



Series  
DX

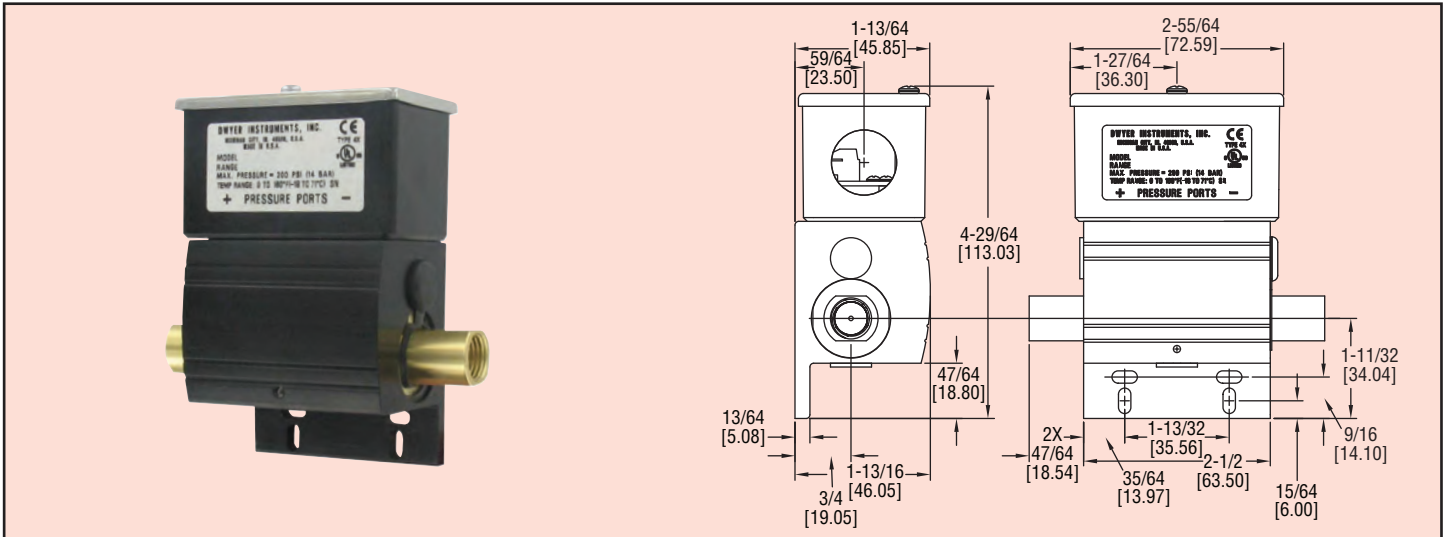
# Wet/Wet Differential Pressure Switch

NEMA 4X Enclosure, Low Differential Set Points



PRESSURE

Differential Pressure Switches



The Series DX is a differential pressure switch that makes a contact output based on the differential between two pressure sources. Wetted materials of brass and fluoroelastomer are suitable for use with most gases and water based solutions. The switch can be used for low differential pressure indication with set point on a decrease of pressure as low as 1 psid (0.07 bar). Differential set point ranges are available from 2.5 to 75 psid (0.17 to 5.17 bar) on increasing differential pressure and 1.0 to 67 psid (0.07 to 4.62 bar) on decreasing differential pressure. Unit features a high static pressure rating of 200 psig (13.8 bar) for higher static pressure applications. Standard is a weatherproof, UL type 4X, enclosure for dust laden, outdoor, or wash-down installation environments. Series DX incorporates an externally adjustable set point, integral mounting flange and a removeable electrical terminal block for quick and easy installation. The DX uses opposing diaphragms to sense the high and low pressure with a pivot mechanism that transfers the difference of the two pressures to the SPDT switch.

### APPLICATIONS

- Indicating filter differential pressure. For example initiating water filter backwash as the filter becomes clogged on increasing differential pressure.
- Proof of flow indicator monitoring differential pressure from a sensing device. For example sensing the pressure across an orifice plate to prove water flow.
- Proving flow through a pump by sensing the pressure across the pump to make sure the pump does not run dry.
- Proving flow through a chiller. Often called evaporator water pressure drop.
- Proving flow through a heat pump or AC unit. Often called a condenser water lock-out switch.

### SPECIFICATIONS

- Service:** Compatible gases and liquids.
- Wetted Materials:** Connection: Brass; Diaphragm: Fluoroelastomer.
- Temperature Limits:** 30 to 140°F (-1 to 60°C).
- Pressure Limits:** 200 psig (13.8 bar).
- Enclosure Rating:** Weatherproof UL type 4X (IP65).
- Repeatability:** ±2% of full range.
- Switch Type:** SPDT snap switch.
- Electrical Rating:** 5 A @ 125/250 VAC (~), 5 A res. @ 30 VDC (---).
- Electrical Connection:** Removeable terminal block.
- Conduit Connection:** 0.871" diameter hole for 1/2" conduit fitting.
- Process Connection:** 1/4" NPT female. Continuous single side only pressure should not exceed 1.25 x full differential range.
- Mounting Orientation:** Ports on horizontal plane, ±10°.
- Set Point Adjustment:** External screw.
- Housing Materials:** Body: Aluminum; Housing: Polycarbonate; Cover: 300 SS.
- Vibration and Shock:** Set point repeats after 2.5 Gs, 5 to 500 Hz. Set point repeats after a 15 Gs, 10 millisecond duration.
- Altitude Limit:** 6560 ft (2000 m).
- Humidity Limit:** 80% (non-condensing).
- Pollution Degree:** 2.
- Environment:** Intended for indoor and outdoor use.
- Weight:** 1 lb 3 oz (0.54 kg).
- Agency Approvals:** CE, cUL, UL.

Series DX, Differential Pressure Switch

Model	Adjustable Differential Range (on increase)	Fixed Deadband	
		At Low Set Point	At High Set Point
DXW-11-153-1	2 to 10 (0.14 to 0.69)	1.5 (0.10)	2.5 (0.17)
DXW-11-153-2	10 to 25 (0.69 to 1.72)	2.5 (0.17)	3.5 (0.24)
DXW-11-153-3	25 to 50 (1.72 to 3.45)	3.5 (0.24)	6.0 (0.41)
DXW-11-153-4	50 to 75 (3.46 to 5.17)	6.0 (0.41)	8.0 (0.55)

psid (bar)

**Note:** Set points on decrease will be the range minus the deadband.