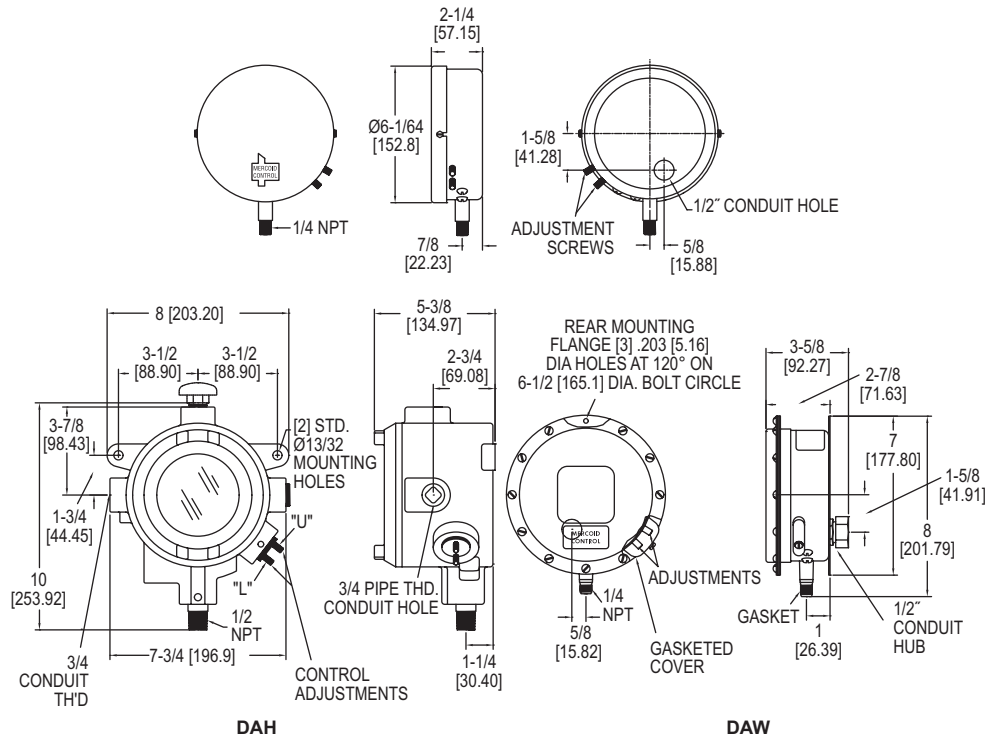
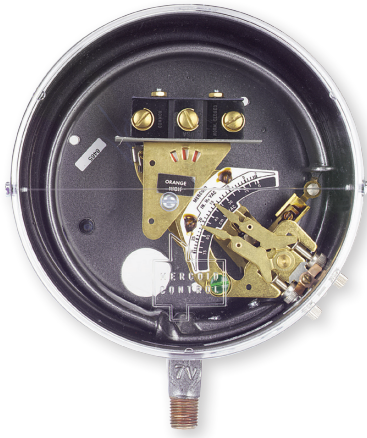


BOURDON TUBE PRESSURE SWITCH

Pressure Ranges to 8000 psi (551.6 bar)



Customers tell us that the **Series DA/DS Bourdon Tube Pressure Switch** is the best pressure switch made. The Mercoid DA/DS Series is one of the world's broadest lines of pressure switches. The DA/DS Series has extremely high sensitivity and great repeatability. The DA Models are equipped with two external adjustments, one for setting high pressure operating point, the other for setting low pressure operating point. Deadband, the difference between high and low setpoints, is adjustable over the full-scale. The DS Models are equipped with a single external adjustment for setting operating point only. For mercury-free switches, choose between the snap action switch or hermetically sealed snap action switch. Hermetically sealed mercury switch also available.

FEATURES/BENEFITS

- Visible calibrated dial provides an easy and fast check without having to open device causing dangerous conditions to operators
- On/off indication (except hermetically sealed snap switch models) gives operator clear indication of state of switched equipment that could be located in another location
- Adjustable or fixed deadband supports control applications by reducing equipment wear-out by unnecessary recycling
- External switch set point adjustment reduces set-up time
- Pressure ranges of full vacuum to 8000 psig gives application designers the ability to specify standard equipment, simplifying install and training, and reducing servicing costs
- UL listed, CSA approved, many models FM approved to support rigorous process applications and regulations
- General purpose, weatherproof or explosion-proof enclosures for a variety of indoor or outdoor environments meeting the needs of multiple applications and uses

APPLICATIONS

- Compressors
- Mechanical HVAC or process equipment
- Pump control

SPECIFICATIONS

Wetted Materials: Brass, 403 SS, or 316 SS.

