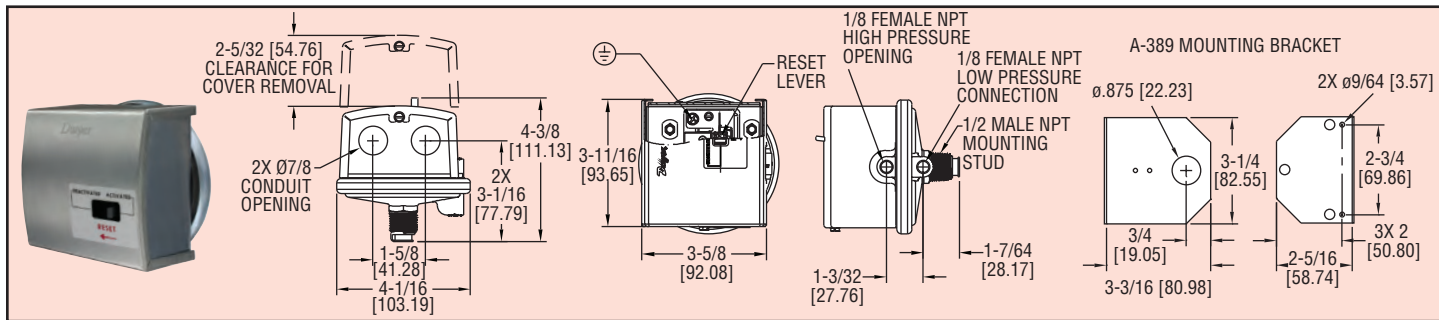




Series  
1831

# DPDT Low Differential Pressure Switches

## Manual Reset, No Power Required



One of our most popular differential pressure switches is now available with a DPDT switch and manual reset. The 1831 combines small size with 4% set point repeatability. Absolutely no power is required to operate the DPDT switch. Set point adjustment on the switch is easily accessible for modifying the set point.

The Series 1831 DPDT Low Differential Pressure Switches with Manual Reset eliminate common problems associated with typical high duct static cutout installations. Since the 1831 requires absolutely no power to drive its outputs, a separate power loop and its associated additional wiring and conduit is alleviated, reducing material and labor installation costs. Both control contacts of the Series 1831 activate at the same time. The potential of the lead switch shutting down the fan preventing the lag switch from sending an alarming signal to the DDC is no longer a probable system liability. Potential costly maintenance calls are diminished. Unlike typical switches that possess only a single conduit entry for both control loops, the Series 1831 provides two conduit connections simplifying wiring while eliminating additional conduit tees. The Series 1831's specifications and features make it the superior choice for high duct static cutout applications.

Model	Description	Range (in w.c.)
1831-1-RA-S	Manual reset DPDT, activate on increase	2.5 to 9
1831-2-RA-S	Manual reset DPDT, activate on increase	7.5 to 23

### SPECIFICATIONS

**Service:** Air and non-combustible, compatible gases.  
**Wetted Materials:** Consult factory.  
**Temperature Limits:** -30 to 180°F (-34 to 82.2°C).  
**Pressure Limits:** 10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge.  
**Switch Type:** 2 SPDT.  
**Actuation Time Difference:** 1 millisecond maximum actuation delay between contacts

**Repeatability:** ±4% max.

**Electrical Rating:** 4A @ 125/250 VAC.  
**Electrical Connections:** Screw type terminal block.  
**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 2 oz (522 g).

### ACCESSORIES

**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

**Note:** Shown with included mounting bracket. Bracket can rotate and be tightened at any angle.

See page 587 for process tubing options.

