

## Probe, duct, panel

# Static - Differential Pressure

0-25", 0-7000 Pa versions Accurate silicon piezoresistive sensor LCD display (WC or pascal models) Dual 0-5/10VDC and 4-20mA outputs





#### **DESCRIPTION**

This PDP series dry media pressure sensors cover up to 0-25" (0-7000pA). The transmitter features field selectable pressure ranges LCD readout for ease of installation. Piezoresistive sensor chip provides accurate and reliable sensing.

#### **APPLICATIONS**

 Static pressure in duct or room, variable air volume system control, and filter status monitoring

PDP31

## **FEATURES**

### Integrated, micromachined silicon piezoresistive sensor

Outstanding sensitivity, linearity, and hysteresis

#### **Switch-selectable ranges**

- Three WC models with three ranges each: 0-10" (Selectable 2.5, 5.0, 10.0"WC) or 0-25" (Selectable 10, 15, 25"WC)
- Three Pa modelswith three ranges each: 0-2500Pa (0-2500/1250/250"Pa uni-directional only) or 0-7000Pa (Selectable 0-7000 (7000/5000/2500 Pa uni-directional)
- Dual outputs 4-20mA and jumper selectable 0-5V or 0-10V

#### Easy to install and maintain

- LCD display for easy setup and commissioning
- Autozero push button input and autozero control contact for system accuracy
- Dual outputs: 4-20mA and jumper selectable 0-5V or 0-10V

#### Three Versatile package styles:

- Open Frame: Panel mount DIN or screw-mount model
- Probe: NEMA 4 with integral duct probe
- Duct: NEMA 4 with brass hose barb fittings



Selectable ranges for high resolution







## **ORDERING** pkg p range PDP3 **Package** 0 = Panel Mount 1 = NEMA 4 2 = NEMA 4 with duct probe

**Pressure Range** 

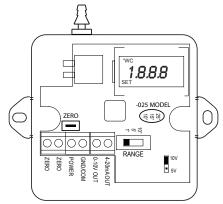
the boxes above)

- -010 = 0-10" (Selectable 2.5,5,10"WC) -025 = 0-25" (Selectable 10,15,25"WC)
- -2500Pa (Selectable 2500, 1250, 250 Pa) -7000Pa (Selectable 7000, 5000, 2500 Pa)
- (Write your selected Package and Pressure Range numbers in

	SPECIFICATIONS		
	Power Supply		12-30VDC/24VAC(1), 30mA max. (13VDC min for 10V f.s. output)
	Output type	Dual outputs	3-wire 0-5/10VDC and 3-wire 4-20mA
	Output scaling	Model PDP[XX]-010	0-10" (Selectable 2.5, 5, 10"WC)
		Model PDP[XX]-025	0-25" (Selectable 10, 15, 25"WC)
		PDP[XX]-2500Pa	0-2500Pa (Selectable 2500, 1250, 250 Pa)
		PDP[XX]-7000Pa	0-7000Pa (Selectable 7000, 5000, 2500 Pa)
	Operating Environment	Calibrated temperature range	50 to 140 F (10-60C)
		Humidity range	0-90% RH
	Media compatibility		Dry, oil-free air, N2
	Sensor Type		Integrated, micromachined silicon piezores is tive
	Sensor Performance	Accuracy(Linearity, hysteresis, temperature)	2.5% f.s.
		Auto-zero input	Push-button and contact closure input provided
	Enclosure	PDP30-XXX (Duct or Panel Mount)	IP65, screw mount, brass hose barb fittings
		PDP31-XXX (Duct or Panel Mount)	IP65, screw mount, brass hose barb fittings
		PDP32-XXX (Duct Mount w/pickup tube)	IP65, screw mount, brass hose barb fitting and static pickup tube

(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

### **TYPICAL WIRING**



WIRING: POWER = Power Supply + GND/COM = Common (power & signal) 0-10V OUT = Voltage output 5v/10vdc 4-20mA OUT = Current output 4-20mA ZERO = Contact closure input

(PWR and GND required for both Vdc and mA operation)