Temperature Limit: 180°F (82°C).

Pressure Limit: Maximum pressure of the operating range.

Enclosure Rating: General purpose, weatherproof or explosion-proof.

Repeatability: ±1% of full operating range, ±1.5% on DS-7300 models.

Switch Type: SPST mercury switch, SPDT mercury switch, SPDT snap switch, or SPDT hermetically sealed snap switch. Other circuit types available.

Electrical Rating: See model charts.

Electrical Connections: Screw terminal.

Conduit Connection: General purpose: 1/2" hole for conduit hub; Weatherproof: 1/2" conduit hub; Explosion-proof: 3/4" female NPT.

Process Connection: General purpose and weatherproof: 1/4" male NPT, 1/2" male NPT on ranges 15S and 16S; Explosion-proof: 1/2" male NPT and 1/4" female NPT.

Mounting Orientation: Vertical.

Set Point Adjustment: Thumbscrew.

Weight: General purpose: 4 lb (1.8 kg); Weatherproof: 6 lb (2.7 kg); Explosion-proof: 8 lb (3.5 kg).

Deadband: See model chart.

Agency Approvals: CSA, FM, UL (mercury switch units are not CE approved) (Consult factory for FM approved models).



SERIES DA/DS | MERCROID® BY DWYER



PRESSURE

BOURDON TUBE PRESSURE SWITCH

Pressure Ranges to 8000 psi (551.6 bar)

