

Probe, duct, panel

Low Differential Pressure

0-2" W.C., 0-500Pa version All-in-one
Zero-drift sensing technology
Standard LCD display
Dual 0-5/10VDC and 4-20mA outputs

NEMA 4 Duct Probe
PDP32

NEMA 4
PDP31

Panel Mount
PDP30



DESCRIPTION

This PDP series dry media pressure sensors cover up to 0-2" (0-500Pa) and offers industry-leading long-term stability thanks to a fully calibrated and temperature compensated application specific integrated circuit (ASIC) in the piezoresistive silicon pressure sensor. The sensor features five field selectable ranges in both inches of WC and pascals, dual 0-5/0-10VDC and 4-20mA outputs, uni/bi-directional modes, and LCD readout for ease of installation.

APPLICATIONS

- Ideal for clean rooms, hospitals, fume hoods, computer rooms, and other very low differential pressure applications
- Static pressure in duct or room, variable air volume system control, and filter status monitoring

FEATURES

Industry-leading long-term stability

- On-board application specific integrated circuit (ASIC)
- Fully calibrated and temperature compensated for sensor offset, sensitivity, temperature effects, and non-linearity

Easy to install and maintain

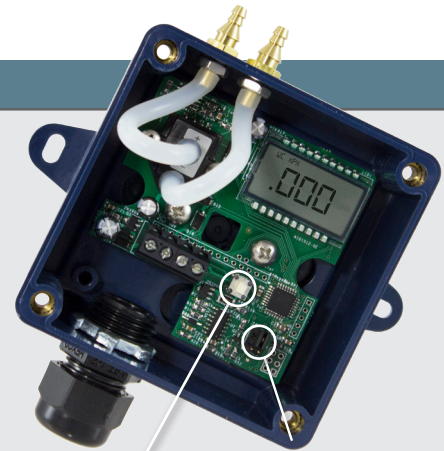
- Mount in any position. No gravity effect
- LCD display for easy setup and commissioning

Push button selectable ranges, outputs, and modes

- One model with five ranges: 0-2" (0.1, 0.25, 0.5, 1.0, 2.0) and 0-500Pa (.025, .062, .125, .250, .500kPa)
- Jumper selectable uni- or bi-directional
- Dual outputs 4-20mA and jumper selectable 0-5V or 0-10V

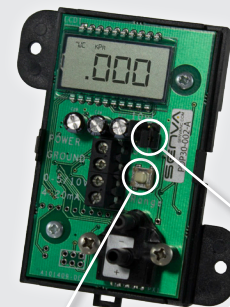
Three Versatile package styles:

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



Push button
Selectable ranges
for high resolution

Select output type and
uni/bi-directional modes



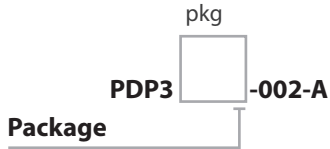
Push button
Selectable ranges
for high resolution

Select output
type and uni/
bi-directional
modes



7 year limited warranty

ORDERING



Package

0 = Open Frame
1 = NEMA 4
2 = NEMA 4 / duct probe

(Write your selected Package number in the box above)

SPECIFICATIONS

Power Supply	12-30VDC/24VAC(1), 30mA max. 15-30VDC/24VAC Required for 10V F.S. Output	
Output Type	Dual	3-wire 0-5/10VDC and 3-wire 4-20mA
Output scaling	Model PDP3X-002-A, selectable ranges	0-2" (0.1/0.25/0.5/1.0/2.0"W.C.) 0-500Pa (.025/.062/.125/.250/.500kPa) uni or bi-directional (jumper selectable)
Operating Environment	Temperature range	32 to 122 F (0-50C)
	Humidity range	0-95% RH
Media compatibility	Dry, oil-free air. Nitrogen	
Sensor Type	Silicon Ceramic Diaphragm	
Sensor Performance	Position effects	None - position insensitive
	Zero Drift	None
	Accuracy	+/-0.25% of full scale BFSL
	Total Band Error	+/-2.5% of full scale
	Maximum Working Pressure	135"W.C.
	Maximum Over Pressure	270"W.C.
	Burst Pressure	415"W.C.
	Maximum Common Mode Pressure	1400"W.C.
Enclosure	PDP30-002-A (Panel Mount)	Open frame, 35mm DIN rail or screw mount
	PDP31-002-A (Duct or Panel Mount)	IP65, screw mount, brass hose barb fittings
	PDP32-002-A (Duct Mount w/pickup tube)	IP65, screw mount, brass hose barb fitting and static pickup tube

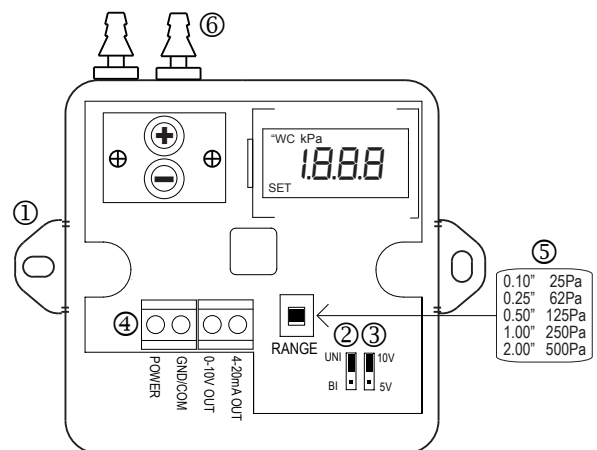
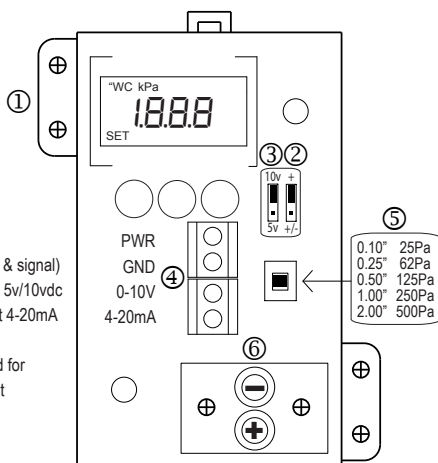
(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

TYPICAL WIRING

WIRING:

PWR = Power Supply +
GND = Common (power & signal)
0-10V = Voltage output 5v/10vdc
4-20mA = Current output 4-20mA

(PWR and GND required for both Voltage and Current output operation)



WIRING:

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

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