

B1S, B2S, B1T, B2T Pressure Switch

Stripped and Housed Bourdon Tube

B1S, B2S, B1T, B2T Series

- ❖ High Accuracy
- ❖ Tamper-proof External Adjustment
- ❖ Stripped and Housed Versions Available
- ❖ High Proof Pressure
- ❖ Dual Switching Capability



B1S

B1T

Barksdale's Bourdon Tube Pressure Switches offer instrument class accuracy, making them an ideal solution to your pressure control needs when accuracy is critical.

Built-in over-travel stops allow for higher proof pressures than most other pressure switch technologies. Setpoints are easily adjusted via an internal adjustment screw. Available in single and dual configurations, Bourdon Tube Pressure Switches are adaptable for use in a wide range of industrial applications. A variety of limit switches is available to allow for a multitude of electrical switching conditions. For applications requiring a highly accurate switch in a highly durable package, Bourdon Tube Pressure Switches are the ideal solution.

B1S, B2S, B1T, B2T Pressure Switch

With Barksdale - Pressure's No Problem

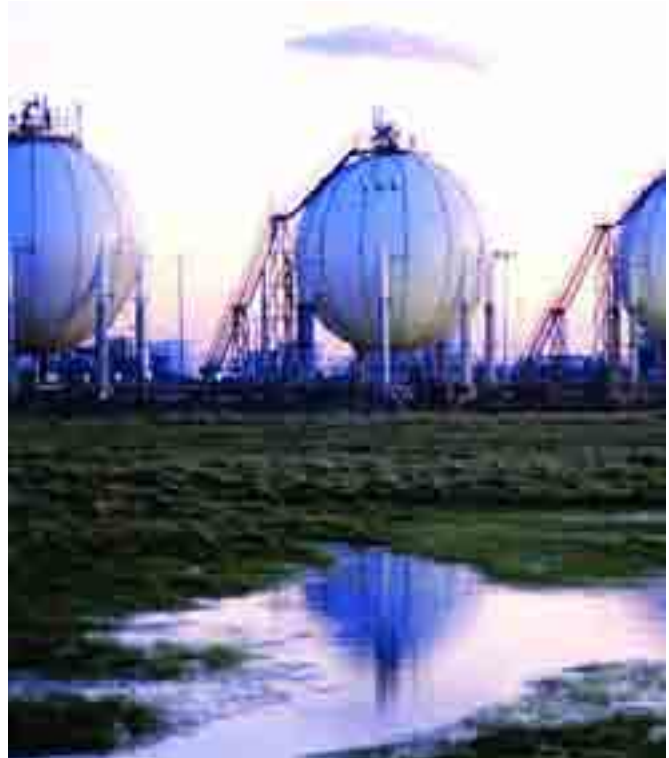
As a recognized leader in the manufacture of pressure product solutions, we meet the demanding requirements of our customers. From 29" Hg to 18,000 psi, Barksdale has pressure switches for a variety of applications – from transformers to natural gas compressors to beverage dispensers – and more!

Barksdale's Bourdon Tube Pressure Switches provide an ideal solution for your switching needs in applications requiring high accuracy in a highly durable package. Housed in a rugged, die-cast aluminum enclosure, **Bourdon Tube Pressure Switches** can monitor, control, and switch pressures from 50 to 18,000 psi. Setpoint adjustment is easily accomplished via an integrated internal adjustment screw – no special tools are required – and a tamper resistant cover prevents inadvertent setpoint changes. The **Bourdon Tube Series** is economically priced, and offers time proven technology for the ultimate in accuracy and reliability.

Bourdon Tube Switch Applications

With its instrument class accuracy and highly reliable design, **Bourdon Tube Pressure Switches** provide an outstanding switching solution for pressures up to 18,000 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.

Need more information?

Call us. We are only a phone call away.
Toll-Free 1-800-835-1060.