| MODEL CHART - D SERIES PRESSURE SWITCH WITH SNAP ACTION SWITCH AND GENERAL PURPOSE ENCLOSURE | | | | | | | |
|----------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------|-----------------|----------------------------------------|-----------------|--------------------------------------------------------------------------------|-----------------|
| Bourdon Tube Material | Adjustable Operating Range (psig) | Adjustable Deadband SPDT: 10 A @ 120/240 VAC | | Fixed Deadband SPDT: 15 A @ 120/240 AC | | Hermetically Sealed, Fixed Deadband SPDT: 5 A @ 120/240 VAC, 5 A res. @ 30 VDC | |
| | | Minimum Deadband (psig) | Model | Fixed | Model | Fixed | Model |
| Brass | 0 to 30" Hg VAC | 13.5" Hg | DA-7031-153-2 | 3" Hg | DS-7231-153-2 | 5" Hg | DS-7331-153-2 |
| Brass | 10" Hg VAC to 12 | 6 | DA-7031-153-3 | 1.5 | DS-7231-153-3 | 3 | DS-7331-153-3 |
| Brass | 25" Hg VAC to 50 | 12 | DA-7031-153-27 | 2.5 | DS-7231-153-27 | 3.75 | DS-7331-153-27 |
| Brass | 1/8 to 15 | 6 | DA-7031-153-1 | 1.5 | DS-7231-153-1 | 3 | DS-7331-153-1 |
| Brass | 1/8 to 20 | 6 | DA-7031-153-3A | 1.5 | DS-7231-153-3A | 3 | DS-7331-153-3A |
| Brass | 1 to 35 | 7.5 | DA-7031-153-4 | 1.5 | DS-7231-153-4 | 3 | DS-7331-153-4 |
| Brass | 2 to 60 | 9 | DA-7031-153-5 | 2 | DS-7231-153-5 | 3 | DS-7331-153-5 |
| Brass | 5 to 100 | 13.5 | DA-7031-153-6 | 2.5 | DS-7231-153-6 | 3.75 | DS-7331-153-6 |
| Brass | 5 to 150 | 24 | DA-7031-153-7 | 3 | DS-7231-153-7 | 5.25 | DS-7331-153-7 |
| Brass | 10 to 200 | 24 | DA-7031-153-8 | 4 | DS-7231-153-8 | 6.75 | DS-7331-153-8 |
| Brass | 10 to 300 | 37.5 | DA-7031-153-9 | 5 | DS-7231-153-9 | 9 | DS-7331-153-9 |
| 403 stainless steel | 30" Hg VAC to 60 | 18 | DA-7021-153-25S | 3.5 | DS-7221-153-25S | 5.25 | DS-7321-153-25S |
| 403 stainless steel | 30" Hg VAC to 75 | 22.5 | DA-7021-153-26S | | DS-7221-153-26S | 5.25 | DS-7321-153-26S |
| 403 stainless steel | 2 to 60 | 13.5 | DA-7021-153-5S | 3 | DS-7221-153-5S | 4.5 | DS-7321-153-5S |
| 403 stainless steel | 5 to 100 | 19.5 | DA-7021-153-6S | 3.5 | DS-7221-153-6S | 5.25 | DS-7321-153-6S |
| 403 stainless steel | 10 to 200 | 22.5 | DA-7021-153-8S | 4 | DS-7221-153-8S | 7.125 | DS-7321-153-8S |
| 403 stainless steel | 10 to 300 | 28.5 | DA-7021-153-9S | 6 | DS-7221-153-9S | 10.5 | DS-7321-153-9S |
| 403 stainless steel | 40 to 350 | 30 | DA-7021-153-9AS | 6 | DS-7221-153-9AS | 10.5 | DS-7321-153-9AS |
| 403 stainless steel | 25 to 600 | 67.5 | DA-7021-153-10S | 10 | DS-7221-153-10S | 18 | DS-7321-153-10S |
| 403 stainless steel | 50 to 1000 | 142.5 | DA-7021-153-11S | 20 | DS-7221-153-11S | 33 | DS-7321-153-11S |
| 403 stainless steel | 100 to 1500 | 195 | DA-7021-153-12S | 30 | DS-7221-153-12S | 52.5 | DS-7321-153-12S |
| 403 stainless steel | 300 to 2500 | 390 | DA-7021-153-13S | 60 | DS-7221-153-13S | 90 | DS-7321-153-13S |
| 403 stainless steel | 500 to 5000 | 1350 | DA-7021-153-15S | 200 | DS-7221-153-15S | 300 | DS-7321-153-15S |
| 403 stainless steel | 800 to 8000 | 2250 | DA-7021-153-16S | 500 | DS-7221-153-16S | 5.25 | DS-7341-153-26E |
| 316 stainless steel | 30" Hg VAC to 75 | 15 | DA-7041-153-26E | 3.5 | DS-7241-153-26E | 6 | DS-7341-153-23E |
| 316 stainless steel | 5 to 75 | 12 | DA-7041-153-23E | 4 | DS-7241-153-23E | 5.25 | DS-7341-153-6E |
| 316 stainless steel | 10 to 100 | 15 | DA-7041-153-6E | 3.5 | DS-7241-153-6E | 6.75 | DS-7341-153-24E |
| 316 stainless steel | 10 to 150 | 16.5 | DA-7041-153-24E | 4 | DS-7241-153-24E | 12 | DS-7341-153-9E |
| 316 stainless steel | 10 to 300 | 42 | DA-7041-153-9E | 8 | DS-7241-153-9E | 18 | DS-7341-153-21E |
| 316 stainless steel | 30 to 400 | 78 | DA-7041-153-21E | 10 | DS-7241-153-21E | 37.5 | DS-7341-153-22E |
| 316 stainless steel | 75 to 800 | 180 | DA-7041-153-22E | 25 | DS-7241-153-22E | 52.5 | DS-7341-153-11E |
| 316 stainless steel | 100 to 1000 | 285 | DA-7041-153-11E | 35 | DS-7241-153-11E | 112.5 | DS-7341-153-13E |
| 316 stainless steel | 200 to 2500 | 600 | DA-7041-153-13E | 75 | DS-7241-153-13E | | |

