ProSense® 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

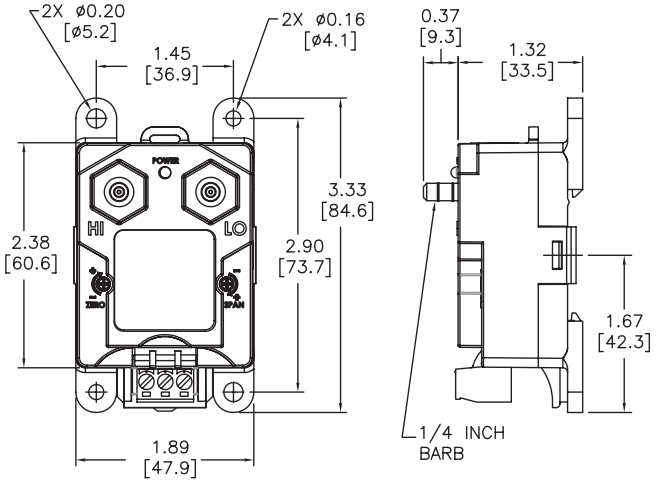
Click on the thumbnail or go to https:/// VID-PR-0001 for a short video on ProSense Air Differential and Pressure Transmitters

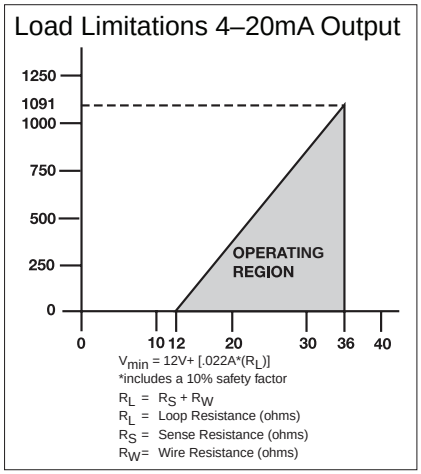
ProSense DPTA Series Differential Air Pressure Transmitters					
Part Number	**Description**	**Electrical Connection**	**Input Voltage**	**Wt(lb)**	**Price**
DPTA-20-P1	Differential Pressure transmitter, 4 to 20 mA output, 0 to 0.1 in. water column range, 1/4" brass barbed connections	Screw Terminals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

ProSense DPTA Series Differential Air Pressure Transmitters

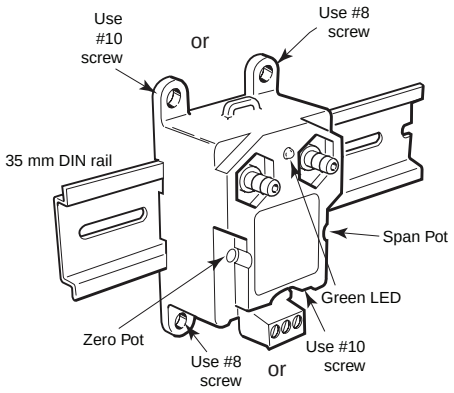
ProSense DPTA Series Specifications	
Operating Voltage	12 – 36 VDC
Output Range*	4 - 20 mA (2-wire)
Supply Current*	21.5 mA Max.
Maximum Load	$\frac{V_L - 12\ VDC}{0.022\ amps} = R_L$ For example [(24 VDC – 12 VDC) / 0.022 amps] = 545Ω
Enclosure	NEMA Type 1 Fire-retardant ABS (meets UL 95-5VA)
Pressure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

Dimensions inches [mm]

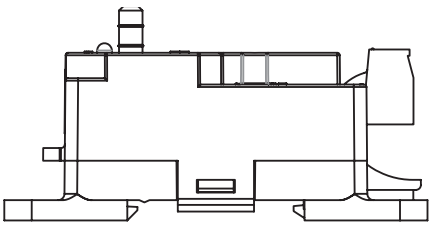




Mounting Options

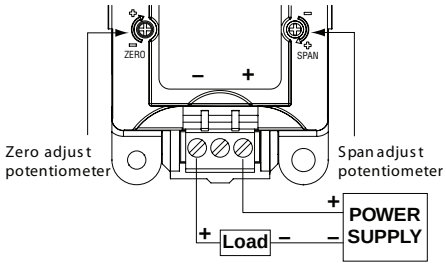


NOTE: PROSENSE DPTA SERIES TRANSMITTER SHOULD BE MOUNTED IN A VERTICAL AND UPRIGHT POSITION AS SHOWN ABOVE.



MOUNTING HORIZONTALLY MAY AFFECT ACCURACY BY AN ADDITIONAL 1%.

Wiring Diagram



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

See our website _____ for complete Engineering drawings.