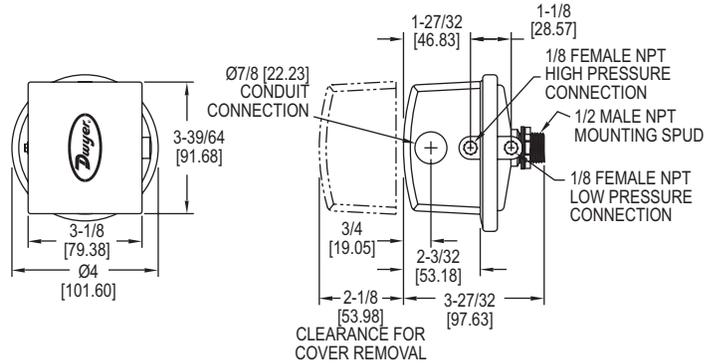


# LOW DIFFERENTIAL PRESSURE SWITCH FOR GENERAL INDUSTRIAL SERVICE

Set Points from 0.07 in w.c. to 85 in w.c. Repetitive Accuracy within 2%



Essential for industrial environments, the **Series 1800 Low Differential Pressure Switch for General Industrial Service** combines small size and low price with 2% repeatability for enough accuracy for all but the most demanding applications. Set point adjustment inside the mounting stud permits mounting switch on one side of a wall or panel with adjustment easily accessible on the opposite side. UL and CSA listed, and FM approved. For use with air or compatible gases.

#### FEATURES/BENEFITS

- Compact size and repeatability, provides a high-value switch for many industrial applications
- Designed for panel and wall mounting and provides easy access that simplifies making adjustments or changes to switch setting
- Wide range of models from 0.07 in w.c. to 85 in w.c. can meet exacting specifications for a low pressure switch

#### APPLICATIONS

- Process applications
- Mechanical equipment control

#### SPECIFICATIONS

**Service:** Air and non-combustible, compatible gases.  
**Wetted Materials:** Consult factory.  
**Temperature Limits:** -30 to 180°F (-34 to 82.2°C); 1823-00: -20 to 180°F (-28.9 to 82.2°C).  
**Pressure Limits:** 10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge.  
**Switch Type:** Single-pole double-throw (SPDT).  
**Repeatability:** ±2%.  
**Electrical Rating:** 15 A @ 120-480 VAC, 60 Hz. Resistive 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC, 60 Hz. De-rate to 10 A for operation at high cycle rates.  
**Electrical Connections:** 3 screw type, common, normally open and normally closed.  
**Process Connections:** 1/8" female NPT.  
**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.  
**Set Point Adjustment:** Screw type inside mounting spud.  
**Weight:** 1 lb 5 oz (595 g).  
**Agency Approvals:** CE, CSA, FM, UL. Optional-EXPL explosion-proof enclosure does not possess any agency approvals.

#### OPTIONS

##### Weatherproof Housing

16 ga. steel enclosure with gasketed cover (NEMA 4, IP66) for wet or oily conditions. Withstands 200 hour salt spray test. Wt. 5-1/2 lb (2.5 kg). Switch must be factory installed.

**Note:** To order, change 1823 base number to 1824 and add -WP suffix.

**Example:** 1824-1-WP

##### Explosion-Proof Housing

Cast iron base with aluminum cover. Rated Class I, Div. 1 & 2, Group D; Class II, Div. 1 & 2, Groups E, F, G; Class III and NEMA 7 CD, 9 EFG. Wt. 7-1/2 lb (3.4kg). Switch must be factory installed.

**Note:** To order, change 1823 base number to 1824 and add -EXPL suffix.

**Example:** 1824-1-EXPL

##### MIL Environmental Construction

Unlisted Model 1820 can be furnished with a special sealed snap switch for protection against high humidity, fungus and/or military applications. Similar to Model 1823 except deadband is slightly greater and some lower setpoints may not be possible.

**Note:** To order, add -MIL suffix. **Example:** 1820-2-MIL

#### MODEL CHART

Model	Operating Range, in w.c.	Approximate Deadband	
		At Min. Set Point	At Max. Set Point
1823-00	0.07 to 0.22	0.05	0.05
1823-0	0.15 to 0.5	0.06	0.06
1823-1	0.3 to 1.0	0.08	0.08
1823-2	0.5 to 2.0	0.10	0.12
1823-5	1.5 to 5.0	0.14	0.28
1823-10	2.0 to 10	0.18	0.45
1823-20	3 to 22	0.35	0.70
1823-40	5 to 44	0.56	1.10
1823-80	9 to 85	1.30	3.0

#### ACCESSORIES

Model	Description
A-389	Mounting bracket; 16 ga. steel, zinc plated and dichromate dipped for corrosion resistance; provides rugged, permanent mounting and speeds installation
A-489	4" straight static pressure tip with flange
A-491	6" straight static pressure tip with flange
A-493	8" straight static pressure tip with flange
A-302F-A	303 SS static pressure tip with mounting flange; for 3/16" ID rubber or plastic tubing; 4" insertion depth; includes mounting screws
A-302F-B	303 SS static pressure tip with mounting flange; for 3/16" rubber or plastic tubing; 6" insertion depth; includes mounting screws
A-302F-C	303 SS static pressure tip with mounting flange; for 3/16" rubber or plastic tubing; 8" insertion depth; includes mounting screws