MODEL CHART - D SERIES PRESSURE SWITCH WITH MERCURY SWITCH AND GENERAL PURPOSE ENCLOSURE

| Bourdon Tube Material | Adjustable Operating Range (psig) | Adjustable Deadband | | | |
|-----------------------|-----------------------------------|-------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------------------------|
| | | Minimum Deadband (psig) | SPDT 4 A @ 120 V, 2 A @ 240 V AC/DC | SPST Open on Increase 10 A @ 120 V, 5 A @ 240 V AC/DC | SPST Close on Increase 10 A @ 120 V, 5 A @ 240 V AC/DC |
| Brass | 30" to 0 Hg VAC | 2" Hg | DA-31-153-2 | DA-31-2-2 | DA-31-3-2 |
| Brass | 10" Hg VAC to 12 | 1 | DA-31-153-3 | DA-31-2-3 | DA-31-3-3 |
| Brass | 25" Hg VAC to 50 | 3.5 | DA-31-153-27 | DA-31-2-27 | DA-31-3-27 |
| Brass | 1/8 to 15 | 1 | DA-31-153-1 | DA-31-2-1 | DA-31-3-1 |
| Brass | 1/8 to 20 | 1 | DA-31-153-3A | DA-31-2-3A | DA-31-3-3A |
| Brass | 1 to 35 | 1.75 | DA-31-153-4 | DA-31-2-4 | DA-31-3-4 |
| Brass | 2 to 60 | 3 | DA-31-153-5 | DA-31-2-5 | DA-31-3-5 |
| Brass | 5 to 100 | 3.75 | DA-31-153-6 | DA-31-2-6 | DA-31-3-6 |
| Brass | 5 to 150 | 6 | DA-31-153-7 | DA-31-2-7 | DA-31-3-7 |
| Brass | 10 to 200 | 8 | DA-31-153-8 | DA-31-2-8 | DA-31-3-8 |
| Brass | 10 to 300 | 12 | DA-31-153-9 | DA-31-2-9 | DA-31-3-9 |
| 403 stainless steel | 30" Hg VAC to 60 | 6 | DA-21-153-25S | DA-21-2-25S | DA-21-3-25S |
| 403 stainless steel | 30" Hg VAC to 75 | 8 | DA-21-153-26S | DA-21-2-26S | DA-21-3-26S |
| 403 stainless steel | 2 to 60 | 4 | DA-21-153-5S | DA-21-2-5S | DA-21-3-5S |
| 403 stainless steel | 5 to 100 | 6 | DA-21-153-6S | DA-21-2-6S | DA-21-3-6S |
| 403 stainless steel | 10 to 200 | 8 | DA-21-153-8S | DA-21-2-8S | DA-21-3-8S |
| 403 stainless steel | 10 to 300 | 14 | DA-21-153-9S | DA-21-2-9S | DA-21-3-9S |
| 403 stainless steel | 40 to 350 | 14 | DA-21-153-9AS | DA-21-2-9AS | DA-21-3-9AS |
| 403 stainless steel | 25 to 600 | 25 | DA-21-153-10S | DA-21-2-10S | DA-21-3-10S |
| 403 stainless steel | 50 to 1000 | 60 | DA-21-153-11S | DA-21-2-11S | DA-21-3-11S |
| 403 stainless steel | 100 to 1500 | 90 | DA-21-153-12S | DA-21-2-12S | DA-21-3-12S |
| 403 stainless steel | 300 to 2500 | 150 | DA-21-153-13S | DA-21-2-13S | DA-21-3-13S |
| 403 stainless steel | 500 to 5000 | 450 | DA-21-153-15S | DA-21-2-15S | DA-21-3-15S |
| 403 stainless steel | 800 to 8000 | 750 | DA-21-153-16S | DA-21-2-16S | DA-21-3-16S |
| 316 stainless steel | 30" Hg VAC to 75 | 7 | DA-41-153-26E | DA-41-2-26E | DA-41-3-26E |
| 316 stainless steel | 5 to 75 | 3 | DA-41-153-23E | DA-41-2-23E | DA-41-3-23E |
| 316 stainless steel | 10 to 100 | 7 | DA-41-153-6E | DA-41-2-6E | DA-41-3-6E |
| 316 stainless steel | 10 to 150 | 6 | DA-41-153-24E | DA-41-2-24E | DA-41-3-24E |
| 316 stainless steel | 10 to 300 | 18 | DA-41-153-9E | DA-41-2-9E | DA-41-3-9E |
| 316 stainless steel | 30 to 400 | 30 | DA-41-153-21E | DA-41-2-21E | DA-41-3-21E |
| 316 stainless steel | 75 to 800 | 75 | DA-41-153-22E | DA-41-2-22E | DA-41-3-22E |
| 316 stainless steel | 100 to 1000 | 100 | DA-41-153-11E | DA-41-2-11E | DA-41-3-11E |
| 316 stainless steel | 200 to 2500 | 210 | DA-41-153-13E | DA-41-2-13E | DA-41-3-13E |

OPTIONS

Weatherproof Enclosure - Series DAW
Note: To order, add "W" to model number after DA or DS, change 1 to 3.
Example: DAW-33-153-7

Explosion-Proof Enclosure - Series DAH
Suitable for Class I, Groups C and D; NEMA 7; Class II, Groups E, F, G; Class III NEMA 9 and 9A, Division 1.
Note: To order, add "H" to model number after DA or DS. **Example:** DAH-31-153-7

FM Approved
For general purpose and explosion-proof models see agency approvals.
Note: To order, add "F" to model number after DA, DS, DAH or DSH.
Examples: DAF-31-153-7 or DAHF-31-153-7

Other Options (Consult Factory)
DPDT switches or other switch types, fixed deadband mercury switch units for low deadband applications, manual reset operation, two-stage operation, acetal bushed movement for applications with high amounts of vibration and/or pulsation, fungus proofing, siphon, diaphragm seals, mounting flange and remote connection.

Single Pressure Switches