

# proense® DPTA Series Differential Air Pressure Transmitters



The ProSense DPTA differential pressure transmitter series is precision engineered for accurate low differential pressure measurement of air and non-condensing, non-corrosive gases in industrial, commercial, and OEM applications. Its highly reliable, ultra-thin single silicon crystal diaphragm capacitive sensor provides inherent repeatability and stability with no glues or other organics to contribute to drift or mechanical degradation over time. The DPTA series is available in ranges from 0.1 inches w.c. to 25 inches w.c. to measure positive, negative, and bi-directional pressures with the ability to withstand 15 psig overpressure without damage or calibration shift. The easily accessible brass barbed pressure ports, removable terminal blocks, and rugged ABS housing capable of 35 mm DIN rail or panel mounting make installation quick and easy.

## Applications

- HVAC duct static pressure
- Air filter monitoring
- Building pressurization
- Isolation and clean rooms
- Fume hoods
- Furnace, oven, dryer draft pressure
- Air flow measurement

## Features

- Highly stable capacitive sensing element
- Positive, negative, and bi-directional pressure measurement
- Pressure ranges from 0.1" w.c. to 25" w.c.
- Accuracy is +/-1% of full range maximum
- High overpressure rating of 15 psig without damage or calibration shift
- Rugged ABS housing capable of DIN rail or panel mounting
- LED loop power status indicator
- Made in the USA
- CE marked
- 3-year warranty



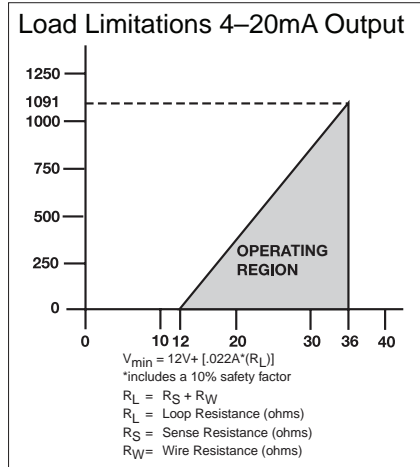
Click on the thumbnail or go to <https://www.automationdirect.com/VID-PR-0001> for a short video on ProSense Air Differential and Pressure Transmitters



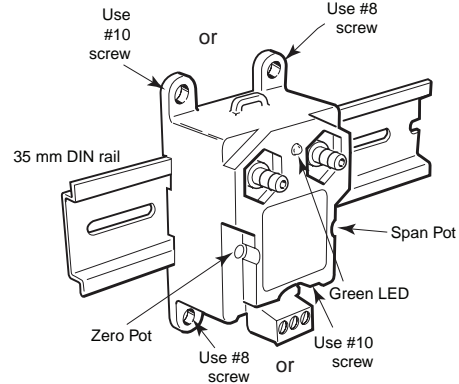
ProSense DPTA Series Differential Air Pressure Transmitters					
Part Number	Description	Electrical Connection	Input Voltage	Wt(lb)	Price
DPTA-20-P1	Differential Pressure transmitter, 4 to 20 mA output, 0 to 0.1 in. water column range, 1/4" brass barbed connections	Screw Terminals	12 - 36 VDC	0.16	\$118.00
DPTA-20-P1B	Differential Pressure transmitter, 4 to 20 mA output, -0.1 to +0.1 water column range, 1/4" brass barbed connections				\$118.00
DPTA-20-P25	Differential Pressure transmitter, 4 to 20 mA output, 0 to 0.25 in. water column range, 1/4" brass barbed connections				\$118.00
DPTA-20-P25B	Differential Pressure transmitter, 4 to 20 mA output, -0.25 to +0.25 in. water column range, 1/4" brass barbed connections				\$118.00
DPTA-20-P5	Differential Pressure transmitter, 4 to 20 mA output, 0 to 0.5 in. water column range, 1/4" brass barbed connections				\$118.00
DPTA-20-P5B	Differential Pressure transmitter, 4 to 20 mA output, -0.5 to +0.5 in. water column range, 1/4" brass barbed connections				\$118.00
DPTA-20-01	Differential Pressure transmitter, 4 to 20 mA output, 0 to 1.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-01B	Differential Pressure transmitter, 4 to 20 mA output, -1.0 to +1.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-02	Differential Pressure transmitter, 4 to 20 mA output, 0 to 2.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-02B	Differential Pressure transmitter, 4 to 20 mA output, -2.0 to +2.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-03	Differential Pressure transmitter, 4 to 20 mA output, 0 to 3.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-03B	Differential Pressure transmitter, 4 to 20 mA output, -3.0 to +3.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-05	Differential Pressure transmitter, 4 to 20 mA output, 0 to 5.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-05B	Differential Pressure transmitter, 4 to 20 mA output, -5.0 to +5.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-10	Differential Pressure transmitter, 4 to 20 mA output, 0 to 10.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-10B	Differential Pressure transmitter, 4 to 20 mA output, -10.0 to +10.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-15	Differential Pressure transmitter, 4 to 20 mA output, 0 to 15.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-15B	Differential Pressure transmitter, 4 to 20 mA output, -15.0 to +15.0 in. water column range, 1/4" brass barbed connections				\$113.00
DPTA-20-25	Differential Pressure transmitter, 4 to 20 mA output, 0 to 25.0 in. water column range, 1/4" brass barbed connections	\$113.00			