Barksdale
CONTROL PRODUCTS

B1S, B2S, B1T, B2T Pressure Switch

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

Performance Characteristics

Accuracy ± 0.5% of the adjustable range

Switch Type SPDT Snap Action; single or dual circuit

Rating 10 Amp @ 125/250 VAC
3 Amp @ 480 VAC
0.5 Amp @ 24 VDC

Physical

Shipping Weight

Stripped Model 1.5 lbs. approximate

Housed Model 2.5 lbs. approximate

Wetted Parts

Process Fitting & Bourdon Tube 316 Series Stainless Steel

Enclosure Anodized Aluminum

Ratings

Stripped Model NEMA 4

Housed Model NEMA 1

Pressure Connection Housed models with proof pressure up to 7,200 psi and stripped models with proof pressure up to 6,000 psi; 1/4" NPT Female; All higher pressure ranges: Superpressure Fitting for 1/4" NPT tube.

Electrical Connection

Stripped 21" Free Leads

Housed Internal terminal strip via conduit connection

Approvals

UL Available upon request (consult factory)

CSA Available upon request (consult factory)

Environmental

Temperature Range

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

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

Adjustment Instructions Turn adjustment screw clockwise to lower setpoint, counterclockwise to raise setpoint

Wiring Code		
Lead	Circuit 1	Circuit 2
Normally Closed	Blue	Orange
Common	Purple	Brown
Normally Open	Red	Yellow

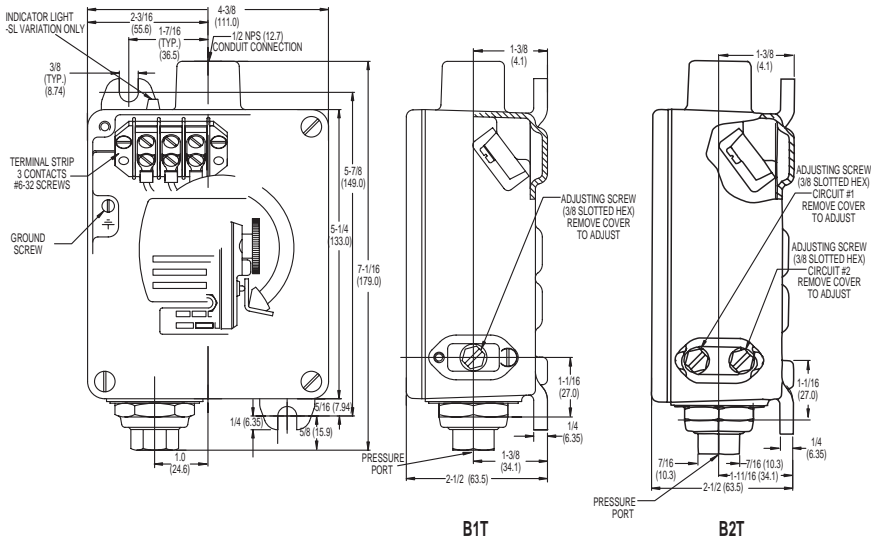
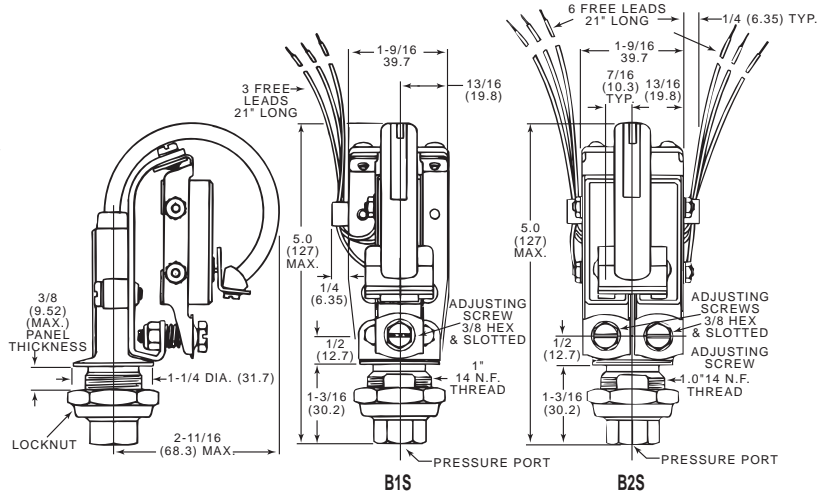
Consult Factory for These Options

