



Series 1900

# Compact Low Differential Pressure Switches

Set points from 0.07" to 20" W.C. Repetitive accuracy within 3%.

Pressure



Series 1910 pressure switch. All pressure and electrical connections and set point adjustments are on one side for easy installation.

Series 1910 switch with conduit enclosure. Shows electric switch and set point adjustment screw.

The Dwyer-engineered force-motion amplifier increases the leverage of diaphragm movement and results in a switch with excellent sensitivity and repeatability.

- 2-1/2 [63.5] SET POINT ADJUSTMENT SCREW
- SNAP-ON COVER
- SCREW TYPE ELECTRICAL CONNECTIONS
- SPDT SNAP SWITCH
- SILICONE RUBBER DIAPHRAGM
- ALUMINUM DIAPHRAGM PLATE
- RANGE SPRING
- FORCE-MOTION AMPLIFIER LEVER
- CONDUIT ENCLOSURE
- 1/2 [12.7] CONDUIT CONNECTION
- 3-1/2 [88.9] DIA.

Our most popular series combines advanced design and precision construction to make these switches able to perform many of the tasks of larger, costlier units. Designed for air conditioning service, they also serve many fluidics, refrigeration, oven and dryer applications. For air and non combustible compatible gases, series 1900 switches have set points from 0.07 to 20" (1.8 to 508 mm) w.c. Set point adjustment is easy with range screw located inside conduit enclosure. Internal location helps prevent tampering. U.L. and C.S.A. listed, FM and CENELEC approved.

### SPECIAL MODELS AND ACCESSORIES

**1900-5-MR DUCT PRESSURE MONITOR** includes special 1.4 to 5.5" (35 to 140 mm) w.c. range 1900 pressure switch with manual reset snap switch. Unit prevents duct blowout by shutting down blower when excess pressure occurs. Switch will allow blower restart until condition is corrected and switch is manually reset. Includes switch, duct pressure sensor, tubing and adapters.

**MANUAL RESET MODEL 1900 MR** includes special snap switch which latches on pressure increase above the setpoint. Switch must be manually reset after pressure drops below the setpoint. To order, change base model to 1900 and add MR suffix after range number. Example: 1900-10-MR. Available on -1, -5, -10 or -20 ranges only. Option is not UL, CSA or FM listed.

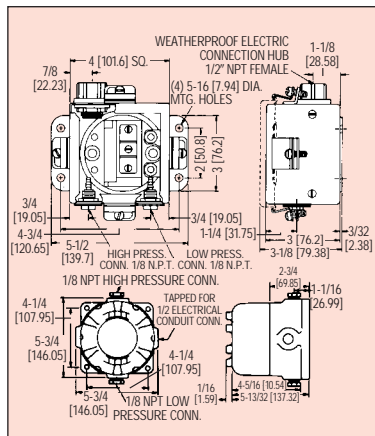
**A-329 STREET ELL** — Brass adapter for applications requiring right angle connections. Two required for differential pressures.

### Weatherproof Housing

16 ga. steel enclosure with gasketed cover (NEMA 4) for wet or oily conditions. Withstands 200 hour salt spray test. Wt. 5 lbs. (2.3 kg). Switch must be factory installed. Change 1910 base number to 1911 and add -WP suffix. Example: 1911-1-WP.

### Explosion-Proof Housing

Cast iron base with brass cover. Rated Class I, Div. 1 & 2, Groups C, D; Class II, Div. 1 & 2, Groups E, F, G; Class III and NEMA 7 CD, 9 EFG. (7 lbs). Switch must be factory installed. Change model to 1911 and add -EXPL suffix. Example: 1911-1-EXPL.



### PHYSICAL DATA

**Temperature limits:** 32°F (35.6°C) (-30°F(34.4°C) for dry air) to 180°F (82.2°C).

**Maximum surge pressure:** 10 psig (.7 bar).

**Rated pressure:** 45" (114 cm) w.c.

**Pressure connections:** 1/8" NPT.

**Electrical rating:** 15 amps, 120-480 volts, 60 Hz. A.C. Resistive 1/8 H.P. @ 125 volts, 1/4 H.P. @ 250 volts, 60 Hz. A.C. Derate to 10 amps for operation at high cycle rates.

**Wiring connections:** 3 screw type,

common, normally open and normally closed.

**Set point adjustment:** Screw type inside conduit enclosure.

**Housing:** Aluminum die casting with chemical conversion coating for corrosion protection; zinc plated steel stamping.

**Diaphragm:** Molded Silicone rubber. Aluminum diaphragm plate.

**Calibration spring:** Stainless steel.

**Weight:** 1lb. (454 g)

**Installation:** Diaphragm vertical.

**CAUTION: FOR USE ONLY WITH AIR OR COMPATIBLE GASES.**

**CENELEC Approved Housing, Model 1911- CN.** Explosion-proof housing, CENELEC approved, Exd and NEMA-7&9 rated; U.L. and C.S.A. listed, F.M. approved. Change base number to 1911 and add -CN suffix. Example: 1911-1-CN.



### SERIES 1910 SWITCHES — STOCKED MODELS OPERATING RANGES & DEADBANDS

Model Number	Operating Range, Inches W.C.	Approximate Dead Band	
		At Min. Set Point	At Max. Set Point
1910-00	0.07 to 0.15	0.04	0.04
1910-0	0.15 to 0.55	0.10	0.10
1910-1	0.40 to 1.6	0.15	0.16
1910-5	1.40 to 5.5	0.30	0.30
1910-10	3.0 to 11.75	0.40	0.40
1910-20	4.0 to 20.0	0.40	0.50