# proSense® DPTA Series Differential Air Pressure Transmitters

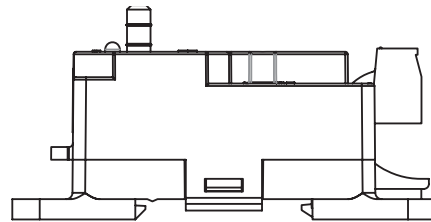
ProSense DPTA Series Specifications	
<b>Operating Voltage</b>	12 – 36 VDC
<b>Output Range*</b>	4 - 20 mA (2-wire)
<b>Supply Current*</b>	21.5 mA Max.
<b>Maximum Load</b>	$V_L - 12 \text{ VDC}$ $0.022 \text{ amps} = R_L$ For example [(24 VDC - 12 VDC) / 0.022 amps] = 545Ω
<b>Enclosure</b>	NEMA Type 1 Fire-retardant ABS (meets UL 95-5VA)
<b>Pressure Connections</b>	1/4" brass barbed fittings
<b>Weight</b>	0.16 lb
<b>Media</b>	Clean, dry and non-corrosive gas
<b>Mounting</b>	Threaded fastener and 35mm DIN rail mount
<b>Reference Temperature</b>	70°F ± 2°F (21°C ± 1°C)
<b>Temperature Coefficients - Zero &amp; Span</b>	±0.03% full range / °F
<b>Compensated Range</b>	35 to 130°F (2 to 54°C)
<b>Operating Temperature</b>	0 to 160°F (-18 to 71°C)
<b>Storage Temperature</b>	-40 to 180°F (-40 to 82°C)
<b>Humidity</b>	10 to 95% R.H., non-condensing
<b>Stability</b>	Less than ≤0.25% full range / year
<b>Accuracy</b>	±1% maximum. Includes non-linearity, hysteresis, nonrepeatability, zero offset and span setting errors.
<b>Response Time</b>	250 msec
<b>Proof Pressure</b>	15 psig
<b>Burst Pressure</b>	25 psig
<b>Max. Static Line Pressure</b>	15 psig
<b>Electrical Connection</b>	Euro style pluggable terminal block accepts 12-26 gauge wire
<b>Terminal Screw Torque</b>	4 lbs in (0.5 Nm)
<b>Reverse Wiring Protected</b>	Yes
<b>External Zero Adjustment</b>	±5% full range
<b>External Span Adjustment</b>	±5% full range
<b>Agency Approvals</b>	CE, RoHS
<b>* Output signal is independent of power supply changes.</b>	



## Mounting Options

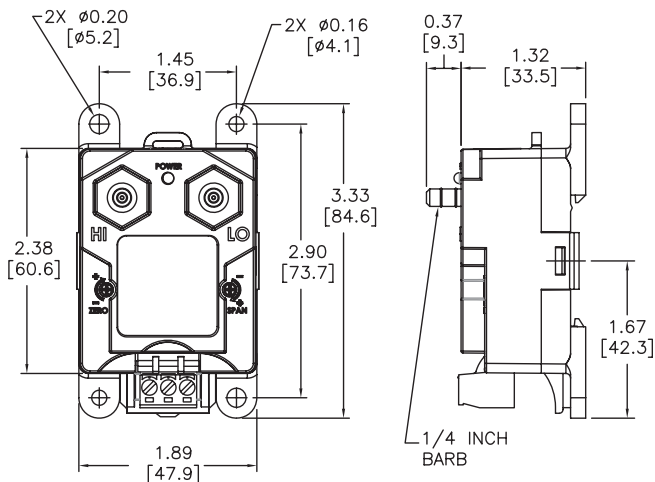


**NOTE: PROSENSE DPTA SERIES TRANSMITTER SHOULD BE MOUNTED IN A VERTICAL AND UPRIGHT POSITION AS SHOWN ABOVE.**

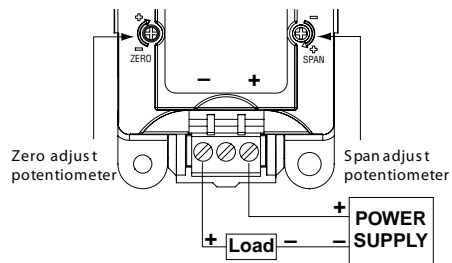


**MOUNTING HORIZONTALLY MAY AFFECT ACCURACY BY AN ADDITIONAL 1%.**

## Dimensions inches [mm]



## Wiring Diagram



DN-3PLUGMN can be used as a replacement terminal block.

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.