



Magnesense® Differential Pressure Transmitter

Series MSX

The Series MSX Magnesense® Differential Pressure Transmitter measures differential pressure, air velocity, and volumetric flow in one device. This versatile transmitter allows the installer to field select pressure ranges, electrical outputs, and units of measure.



Key Benefits & Features

Easy Installation

- Simplified model selection reduces setup time
- Wiring slide simplifies installation process
- Internal DIP switches allow for easy field adjustments

Multipurpose

- 32 unidirectional or bidirectional ranges to meet a broad range of applications
- Configurable as a wall or duct unit

Intelligence

- Selectable flow or velocity output eliminates the need for multiple devices
- Dual output signal for measurement and control



The MSX regulates the air velocity/flow in learning environments

Key Specifications

Service: Air and non-combustible, compatible gases

Wetted Materials: Consult factory. Accuracy: $\pm 1\%$ FSO

Stability: $\pm 1\%$ 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, 3 and 4: 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 k Ω

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)

Compliance: CE

Common 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

How to Order

Example	MSX	-W	1	3	-IN	-LCD	MSX-W13-IN-LCD
Series	MSX						Magnesense® differential pressure transmitter
Mounting		W U N					Wall mount Universal (wall or duct) mount DIN rail mount
Direction			1 2				Unidirectional Bidirectional
Range				0 1 2 3			.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.
Pressure Unit					IN PA MM		Inches water column Pascal Millimeters water column
Options						A481 FC FP GLD LCD NIST STX TT WO	Installer kit, includes 2 plastic static pressure tips and 7 ft (2.1m) of PVC tubing Factory calibration certificate Filtered pickup with barb Liquid tight cable gland fitting Liquid crystal display NIST traceable calibration certificate Two (2) plastic static pressure tips Toolless terminal block LCD cover without LCD display