NEMA 4X

Temperature stabilization and pre-cycle

Cleaned for Oxygen Service

Indicator light (UL and CSA approval not available on this option)



B1S, B2S, B1T, B2T Pressure Switch

Stripped and Housed Bourdon Tube

B1S, B2S, B1T, B2T Series

H Hermetically Sealed Limit Switch (see Note 1)

Series

- B1S Single Setpoint Stripped
- B2S Dual Setpoint Stripped
- B1T Single Setpoint Housed
- B2T Dual Setpoint Housed

Limit Switch

- A 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; 0.5 Amps @ 24 VDC
Standard for 12, 48, 65, 120, and 180 pressure ranges
- H 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC
Standard for 32 pressure range
- E 10 Amps @ 125/250/480 VAC; 3 Amps @ 600 VAC; 3 Amps @ 24 VDC
(consult sales drawing for deadband values)
- C 10 Amps @ 125/250/480 VAC; 3 Amps @ 600 VAC; 10 Amps @ 24 VDC
(consult sales drawing for deadband values)
- E 15 Amps @ 125/250/480 VAC; 3 Amps @ 600 VAC; 5 Amps @ 24 VDC
(consult sales drawing for deadband values)
- J 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; 0.5 Amps @ 24 VDC
(consult sales drawing for deadband values)
- M 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; 1 Amp @ 24 VDC
(consult sales drawing for deadband values)
- S 15 Amps @ 125/250/480 VAC; 5 Amps @ 24 VDC; 0.05 Amps @ 125 VDC; .03 Amps @ 250 VDC
(consult sales drawing for deadband values)
- GH 1 Amp @ 125 VAC; 1 Amp @ 24 VDC Gold Contact
(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)

Pressure Range	Adjustable Range				Approx. Deadband (Actuation Value) psi (bar)	Proof (B1S, B2S) psi (bar)	Proof (B1T, B2T) psi (bar)
	Decreasing - psi (bar)		Increasing - psi (bar)				
	Min	Max	Min	Max			
12	50 (3.4)	1100 (80.3)	70 (4.8)	1200 (81.6)	11 - 27 (0.7 - 1.8)	1000 (122)	1000 (122)
32	160 (11)	3161 (211)	199 (13.5)	3200 (213)	16 - 29 (1.1 - 2.7)	4000 (327)	4000 (327)
48	240 (16)	4719 (323)	328 (21.7)	4800 (327)	40 - 89 (2.7 - 6.6)	7200 (490)	7200 (490)
65	325 (22)	8385 (434)	440 (29.9)	8500 (442)	54 - 115 (3.7 - 7.8)	9750 (663)	9750 (663)
120	600 (41)	11450 (779)	1150 (78)	12000 (816)	275 - 550 (19.7 - 37.4)	18000 (1224)	18000 (1224)
180	600 (41)	17450 (1187)	1150 (78)	18000 (1224)	275 - 550 (19.7 - 37.4)	24000 (1632)	24000 (1632)

Options

- SS Stainless steel bourdon tube
- P4 1/4" NPT Female (available on 65, 120, and 180 ranges only)
- P5 7/16-20 SAE female pressure fitting
- FX NEMA 4X enclosure
- SL Indicator light option
- WXXX Extra wire length
- CS CSA Approval
- TC Temperature stabilization and pre-cycle
- Z1 Cleaned for oxygen service
- XXXX Factory pre-set (consult factory)

Example: B1T-A8065

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

NOTE:
1. Hermetically sealed option requires Class AA, HH, CC, or GH limit switch.
Consult sales drawing for adjustable ranges, deadband, and electrical ratings.

Barksdale
CONTROL PRODUCTS

3211 Fruitland Avenue • Los Angeles, CA 90058 • ☎ 800-835-1060 • Fax: 323-589-3463 • www.barksdale.com