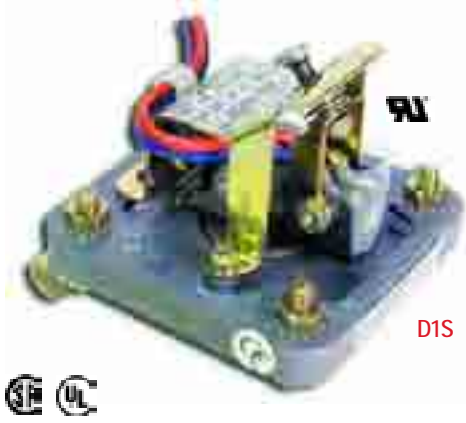


# D1S, D2S, D1H, D2H Pressure Switch

Stripped and Housed Diaphragm  
D1S, D2S, D1H, D2H, D3H Series

- ✦ Stripped and Housed Versions Available
- ✦ High Accuracy
- ✦ Ideal for Pressure or Vacuum
- ✦ Easy Setpoint Adjustment
- ✦ NEMA 4 (Housed Models)
- ✦ Up to 3 Setpoints Available in One Switch



**B**arksdale's Diaphragm Pressure Switches offer superior accuracy in a robust package, making them the ideal solution to your industrial pressure control needs.

Diaphragm switches are an excellent choice for applications demanding instrument class accuracy and where pressure pulsations are less than 25 cycles per minute. Available in various pressure ranges up to 150 psi, diaphragm switches are suitable for use in either positive pressure or vacuum applications. Single, dual, and triple circuit models are available. Housed models (D1H & D2H) feature a durable, anodized aluminum enclosure with an integrated 1/2" NPT conduit connector, a tamper-resistant cover for the setpoint adjustment screws, and are rated to NEMA 4 as a standard. For applications requiring a highly accurate switch in a durable package, Barksdale's Diaphragm Pressure Switches are the ideal choice.

# D1S, D2S, D1H, D2H Pressure Switch

## With Barksdale - Pressure's No Problem

**A**s a recognized leader in the manufacture of pressure product solutions, Barksdale pressure switches meet the demanding needs 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 D1S, D2S, D1H, D2H, D3H Diaphragm Pressure Switches** provide an economical solution for your pressure sensing needs. Diaphragm switches accurately control pressures from 30 inches of mercury vacuum to 150 psi positive pressure, and can be factory pre-set upon request. Setpoint adjustment is easily accomplished by turning the adjustment screws, which are protected by a tamper-resistant cover on housed models. A variety of available factory options allows the diaphragm switches to be configured to the exact needs of your application.

### Diaphragm Pressure Switch Applications

With its economical design and high repeatability, **Barksdale's D1S, D2S, D1H, D2H, D3H Diaphragm Pressure Switches** provide an accurate and reliable solution for pressures up to 150 psi, making them ideal for use in:

- Pump & Compressor Monitoring
- Air proving in HVAC Systems
- Engine Monitoring
- Machine Tools
- Hydraulic Power Units



### 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

# D1S, D2S, D1H, D2H 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 Amps @ 125/250 VAC; .5 Amps @ 24 VDC (Class A or H limit switch). Consult sales drawing for ratings of optional limit switches.

**Physical**  
**Shipping Weight**  
 Stripped Versions 1.5 lbs. approximate  
 Housed Versions 1.75 lbs. approximate  
**Wetted Parts**  
 Process Fitting 304 Stainless Steel  
 Seals & Diaphragms 17-7 PH Stainless Steel  
**Enclosure**  
 Ratings Anodized Aluminum (housed models)  
 Housed Models: NEMA 4;  
 Stripped Models: NEMA 1  
**Pressure Connection** 1/8" NPT Female  
**Electrical Connection** Free leads approximately 18" long, #16 AWG

