they need. We have design engineers and technical specialists who are experts in solving your unique pressure problems. Our technology and resources are at your disposal.

P1X Pressure Switch

Electrical Characteristics All models incorporate Underwriters Laboratories, Inc. and CSA Listed single pole double throw snap-action switching elements.

Performance Characteristics

Accuracy Switch ± 2% of the adjustable range

Type SPDT Snap Action; single circuit

Rating

Class M Switch 10 Amps @ 125/250/480 VAC
2 Amps @ 600 VAC
0.03 Amps @ 250 VDC

Class H & J Switches 10 Amps @ 125/250 VAC
3 Amps @ 480 VAC

Physical

Shipping Weight 3.75 lbs. approximate

Wetted Parts

Process Fitting Anodized Aluminum (Standard)

Diaphragm Buna-N

Enclosure Anodized Aluminum

Ratings NEMA 7, 9

Pressure Connection 1/4" -18 NPT Female (standard)

Electrical Connection Internal screw terminals via 1/2" NPT conduit connector

Approvals

UL File No. E37043; Approved for Hazardous Locations, Class I Groups C&D, Class II Groups E, F, & G; not available on 1600 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

Environmental

Temperature Range

Operating -20° to +165 °F (-29° to +74°C)

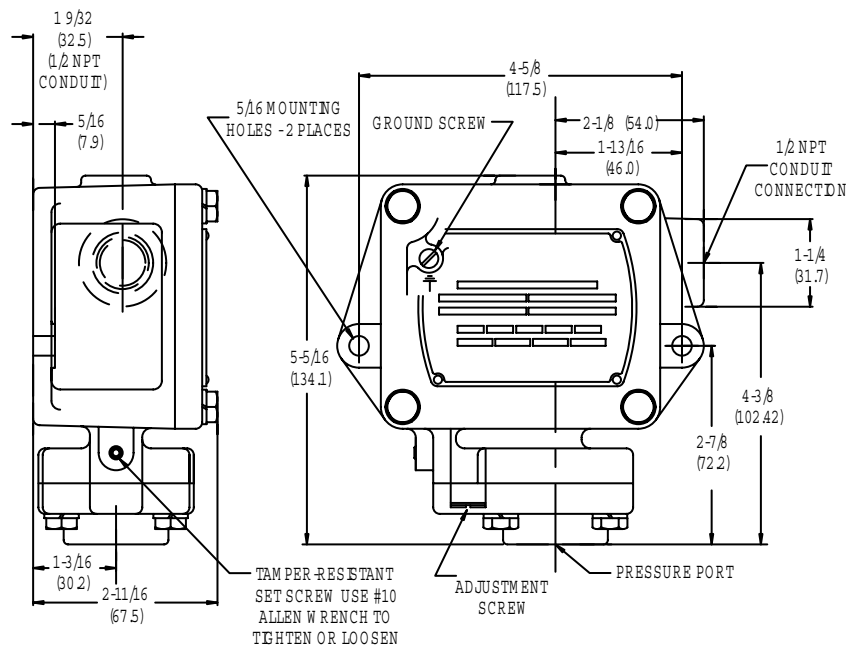
Storage -40° to +200 °F (-40° to +93°C)

Adjustment Instructions Loosen tamper-resistant setscrew with #10 allen wrench. With screwdriver, turn adjustment screw clockwise to raise setpoint and counterclockwise to lower the setpoint. Tighten setscrew after desired setting is reached.

Wiring Code Screw terminals on limit switch are labeled as NO (Normally Open), NC (Normally Closed), and C (Common)

Consult Factory for These Options

- Viton® Diaphragm
- Teflon Diaphragm
- NEMA 4X Enclosure
- Hermetically Sealed Limit Switch



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H Hermetically sealed limit switch (optional); Class 1 Division 2. Requires Class AA, CC, or HH limit switch.

Enclosure **P1X** NEMA 7, 9

Limit Switch

- B 10 Amps @ 125/250/480 VAC; 2 Amps @ 600 VAC (Standard up to 340 psi range)
- H 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC - Consult factory for details
- J 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC (Standard)
- K 10 Amps @ 125/250/480 Vac; 2 Amps @ 600 VAC (1600 psi range)
- M 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC
- GH 1 Amp @ 125 VAC Gold Contacts - Consult factory for details
(consult sales drawing for deadband values)
- AA Hermetically sealed; 4 Amps @ 125/250 VAC
(consult sales drawing for deadband values)
- CC Hermetically sealed; 10 Amps @ 125/250 VAC
(consult sales drawing for deadband values)
- HH Hermetically sealed; 5 Amps @ 125/250 VAC
(consult sales drawing for deadband values)

	Adjustable Range				Approx. Deadband (Actuation Value) psi-(bar)	Proof Pressure psi (bar)
	Decreasing - psi (bar)		Increasing - psi (bar)			
	Min	Max	Min	Max		
Pressure Range	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)

Pressure Fitting

- (blank) Anodized aluminum, 1/4" NPT Female
- SS Stainless steel, 1/4" NPT female

Diaphragm/O-Ring Options

- (blank) Buna-N
- T Teflon
- V Viton® (Not available for 1600 Range)

Options

- FX NEMA 4X enclosure
- P2 1/2" NPT pressure fitting (stainless steel or aluminum)
- SXXX Factory pre-set (consult factory)

Example: P1X-H85SS

Miscellaneous:	
Paper Tag	\$5.00
Metal Tag	\$10.00



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