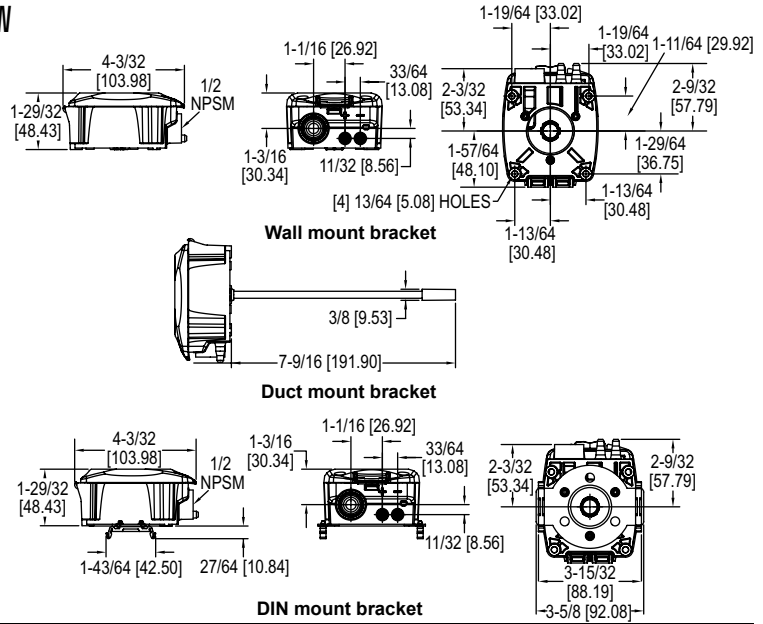


# MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Monitors Differential Pressure, Air Velocity, and Volumetric Flow



The **Series MSX Pro Magnesense® Differential Pressure Transmitter** is the professional differential pressure transmitter meeting stringent industry standards with innovative global product design. The device has exceptional stability for use in critical building performance applications with the popular versatility of our original Series MS2 Magnesense® II transmitter. The MSX Pro simplifies the ordering process to deliver the desired configuration, which reduces product setup time. Pressure ranges of Pa, mm w.c., and in w.c. are available per device. All pressure ranges can be configured in unidirectional or bidirectional modes providing a total of 32 ranges. The MSX Pro transmitter can provide a linear pressure output or a linear velocity output with the square root extraction from the transmitter. Additional parameters have been included to expand the square root capability to calculate flow. Dual voltage and milliamp output signals can be used to provide control and equipment output signal verification.

**BENEFITS/FEATURES**

- Easily access the unit's wiring via the flip-lid housing
- Eliminates accidental damage to the unit during installation with the products innovative design shielding the electronics underneath the PCB
- Added security and protection from the tamper-resistant cover
- Protection from liquids and moisture near the cable egress point with the included liquid tight cable gland fitting
- Reduce installation time with quick and easy wiring via the included a toolless terminal block
- Add safety to variety of applications that need to meet municipal and building code standards with UL94 V-0 and plenum ratings
- Supports exacting measurement and control for critical environments through precision accuracy

**APPLICATIONS**

- High performance building applications for critical environments
- Filter monitoring in air handler units
- Building pressure in pharmaceutical/semiconductor clean rooms
- Duct static pressure in commercial and specialized buildings
- Air velocity/flow in VAV systems

**MODEL CHART**

Example	MSXP	-W	1	3	-IN	-LCD	MSXP-W13-IN-LCD
<b>Series</b>	MSXP						Magnesense® differential pressure transmitter
<b>Mounting</b>		W U N					Wall mount Universal (wall or duct) mount DIN rail mount
<b>Direction</b>			1 2				Unidirectional Bidirectional
<b>Range</b>				0 1 2 3 4			.5 in w.c., 125 Pa, 12.5 mm w.c. 1 in w.c., 250 Pa, 25 mm w.c. 5 in w.c., 1250 Pa, 125 mm w.c. 28 in w.c., 7000 Pa, 700 mm w.c. 15 in w.c., 4000 Pa, 400 mm w.c.
<b>Pressure Unit</b>					IN PA MM		Inches water column Pascal Millimeters water column
<b>Options</b>						A481 COM FC FP LCD NIST STX WO	Installer kit, includes 2 plastic static pressure tips and 7 ft (2.1m) of PVC tubing BACnet/Modbus® communications Factory calibration certificate Filtered pickup with barb Liquid crystal display NIST traceable calibration certificate Two (2) plastic static pressure tips LCD cover without LCD display

**SPECIFICATIONS**

<b>Service:</b> Air and non-combustible, compatible gases.	<b>Loop Resistance:</b> Current output: 0-1250 Ω max; Voltage output: min. load resistance 1 kΩ.
<b>Wetted Materials:</b> Consult factory.	<b>Current Consumption:</b> 21 mA max continuous.
<b>Accuracy:</b> ±0.5% FSO for all ranges except unidirectional .5 in. @ ±1% FSO.	<b>Electrical Connections:</b> 4-wire removable European style terminal block for 16 to 26 AWG.
<b>Stability:</b> ±1% FSO/year.	<b>Electrical Entry:</b> 1/2" NPS thread. Cable gland included.
<b>Temperature Limits:</b> -4 to 158°F (-20 to 70°C).	<b>Display (optional):</b> 4 digit LCD.
<b>Pressure Limits:</b> Ranges 0 and 1: 3.6 psi max operation, 6 psi burst; Ranges 2, 3 and 4: 6 psi max operation, 6 psi burst.	<b>Process Connections:</b> 1/8", 3/16", 1/4", 5 mm, and 6 mm ID flexible tubing.
<b>Power Requirements:</b> 10-36 VDC (2-wire), 17-36 VDC or isolated 21.6-33 VAC (3-wire).	<b>Enclosure Rating:</b> NEMA 4X (IP66), UL 2043 (Plenum), UL94 V-0.
<b>Output Signals:</b> 4-20 mA (2-wire); 0-10 V or 0-5 V selectable (3-wire).	<b>Mounting Orientation:</b> Pressure sensor measurement unaffected by orientation.
<b>Response Time:</b> Instantaneous (default) or 3 s (selectable).	<b>Weight:</b> 8.0 oz (230 g).
<b>Zero and Span Adjustments:</b> Digital push-button.	<b>Compliance:</b> CE.

**OPTIONS**

Range	in w.c.	Pa low	Pa high	mm w.c.
Range 0	0.05	15	60	1.25
	0.1	25	75	2.5
	0.25	40	100	5
	0.5*	50	125*	12*
Range 1	0.1	25	100	2.5
	0.25	40	150	5
	0.5	50	160	10
	1*	60	250*	25*
Range 2	1	250	600	25
	2	300	750	50
	3	400	1000	100
	5*	500	1250*	125*
Range 3	10	1000	3000	250
	15	1500	4000	350
	25	2000	5000	500
	28*	2500	7000*	700*
Range 4	1	250	1000	25
	5	300	2000	125
	10	400	3000	250
	15*	500	4000*	400*

\*Indicated values are the positive full scale output values per range. **Note:** Ranges indicated in the table are the high end of the set range. All ranges have a low end pressure value of 0.

**ACCESSORIES**

Model	Description
<b>A-480</b>	Plastic static pressure tip
<b>A-481</b>	Installer kit, includes 2 plastic static pressure tips and 7 ft (2.1 m) of PVC tubing
<b>A-MSXP-LCD</b>	Replacement display for the Series MSX Pro

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