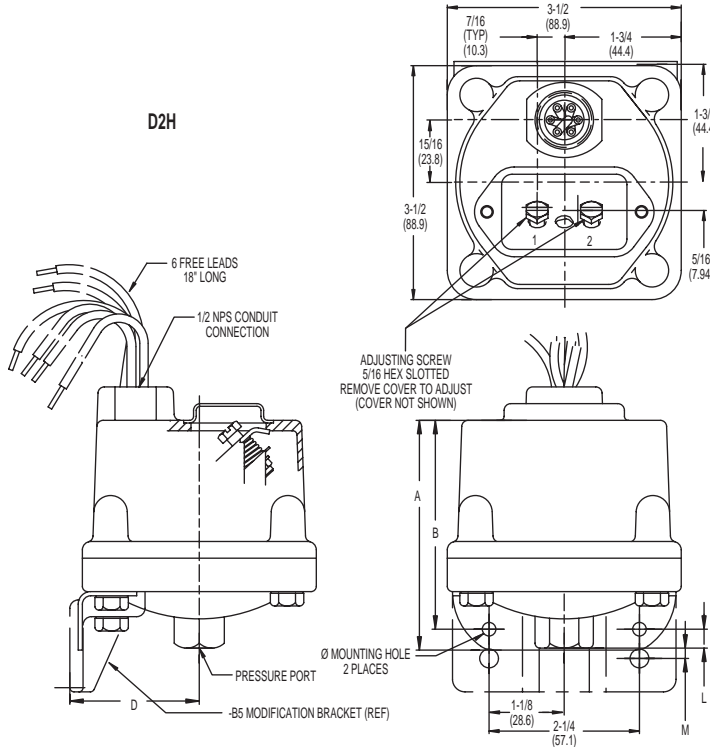
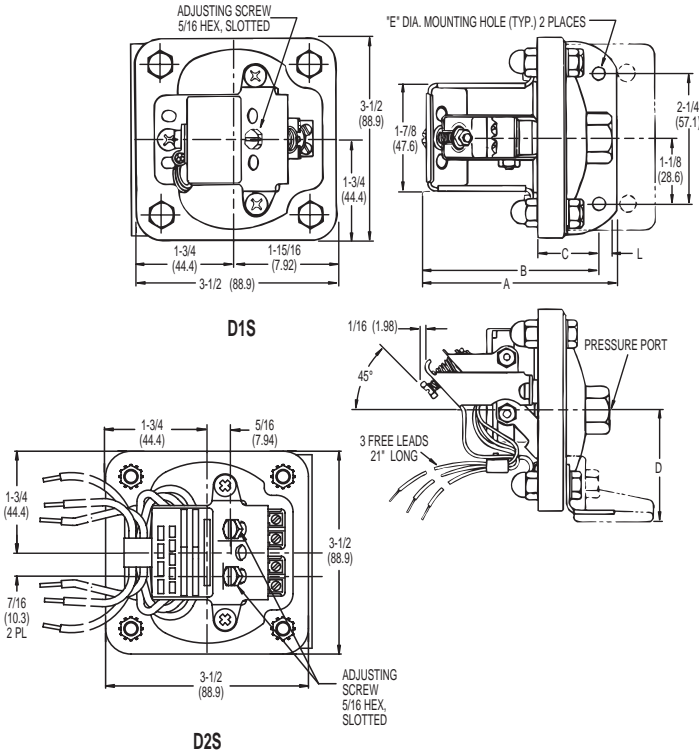
**Approvals**  
**UL (optional)** Stripped (D1S and D2S) models may be ordered as UL Recognized components (UR) on request Housed (D1H and D2H) models may be ordered as UL Listed on request (UL File No. E42816).  
**CSA (optional)** All models may be ordered as CSA listed under Class 3231 02, File LR22355 on request.  
**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**  
**Pressure** Turn adjustment screw counterclockwise to raise actuation point.  
**Vacuum** Turn adjustment screw clockwise to increase setpoint (higher vacuum)

WIRING CODE				
Lead	Circuit #1		Circuit #2	
	Pressure	Vacuum	Pressure	Vacuum
Normally Closed	Blue	Red	Orange	Yellow
Common	Purple	Purple	Brown	Brown
Normally Open	Red	Blue	Yellow	Orange

**Contact Factory for These Options**  
 NEMA 4X Enclosure (housed models only)  
 Cleaned for Oxygen Service  
 Factory pre-set



# D1S, D2S, D1H, D2H Pressure Switch

## Stripped and Housed Diaphragm

### D1S, D2S, D1H, D2H, D3H Series

**Basic Configuration**

- H** Hermetically sealed limit switch (optional). Class 1 Division 2. Requires class AA, CC, or HH limit switch.
- D1H** Single setpoint housed
- D2H** Dual setpoint housed
- D1S** Single setpoint stripped
- D2S** Dual setpoint stripped
- D3H** Triple setpoint housed (includes Class AA limit switch)

**Limit Switch**

- A** 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; .5 Amp @ 24 VDC (standard for 3SS, 80SS, and 150SS ranges)
- B** 10 Amps @ 125/250/480 VAC; 2 Amps @ 600 VAC; 15 Amps @ 12 VDC (consult sales drawing for deadband values)
- H** 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; .5 Amp @ 24 VDC (standard for 2SS and 18SS ranges)
- M** 10 Amps @ 125/250 VAC; 3 Amps @ 480 VAC; 15 Amps @ 12 VDC; 2 Amps @ 24 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)

Consult sales drawing for actual adjustable ranges, deadband, and alternate limit switches.

	Adjustable Range	Proof Pressure psi (bar)
<b>Pressure Switches:</b>		
2SS	.02 to 1.7 psi (.001 to .11 bar)	3 (.2)
3SS	.03 to 3 psi (.002 to .2 bar)	10 (.7)
18SS	4 to 18 psi (.03 to 1.2 bar)	60 (4)
80SS	5 to 80 psi (.03 to 5.3 bar)	160 (10.7)
150SS	1.5 to 150 psi (.1 to 10 bar)	300 (20)
<b>Vacuum Switches (all values in inches of mercury):</b>		
3SS	00 to 5 inches of mercury	5
18SS	5 to 30 inches of mercury	30

**Options**

- FX** NEMA 4X enclosure
- WXXX** Extra wire length (XXX = inches)
- Z1** Dryon cleaned
- P2** 1/2" NPT female pressure connection
- UL** UL Approved Model
- CSA** CSA Approved Model
- SXXX** Factory pre-att (consult factory)

**Example:** D1H-A80SS

**Miscellaneous:**

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

**Barksdale**

CONTROL PRODUCTS

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