



PRESSURE

DIFFERENTIAL PRESSURE SWITCHES 1831 SERIES

DESCRIPTION

The **Dwyer 1831 Series** differential pressure switches are 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 **1831 Series** 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 **1831 Series** 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 **1831 Series** provides two conduit connections simplifying wiring while eliminating additional conduit tees. The **1831 Series'** specifications and features make it the superior choice for high duct static cutout applications.

NEW!



Dwyer®

1831 Series

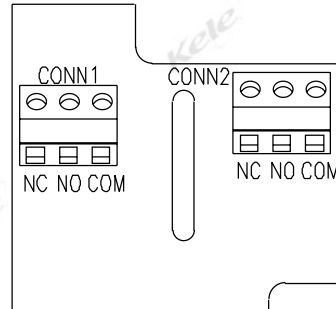
FEATURES

- **No power required**
- **DPDT switch with manual reset**
- **Two conduit connections for easy wiring**
- **Adjustable setpoint**
- **L Bracket mounting**

SPECIFICATIONS

Power	None required
Repeatability	±4% maximum
Operating Pressure	10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge
Setpoint Adjust	2.5-9.0" W.C., 7.5-23.0" W.C.
Reset	Manual lever
Operating Temperature	-30° to 180°F (-34° to 82°C)
Process Connection	1/8" FNPT
Switch Type	2 SPDT, 4A @ 125/250 VAC
Actuation Delay	1 ms maximum actuation delay between contacts
Electrical Connections	Screw terminal, 14 to 30 AWG
Media Compatibility	Air and non-combustible, compatible gases
Mounting Orientation	Diaphragm in vertical position
Enclosure	NEMA 1
Weight	1.1 lb (0.5 kg)
Warranty	1 year

WIRING



Electrical connections to the snap switches are provided by means of terminal block marked "common," "norm open," and "norm closed." The normally open contacts close the normally closed contacts open when pressure increases beyond the set point. For failsafe applications, it is recommended to use N.C. contact wiring. Use 14-30 AWG copper wire rated 194°F (90°C) min.

ORDERING INFORMATION

MODEL	DESCRIPTION
1831-1-RA-S	DPDT low differential pressure switches, 2.5-9.0" W.C., w/ manual reset
1831-2-RA-S	DPDT low differential pressure switches, 7.5-23.0" W.C., w/ manual reset

RELATED PRODUCTS

B-132	1/4" barb x 1/8" MNPT fitting (pkg 100)
A-302-K	Duct static pressure tip, 1/4" barb
C-133	1/4" compression to 1/8" MNPT (pkg 50)
A-489	4" straight pressure tip kit, 1/4" barb
A-491	6" straight pressure tip kit, 1/4" barb
A-493	8" straight pressure tip kit, 1/4" barb