**Differential Pressure Switches** 





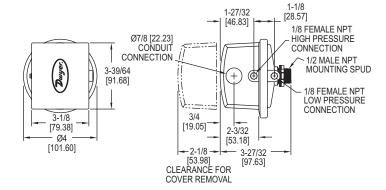


# LOW DIFFERENTIAL PRESSURE SWITCH FOR GENERAL INDUSTRIAL SERVICE

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 all but the most demanding applications. Set point adjustment inside the mounting stud permits mounting the switch on one side of a wall or panel with adjustment easily accessible on the opposite side. UL and CSA listed, and FM approved.

#### **BENEFITS/FEATURES**

- · Compact size and repeatability provide a high-value switch useful in many industrial
- Designed for panel and wall mounting to easily meet mounting requirements in most industrial settings
- Pressure ranges from 0.07 in w.c. to 85 in w.c. make this switch suitable for a wide range of applications

### **APPLICATIONS**

- · Process applications
- · Mechanical equipment control

MODEL CHART			
	Operating Range,	Approximate Deadband	
Model	in w.c.	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 to10	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

#### **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 and 2, Group D; Class II, Div. 1 and 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

ACCESSO	RIES		
Model	Description		
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		
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		

Process Tubing Options: See page 453 (Gage Tubing Accessories)