



SERIES MSX | MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER



FEATURES/BENEFITS

- Rotatable 180° display for ease of reading
- Optional toolless terminal block allows for quick and easy wiring
- UL94 V-0 and plenum ratings that add safety to a variety of applications

APPLICATIONS

- Filter monitoring in air handler units
- Building pressure in pharmaceutical/semiconductor clean rooms
- Duct static pressure in commercial buildings
- Air velocity/flow in VAV systems

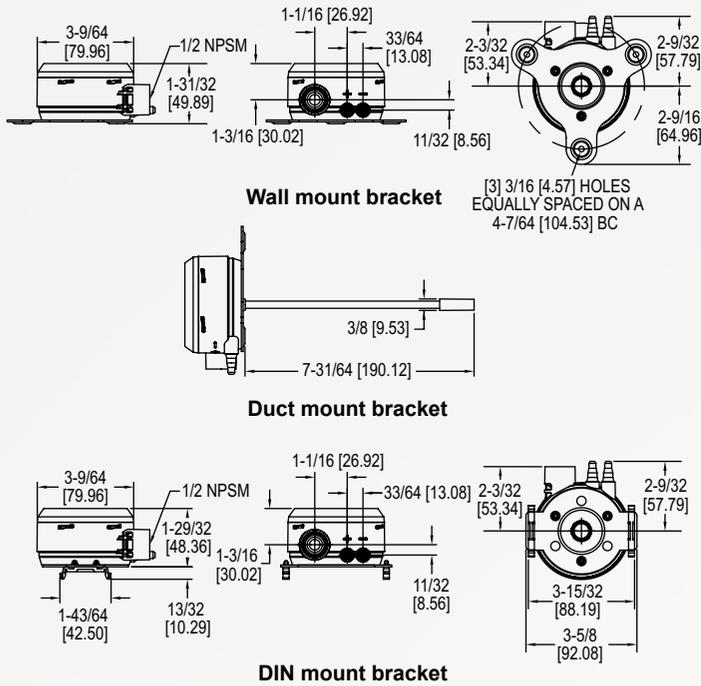
DESCRIPTION

The **Series MSX MagneSense® Differential Pressure Transmitter** combines the stability and versatility of the original Series MS2 MagneSense® II transmitter for use in building control applications. The MSX simplifies the ordering process to deliver the desired configuration, which reduces product setup time. Pressure ranges are available in Pa, mm w.c., and in w.c. All pressure ranges can be configured in unidirectional or bidirectional modes, providing a total of 32 ranges. The MSX 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 both control and equipment output signal verification.

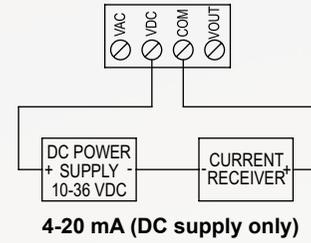
SPECIFICATIONS

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

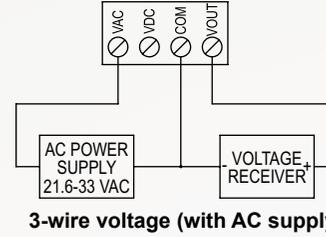
DIMENSIONS



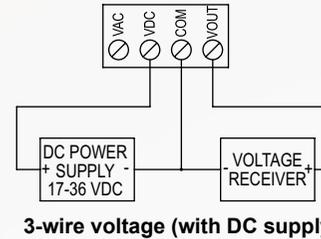
WIRING DIAGRAM



4-20 mA (DC supply only)



3-wire voltage (with AC supply)



3-wire voltage (with DC supply)

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

<p>SERIES</p> <p>MSX: Magnesense® differential pressure transmitter</p> <p>MOUNTING</p> <p>-W: Wall mount</p> <p>-U: Universal (wall or duct) mount</p> <p>-N: DIN rail mount</p> <p>DIRECTION</p> <p>1: Unidirectional</p> <p>2: Bidirectional</p> <p>RANGE</p> <p>0: .5 in w.c., 125 Pa, 12.5 mm w.c.</p> <p>1: 1 in w.c., 250 Pa, 25 mm w.c.</p> <p>2: 5 in w.c., 1250 Pa, 125 mm w.c.</p> <p>3: 28 in w.c., 7000 Pa, 700 mm w.c.</p>	<p>MSX -W 1 3 -IN -LCD</p>	<p>OPTIONS</p> <p>-A481: Installer kit</p> <p>-FC: Factory calibration certificate</p> <p>-FP: Filtered pickup with barb</p> <p>-GLD: Liquid tight cable gland fitting</p> <p>-LCD: Liquid crystal display</p> <p>-NIST: NIST traceable calibration certificate</p> <p>-STX: Two (2) plastic static pressure tips</p> <p>-TT: Toolless terminal block</p> <p>-WO: LCD cover without LCD display</p> <p>PRESSURE UNIT</p> <p>-IN: Inches water column</p> <p>-PA: Pascal</p> <p>-MM: Millimeters water column</p>
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ACCESSORIES

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

Download the product manual at www.itm.com/Products/Products/MSX

